

Pain into Power, Wounds into Wisdom: Exploring women's experiences of wellbeing in the cyclone shelters of Bangladesh

Thesis submitted by

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Master of Science in Disaster Management

For the fulfilment of requirements of the degree of

Doctor of Philosophy

Torrens Resilience Initiative

College of Nursing and Health Sciences

Flinders University

Adelaide, South Australia

27 July 2021

Dedication

To Areebah Chowdhury Khan

Summary

Being the 9th most disaster-prone country in the world, Bangladesh frequently suffers mass casualties and economic loss from disasters, including tropical cyclones, tidal surges, tornadoes, drought, floods, river erosion, and fire hazards. Among all the disasters, Bangladesh is repeatedly threatened by tropical storms and cyclones, exposing approximately one-third of the total population of the country. Several cyclone evacuation centres, commonly known as cyclone shelters, have been constructed in the coastal areas as a preparedness measure of the government, yet a large proportion of the coastal population, especially women, are unwilling to use them. As a result, over the years, the death rate for women from cyclones has remained constantly high in Bangladesh. Existing studies and the scientific literature demonstrate a range of concerns that discourage women from evacuating, and highlight women's disadvantages in the pre- and post-disaster phases. The experience of women themselves, the women's voice, is not apparent in this existing research. Therefore, the perspectives of women on their lived-experience as evacuees in the cyclone shelters remains largely unknown. This research explores the lived-experience of women who have experienced evacuation to the cyclone shelters, and recommends a range of provisions to improve their experience and wellbeing as female evacuees.

Hermeneutic phenomenology, an approach concerning the interpretation of experience, was adopted to investigate the research question. The theoretical framework of the research was predominantly grounded in Heideggerian phenomenology. Heidegger's notion of hermeneutic phenomenology as providing experience of the truth of *being*-, was the key concept underpinning this phenomenological research. A total of 19 women who stayed in the cyclone shelters from three *extremely vulnerable* districts of coastal Bangladesh were

interviewed in two sessions by the researcher. The participating women shared their livedexperience of staying in the cyclone shelters, what was it like to be an evacuee, and how they experienced wellbeing in the shelters.

The participants' narratives were analysed using Max van Manen's thematic analysis process which complemented the hermeneutic circle. Research themes were identified from the narratives of the women, through which it was perceived that women's experiences of the cyclone shelters were intimately connected to their reality and their socio-cultural context. The salient theme of this study was being understood (as a woman), otherwise articulated as unfolding women's dasein, understanding their perspectives, and having an insight into their lifeworld, which were referred to and reflected in women's narratives regarding their experiences in the cyclone shelters. Being understood as a woman portrayed the quintessential image of women living in the coastal areas and how being understood as a woman subsequently influenced their vulnerability when exposed to a crisis such as a cyclone emergency, which was depicted in the next theme, being a woman during crisis. Several themes focused on women's lived-experience, the incidents they lived through, and the emotions they felt while staying in the shelters: being in a hostile situation, being fearful, uncertainty, being faithful, and being against the odds. While it was apparent that women's emotional experiences were not always a result of an actual threat, but rather developed through their presuppositions and past experiences, the emotions were true in their reality and an inseparable part of their lived-experience. The remaining themes, being faithful and being against the odds unearthed potential provisions that can improve women's experiences of wellbeing in the cyclone shelters and indicated the potential of women from the coastal

communities to improve their situation in the shelters through social bonding and communication.

The findings from the research provided a new horizon of knowledge to understand how women's *dasein* consequently impacts their experience of wellbeing while staying in the cyclone shelters. The study offers a deep inquiry into women's experiences and recognises the significance of women's voices to improve their experience as evacuees in coastal Bangladesh. Finally, understanding women's experiences presents an opportunity for more informed disaster policies to strengthen disaster preparedness strategies and community resilience in the coastal areas of Bangladesh.

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Statement of Authorship

I certify that this thesis does not incorporate without acknowledgement any material

previously submitted for a degree or diploma in any university; and that to the best of my

knowledge and belief it does not contain any material previously published or written by

another person except where due reference is made in the text.

Candidate's signature

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Date: 27 July 2021

Taznina Jahan Chowdherry

Acknowledgements

I would like to express my sincere appreciation to the people who have provided me with support and assistance throughout my PhD candidature.

First, I would like to acknowledge the constant support, encouragement, guidance, and commitment of my supervisors: Professor Paul Arbon, Professor Kristine Gebbie, Dr. Mayumi Kako, and Dr. Malinda Steenkamp. In particular, I am grateful to Paul for being there with his knowledge, insight, and compassion to lead me towards the end of this journey and to develop my academic capacity. Special thanks to Malinda for mentoring me to cope with the stresses and challenges that came along with the PhD journey.

I would like to express my humble gratitude and acknowledge the financial support of the FIPRS scholarship from Flinders University which provided me with the opportunity to pursue my doctoral studies and develop the skills of an independent researcher.

This study is made possible due to the willingness of the women living in the coastal regions of Bangladesh, who invested their time in the research and shared their experiences of being evacuees in the cyclone shelters of Bangladesh. I would also like to extend my gratitude to the key informants, the concerned personnel both in the government and non-government sectors, without whom conducting the research work in the study area would not have been possible.

Thank you to all the wonderful people I came across at Torrens Resilience Institute –Johanna Garnett, Angela Tomarelli, Professor Richard Nunes-Vaz, Associate Professor Lidia Mayner, Dr. Rebecca Hoile, and Alice Puczkowski for helping me navigate through life over the past

few years, both in personal and professional aspects. I also would like to thank Dr. Robert Muller for editing this thesis. The editing was limited to grammar and style, and it did not involve changes to content and structure.

My two best friends – Parsa and Liana, who were continents away from me, and yet, managed to stay beside me. My other friends, my cousins, and in-laws who are scattered all over the world but have remained connected. Thank you for understanding my hectic life and never leaving me alone in this journey. You were all great sources of positive energy whenever I felt troubled.

I cannot thank my parents enough, whose sacrifices and struggles to give me the best education have brought me to this position. My sisters and their families, for showering their blessings and affection upon me. My nieces and nephew – Armita, Aarya, and Ayaan for being my cheerleaders. My daughter Areebah, who made me the best version of myself.

Finally, and most importantly, my husband Tahsin – I would never have the confidence to apply for a PhD if it was not for your encouragement. Thank you for motivating me to achieve my dreams and to do something meaningful in life.

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Acronyms and Abbreviation

ADB Asian Development Bank

BBS Bangladesh Bureau of Statistics

BCCSAP Bangladesh Climate Change Strategy and Action Plan

BMD Bangladesh Meteorological Department

BRAC Building Resources Across Communities

CCC Climate Change Cell

CDMP Comprehensive Disaster Management Programme

CEGIS Centre for Environment and Geographic Information Services

CPP Cyclone Preparedness Programme

CTS Conflict Tactics Scale

DMA Disaster Management Act

DMB Disaster Management Bureau

DRR Disaster Risk Reduction

DV Domestic Violence

ERF Early Recovery Facility

EWS Early Warning System

GEI Gender Equity Indices

HFA Hyogo Framework for Action

HIV Human Immunodeficiency Virus

IFHV Institute of International Law of Peace and Armed Conflict

IFRC International Federation of Red Cross

IMF International Monetary Fund

IPCC Intergovernmental Panel on Climate Change

IPV Intimate Partner Violence

MoDMR Ministry of Disaster Management and Relief

MoEF Ministry of Environment and Forests

MoF Ministry of Food

NDMC National Disaster Management Council

NGOs Non-government organisations

NPDM National Plan for Disaster Management

PTSD Post Traumatic Stress Disorder

RCC Reinforced Concrete Column

RMG Readymade Garment

RUB Ruhr University Bochum

SBREC Social and Behavioural Research Ethics Committee

SOD Standing Orders on Disaster

SSC Secondary School Certificate

SWC Storm Warning Centre

UKHPA United Kingdom Health Protection Agency

UN United Nations

UNDP United Nations Development Programme

UNDRO United Nations Disaster Relief Organisation

UNISDR United Nations Office for Disaster Risk Reduction

UNICEF United Nations International Children's Emergency Fund

USA United States of America

UTI Urinary Tract Infection

WFP World Food Programme

WHO World Health Organisation

Prelude

Human lives are full of challenges. Women often face more challenges than men in their lifetimes due to the conventional patriarchal social system and male-dominated social structure in most of the world's nations. I was born a girl child in an under-developed South Asian country, Bangladesh. In a country like Bangladesh, it was and is still not easy for a girl to flourish in an academic and professional career and achieve their ambition while working within an extremely patriarchal society characterised by conservative socio-cultural practices. Yet, I was privileged to study at some of the best institutes in the country and pursued my dream of becoming an academic. Unfortunately, all the stories of women in Bangladesh do not progress this way and there are huge differences among women coming from diverse situations. In Bangladesh, there are women who have never set foot in any educational institutes, women who always remain subordinate to male family members, and women who are unaware of their rights and unable to influence their wellbeing.

Bangladesh has struggled with political instability, natural disasters, and a growing population since the country's independence in 1971. Yet, Bangladesh has ensured food security, increased literacy rates, and improved medical services over the years, and recently has been recognised as a *developing* country. However, every year, the country faces several disaster events that result (cumulatively) in thousands of deaths and massive economic loss, slowing down the socio-economic growth of the whole nation. Bangladesh is one of the most disaster-prone countries in the world and has a history of consecutive tropical cyclones, floods, river erosion, and tornadoes, causing mass casualties, loss, and damage to property, agricultural crops, and infrastructure. While growing up, I came across newspaper articles

and news reports on disasters striking the country, affecting human lives, and impeding the country's development. All the information suggested that building resilience to reduce vulnerability and risk from disasters could play a major role in supporting the expected development of the country. Later in life, these thoughts influenced me to pursue my postgraduate studies in Disaster Management.

During my postgraduate education, I studied vulnerabilities, risks, and preparedness strategies in different disasters around the world. The literature on women's experiences during hurricane *Katrina*, in particular, influenced my thinking about vulnerabilities and risks from a gender perspective. The literature I studied argued that women who survived hurricane Katrina and took refuge in emergency shelters frequently suffered from domestic violence, sexual assault, financial hardship, and other forms of deprivation. I wondered if women were mistreated even in a highly resourced country (the USA) with (arguably) better evacuation facilities and shelters, efficient emergency management strategies, and an effective law enforcement system, and then how women living in the cyclone-affected coastal areas of Bangladesh coped with and experienced these large-scale disaster events. As a student, and later as a researcher, I consulted articles and books focused on different disasters in Bangladesh at different times. Although there were very few research papers focusing on women only, the findings and discussions suggested that women's vulnerability was greater than that experienced by men, both during and after a disaster event. For instance, women usually suffered from a range of health issues at a greater rate than men after floods; women in flood-affected areas are diagnosed with urinary tract infections (UTI), reproductive organ infections, malnutrition, and psychological issues, including depression and anxiety. In the aftermath of disasters including floods, drought, and river erosion, men often travel to cities

and towns for employment, leaving their families and financially dependent wives. In many cases, the husbands never return, and the women, dependent on their husbands' income, face extreme financial challenges. Reports of domestic violence and sexual assault in newspapers are very common in Bangladesh, both related to emergencies and in the regular life of the community. Eventually, I started thinking about conducting research that would provide the vulnerable women of Bangladesh with a platform to share their experiences during disasters, and which could lead to some improvement in our planning for, and response to, women's situation during disasters.

Recent research demonstrates that we are now moving into the *era* of disasters. The Intergovernmental Panel on Climate Change (IPCC) (2018) reported that our planet will soon face the consequences of climate change; the continued global warming will increase extreme events and *medium-risk* areas will soon be listed as *high-risk* areas and *high-risk* areas as *very high-risk* areas; extreme events such as tropical cyclones will be of higher frequency and greater intensity. Because tropical depressions, storms, and cyclones with associated tidal surges strike Bangladesh every year, and are associated with alarming statistics of casualties and economic loss, I felt that it is important, and will be significantly more important in the future, to build resilience for women in the cyclone-prone areas of Bangladesh and to minimise the impacts of these events in coming years.

When I started developing the research proposal for my doctoral study, I merged my two concerns and attempted to construct a research project that would provide me with the opportunity to work with women living in the cyclone-prone areas of my country. I constructed my research to understand women's experiences of cyclones and cyclone

shelters, and to identify provisions to improve their experiences as evacuees while staying in the shelters.

Chapter 1: Introduction

1.1 Background

1.1.1 Bangladesh

Bangladesh, situated on the largest deltaic plain in the world, is a South Asian country located between the Indo-Himalayan and the Indo-Chinese sub-regions (World Bank, 2010). The country has a small land area of 147,570 km² with a total population of 160.8 million, comprising 80.5 million males and 80.3 million females (Bangladesh Bureau of Statistics, 2017), and an unusually high population density of 1,050 per square kilometres (Bangladesh Bureau of Statistics, 2017). Being characterised by a geographical location with the Himalayan mountain range to the North, and approximately 700 km of coastline to the South, the country is exposed to a number of natural hazards¹, including tropical cyclones, floods, tornadoes, droughts, earthquakes, and river erosion (Saroar, 2018). Bangladesh, therefore, faces many challenges in managing a large and dense population located in a small land area often affected by natural hazard-caused disasters. Despite the economic and societal strain imposed by the regular impact of disasters, the country has recently been rated as a *Developing Country* by the International Monetary Fund (IMF, 2015), moving from its prior rating as a *Less Developed Country*.

1.1.2 Coastal zone of Bangladesh and risks from cyclones

People around the world are more exposed to extreme events at present. Paul and Routray (2010) pointed out that due to rapid population growth, the number of coastal dwellers has increased four-fold globally over the past 100 years, and this has resulted in more people

¹ A process, phenomenon, or human activity that may cause loss of life, injury, or other health impacts, property damage, social and economic disruption, or environmental degradation (United Nations General Assembly, 2017).

residing in low-lying areas by the coast. Arguably, more people are now vulnerable and exposed to severe weather events such as cyclones (typhoons and hurricanes) than in previous years. Klugman (2011) identified that more than 50% of the world's coastal population live below the poverty line and these people are considered to be the most vulnerable group, exposed to greater risks than the rest of the global community. The situation is even worse for the citizens of Bangladesh. Ahsan, Karuppannan, and Kellett (2011) identified that almost 50 million people live in the coastal zone of Bangladesh, comprising nearly one-third of the country's total population. Saroar (2018) documented that among the 7 administrative divisions² of the country, 3 divisions (Barishal, Khulna, and Chattagram, also known as Chittagong) are part of the coastal region consisting of 19 districts³ among the 64 total districts in the country. The Government of Bangladesh has recognised 12 districts (Table 1.1) as extremely vulnerable to cyclones, as they directly face the shore and expose approximately 2,266,156 households to potential disaster (Disaster Management Bureau, 2014).

Table 1.1 List of extremely vulnerable districts from cyclones

Division	District
	Barguna
Barishal	Bhola

² Divisions are the largest administrative units of Bangladesh.

³ Districts are the second largest administrative units of Bangladesh.

	Patuakhali
	Pirojpur
Khulna	Bagerhat
	Khulna
	Satkhira
Chattagram	Chattagram
	Cox's Bazar
	Feni
	Lakshmipur
	Noakhali

Source: Disaster Management Bureau, Ministry of Disaster Management and Relief (2014).

In addition to the high population density in the most vulnerable areas, the frequency of cyclones in the coastal belt of Bangladesh increases the risk of loss and damage. According to Alam and Dominey-Howes (2015), about 85% of the total damage globally from

cyclones occurs in the region adjacent to the Bay of Bengal. Bangladesh has faced no less than 100 cyclones over the last three decades (Ahsan et al., 2011). During the pre-monsoon (April-May) and post-monsoon (October-December) seasons, the coastal belt of the country is impacted by 24% of tropical storms and depressions out of all storms and depressions that form in the Bay of Bengal (Alam, Hossain, & Shafee, 2003). While many of these cyclones and storm events result in lower casualty rates, Karim and Mimura (2008) quantified that the country has been impacted by 16 tropical cyclones with accompanying tidal surges since the 1960s which have resulted in almost 500,000 casualties. These geographical and social characteristics make Bangladesh extremely vulnerable to cyclones and associated storm surges resulting in extensive storm damage and flooding.

The Intergovernmental Panel on Climate Change (2007) determined that cyclones and other natural calamities would become more frequent and devastating as an outcome of the changing climate. According to a World Bank report (2010) and a report by the Climate Change Cell (2016) of the Department of Environment, Ministry of Environment & Forests, Government of Bangladesh, climate change may increase the likelihood of hydrological and atmospheric disasters, and in particular, the risk of impacts on low-lying countries including Bangladesh. The Global Risk Report 2017 argued that among all present global risks, extreme weather events have the maximum likelihood of occurrence and might have the second-highest impact on human lives (World Economic Forum, 2017). The reports indicate that the increased recurrence of cyclones in the coastal zone of Bangladesh, the flat topography, and the higher density of population will make coastal Bangladesh most vulnerable in terms of loss of lives, damage to property, and disrupted livelihoods.

1.2 Rationale of the study

1.2.1 Cyclone preparedness and people's perceptions of evacuation in Bangladesh

Bangladesh has a long history of struggling with natural disasters that cause mass casualties along with loss of, and damage to, property. The government recognises the urgency of disaster risk reduction (DRR), and preparedness strategies have been initiated to strengthen community resilience (Disaster Management Bureau, 2010a). The Ministry of Disaster Management and Relief (MoDMR) in collaboration with other national and international organisations has been working to improve preparedness activities and to reduce loss and damage. As a result, the Early Warning System (EWS) of Bangladesh has evolved and the number of evacuation centres has increased in the coastal regions to accommodate a greater number of people in times of emergency. These have played a significant role in reducing the number of casualties over the years.

Category 4 cyclone Gorky (wind speed maximum 225 km/h) hit the south-eastern coast in 1991, resulting in a death toll of 140,000 people; more recently in 2007, another Category 4 cyclone Sidr (wind speed maximum 240 km/h) killed approximately 4,000 people in Bangladesh (Paul, 2009). Given the fact that the population in the affected region was eight times higher in cyclone Sidr compared to cyclone Gorky, it can be assumed that the improved disaster management policies of Bangladesh are having a positive impact.

Haider and Ahmed (2014) identified that only 300 evacuation centres were located in the regions affected by cyclone Gorky, whereas in 2009, there were 2,583 cyclone shelters and multi-purpose cyclone shelters, each providing shelter to between 500 and 2,500 people (Centre for Environment and Geographic Information Services, 2009). Over the years,

people's awareness of the importance of taking shelter in evacuation centres has also changed (Ahsan, Takeuchi, Vink, & Warner, 2016). During cyclone *Gorky*, 30.5% of the population of the affected area evacuated; among them, 14.5% took shelter in established evacuation centres while the rest took shelter in other people's dwellings (Chowdhury, Bhuyia, Choudhury, & Sen, 1993). Paul (2011) reported that, of the 41.4% of people evacuated during *Sidr*, 13.6% stayed in the evacuation centres, while 27.8% stayed in other dwellings. Ahsan et al. (2016) stated that 33% of the population of the study areas moved from their houses during the landfall of *Aila* in 2009, with 29% of them taking refuge in cyclone shelters. In 2013, during cyclone *Mahasen*, almost 60% of vulnerable people living in the coastal areas of the country evacuated from their land (Roy, Sarkar, Åberg, & Kovordanyi, 2015). These statistics indicate that more people are evacuating during emergencies in recent years, yet some prefer not to stay in cyclone shelters. It is also evident that a significant percentage of people do not evacuate at all, exposing themselves to life-threatening conditions.

The behaviour of individuals depends on various social, cultural, economic, and psychological factors (Post et al., 2009), which impact their perceptions and may hold them back from evacuating their dwelling and taking refuge in the cyclone shelters. People may not realise the severity of the emergency or put their faith in God, rather than trying to help themselves (Gaillard & Texier, 2010). In many cases, people are driven by normalcy bias, underestimating the possible effects of cyclones and assuming their houses are structurally sound enough to withstand severe weather and flooding (Paul & Routray, 2013). Some affected people choose to remain at home with their livestock, as evacuation centres do not

accommodate animals, and they could not leave their animals behind knowing they might die from the upcoming storm (Paul & Routray, 2013).

1.2.2 Women during cyclone emergencies

Women may face greater challenges during cyclone emergencies because Bangladesh is among the lowest-ranked countries in terms of gender equity (Sayem & Nury, 2013). One of the fundamental reasons for gender inequality in Bangladesh is conservative socio-cultural practices. Some Muslim women misinterpret religious rulings and stay at home believing they are not allowed to go outside without their husbands (Shehabuddin, 1999). Many women, irrespective of their religion, believe that living under the same roof with unknown men is disrespectful and inappropriate for them, and so they choose to remain inside their own home with their young children, even after being advised of the potential damage these severe storms can cause (Alam & Collins, 2010). Additionally, women often remained uninformed about the cyclone emergencies that have taken place in past years. Parvin, Sakamoto, Shaw, Nakagawa, and Sadik (2019) found that during cyclone Aila, the percentage of women receiving evacuation orders was noticeably lower than men in the coastal communities. As a result, over the years, the mortality rate among women associated with cyclone events remains higher than the rate for men in Bangladesh. Following cyclone Gorky, women made up 93% of the 140,000 casualties (Chowdhury et al., 1993), while the percentage was almost 83% in cyclone Sidr (Alam & Rahman, 2014). In 2013, during tropical storm Mahasen (wind speed 63-118 km/h), 50 people died, of which 17 were women with the rest being children (Alam & Rahman, 2014).

There are deficits in the effectiveness of the cyclone shelters as well, that create challenges for women. Alam and Rahman (2014) discussed issues faced by female evacuees, including the lack of availability of separate toilets and washrooms for women, inadequate space for livestock, unfair relief distribution, scarcity of drinking water, food, and medicines, abuse of pregnant women and adolescent girls, and the needs of women not being considered by other stakeholders including government officials, NGO workers, and volunteers. The psychological stress and trauma as a result of sexual abuse and violence are not genderneutral, and the sense of insecurity and loss of assets and property and, in many cases, death and injury of family members, have a particularly negative impact on women after disasters (Sultana, 2010). Alam and Rahman (2014) also underlined the fact that elderly women are frequently the most affected, followed by pregnant women and adolescent girls. It is notable that, although this part of the literature identified many of the major issues arising in cyclone shelters and impacting on women, it did not provide women's perspective(s) on their situations. Alam and Rahman (2014) focused on the pre- and post-disaster state of women, losses experienced by women both financially and socially, and the significance of women's empowerment to overcome vulnerability; yet, women's voices were not present in the research. It is undeniable that cyclones will continue to have a negative impact on coastal Bangladesh in coming years, and cyclone shelters will continue to play an important role in saving lives during cyclone emergencies. Generally, women are more vulnerable in the face of any disaster, and there is evidence that women are a more vulnerable group in the environment of the cyclone shelters. Therefore, it is important to understand from the women's perspective, what it is like to be an evacuee in a shelter, and how women's experiences in the cyclone shelters can be improved.

1.3 Research question and objectives

This research addresses the question:

How do women in the coastal areas of Bangladesh experience wellbeing during their stay in cyclone shelters as evacuees?

The research question will achieve the following objectives:

- Describe and understand what it is like to be a woman in a cyclone shelter in Bangladesh.
- ii. Identify recommendations for the provision of safe cyclone shelters for women which promote their wellbeing.

1.4 Research method

The MoDMR has declared 12 districts as *extremely vulnerable* to cyclones, as they directly face the sea (Islam, 2004; Disaster Management Bureau, 2014; Saroar, 2018). Among these districts, Chattagram, Cox's Bazar, and Bagerhat were chosen for data collection. Chattagram and Cox's Bazar include the highest number of vulnerable people; 2,283,457 and 1,815,971 respectively, whereas Bagerhat has the smallest vulnerable population of 255,672 (Bangladesh Bureau of Statistics, 2012), yet the district has been severely affected by recent cyclones, including cyclone *Sidr* and cyclone *Aila* in 2007 and 2009 respectively, and the existing cyclone shelters are in dire condition from poor maintenance and management (Haider & Ahmed, 2014). Chattagram has 679 evacuation centres, the highest number among the 12 districts, whereas Cox's Bazar has 621 and Bagerhat has 163 cyclone shelters (Disaster Management Bureau, 2014). The large number of affected women in the two districts of Chattagram and Cox's Bazar increased the probability of obtaining participants

with relevant experience of residing in cyclone shelters. Also, female evacuees from Bagerhat had the potential to share some insights into living in the shelters during the most recent devastating cyclones that had a direct impact on their lives and livelihoods. So, these three districts were selected as the study areas for the research. Recently, *Rohingya*⁴ refugees have been residing in the refugee camps of *Ukhiya* sub-district⁵ within Cox's Bazar district. Therefore, this particular sub-district was not included as part of the safety and security measures for the research, and to avoid possible exacerbation of stress or additional demand for information from residents and non-government organisations.

Adult women who had stayed in cyclone shelters during and after cyclones from 2000 till 2018 were selected from the study areas after a referral from key informants, including local government authorities, local representatives who work for national/international non-government organisations, and/or volunteers who worked in cyclone shelters during emergencies following the convenience sampling method. Some participants were recruited through snowball sampling, as the participants were asked to suggest other women from their communities who might be interested in sharing their experiences. Details of participant selection will be elaborated upon in Chapter 5.

Phenomenology focuses on human experience, and was used as the methodological and philosophical approach of this research. Chapter 5 discusses the phenomenological approach.

⁴ Stateless people who used to live in Myanmar, but crossed the border and now living in Bangladesh as refugees.

⁵ A sub-district is an administrative unit smaller than a district and placed under a district.

A total of 19 participants were interviewed on two occasions, with semi-structured in-depth interviews being used for data collection. Oral data from the interviews were recorded using a digital audio-recorder, and a journal was maintained to collect personal reflections on the ongoing interviews, as well as to annotate contextual features of the interviews, such as body language, hesitations, or pauses in conversation during the interviews, and other relevant observations that could be useful for data analysis and interpretation. Thematic analysis techniques were used to interpret and process the interviews and to extract the findings. The invocative method, a method where the findings of the study are expressed by words (van Manen, 2016), was applied as the narrative device to express the phenomenon described by the participants. Chapter 5 explains the data collection and data analysis processes of this research.

1.5 Structure of the thesis

The thesis is structured as follows:

The thesis starts with a prelude written in first-person, focusing on life-events and personal interests that inspired the researcher to develop a career in disaster management and pursue this doctoral thesis focusing on women's experiences of wellbeing in the cyclone shelters of Bangladesh.

Chapter 1 outlines the background and rationale of the study, establishes the research gap, proposes the research question and objectives of the study, and briefly discusses the research methods, including the study areas, the philosophy that underpins the methodology, data collection, and data analysis techniques to provide a vision of the whole thesis.

The background chapter (Chapter 2) is divided into three sections. The opening section presents a discussion on disaster, vulnerability, and exposure in light of the existing literature, and determines which definitions and explanations of important terms would be adopted in this study. The following section of the chapter explicitly discusses the disaster situation in Bangladesh, the evolution of the disaster management approach of the country, historic and current cyclone preparedness strategies, and the associated challenges, successes, advantages, and disadvantages of the contemporary system. The final section of the chapter portrays the image of women in Bangladesh both in general and in disaster situations.

Chapter 3, the literature review, commences with a general discussion of women's vulnerabilities, and women's position within society from a global perspective. The next sections of the chapter focus on women's vulnerability in disasters and provide an extensive overview of the literature on women's increased vulnerability, gender discrimination, and gender-based offences towards women in the different phases of disasters within a range of cultures, ethnicities, socio-economic settings, and backgrounds.

Chapter 4 discusses the meaning of wellbeing, key considerations in wellbeing research, and the way individuals understand their wellbeing. Since the research question asked about women's experiences of wellbeing in the cyclone shelter, it was required to explore the meaning of wellbeing and underpin an appropriate research method to reveal the wellbeing of the participating women.

Chapter 5 describes the research methodology that informs the study, and illustrates the detailed approach to conducting the research. First, the chapter discusses the variations in the theoretical perspectives of phenomenology, and the relationship between phenomenology and

hermeneutics, before exploring philosophical insights into time, truth, and memory. Then the chapter presents the practical steps to undertaking phenomenological research and outlines the data collection and analysis framework. Finally, the data collection and analysis method applied in the study is described in detail.

The next seven chapters (Chapters 6 to 12) of the thesis comprise the findings of the study. The chapters integrate the narratives of the participants along with the researcher's observations and associated interpretations under seven themes – *Being understood (as a woman)*, *Being a woman during crisis*, *Being in a hostile situation*, *Being fearful*, *Being uncertain*, *Being faithful*, and *Being against the odds*. Sub-themes branch out from each theme to showcase the findings through a logical and meaningful approach.

Chapters 13 and 14 of the thesis are the discussion chapters of the study. Chapter 13 discusses each theme and draws on relevant theory and literature to clarify and explain the findings from the themes to establish new knowledge from the study. The following chapter sheds light on the experience of wellbeing of female evacuees that correspond to the related literature. The later section of the chapter discusses potential provisions to improve women's experiences as evacuees in the shelters based on the narratives of the participants and the findings of the research.

The final chapter describes the significant discoveries from the research and suggests recommendations for developing practical strategies and effective approaches to improving women's experiences in the cyclone shelters of coastal Bangladesh. The chapter also addresses future directions for research in this field to create more knowledge and more efficient interventions, based on the findings of this research. The limitations of this study are

acknowledged before drawing a conclusion. The chapter ends with the final comments of the researcher.

Chapter summary

This chapter provides an outline of the present research. The chapter presents the rationale of the study, based on the current cyclone preparedness scenario and women's vulnerability and exposure in the different disaster phases in Bangladesh. The chapter introduces the research question and objectives of the study and briefly addresses the methodology adopted for the research. Finally, the organisation of the thesis is briefly described, to assist the reader to readily navigate through the thesis.

Chapter 2: Background

Chapter overview

This chapter explores the information obtained from the literature to illuminate the background, context, and existing knowledge related to the research question, and to justify the significance of the research.

This research focuses on the experiences of women who have evacuated to the cyclone shelters of Bangladesh during cyclone emergencies. The reviewed literature provided a landscape for the research and described the recent trends in global disaster research, the disaster management strategies of Bangladesh and their limitations, the accountability of the country's cyclone preparedness initiatives, and the situation of women during different natural disasters in Bangladesh. The appraisal of the literature highlighted the information gap, especially the lack of information regarding women's understandings of their experiences in the cyclone shelters, and explained the necessity of exploring women's insights into life in the cyclone shelters.

The literature was identified by using different keywords and phrases related to the research interest, including disasters, vulnerability, disaster risk reduction, disasters in Bangladesh, disaster management, cyclone preparedness in Bangladesh, cyclone shelters, women in disasters, and women in Bangladesh. Some articles were identified from the references of the primarily retrieved literature. The articles were retrieved from electronic databases such as Google Scholar, Elsevier, ProQuest, Scopus, and Science Direct. Date restrictions were not placed on the search process. Although the review commenced at the beginning of the study, it was undertaken throughout the study iteratively, and citation alerts were set to identify

contemporary research associated to the thesis topic. Books and book chapters were also appraised to understand the terminology used, such as 'disaster', 'vulnerability', and 'exposure'. Due to the type of information needed, a number of international reports and government documents including national policies, plans, guidelines, reports, and statistical reports, were also used in this chapter. The websites of the United Nations Office for Disaster Risk Reduction (UNISDR), the United Nations Development Programme (UNDP), the International Federation of Red Cross (IFRC), the World Health Organisation (WHO), the Intergovernmental Panel on Climate Change (IPCC), and the Asian Development Bank (ADB) were searched for relevant documents. Additionally, official websites of different ministries and departments of Bangladesh were searched to access the required documents. Although all the official documents of the country are in Bengali, the first language of the country, translated English versions were also available on the websites. An English version of the ministry report entitled "Cyclone Emergency Preparedness Plan" was not available on the website. The total number of cyclone shelters, the availability of toilets, the water supply, and women's spaces in the shelters were referred to from the document, with this section being documented in English. Therefore, technically speaking, non-English literature was not used in this chapter, even though many Bengali newspaper articles and available resources were read for deeper understanding and to recheck the validity of the perceived facts.

This chapter provides insights into the research focus by discussing all the relevant aspects of this study in three major sections. The first section discusses disaster, vulnerability, and exposure – three frequently used terms in disaster research, to determine suitable definitions for this study. The present trends in disaster research are also described to acknowledge the importance of incorporating comprehensive disaster management into national policies and

UN World Conference for DRR. The latter part of the chapter describes the disaster management system of Bangladesh and compares the paradigm shifts in the policies to the international mandate. The cyclone preparedness level of the country is focused upon in the same section, briefly explaining the administrative activities of local and national authorities, the contributions of non-government and humanitarian organisations, the current early warning system, and a description of the cyclone shelters of Bangladesh. The progress made over the years and the gaps that needed to be overcome are also discussed to highlight the positives and the pitfalls of the existing strategies to connect these threads to the research objectives. The third section of the chapter focuses on women in Bangladesh and constructs an argument explaining why the research particularly focuses on women rather than any other groups from the coastal communities.

2.1 Disaster, vulnerability, and exposure

Disasters are an inseparable part of world history and occur almost every day in different corners of the globe, affecting human lives (Powers, Kiess, & World Association of Disaster and Medicine, 2010). Although disasters have been quite prevalent in the past and had a significant impact on human civilisation on various occasions, the topic has not received substantial attention from researchers, policy-makers, and planners from different fields around the world until recent years because of increasing loss and damage resulting from disasters (Lindell, 2011).

The term *disaster* has been defined in many ways. Lowell J. Carr (1932) gave one of the first explanations of disaster based on social perspectives, stating that an event is not a disaster until the cultural protections of society collapse. In later years, many researchers supported

Carr and described disaster from a social point of view. Lewis M. Killian (1954) and Charles E. Fritz (1961) emphasised the association between catastrophic events and disrupted social order. Similar ideas were conveyed by Dennis Mileti (1999, p. 3) and Robert A. Stallings (2005, p. 239), as they respectively defined disaster as *social in nature* and as a *social situation* (Perry, 2007). Because most disasters originate from nature, researchers including John Oliver (1980) and Kenneth Hewitt (1998) described disaster as a *natural phenomenon*; although a few years back, Barry Turner (1978) added the notion of human-made disasters to his definition. Harry E. Moore (1958) introduced *loss of human lives* as an element of disasters; Philip Buckle (2005) presented the idea of *recovery* in disasters; while Denis Smith (2005) discussed the relationship between political and socio-economic disturbances from disasters. Finally, David A. Alexander (2005) explored the impact of disasters on individuals' mental health.

All these definitions and interpretations of disaster added more knowledge and directed further research, but none can be considered as a universal definition of disaster because of their particular focus on different aspects based on the researchers' interests and professional backgrounds (Mayner & Arbon, 2015). Therefore, Mayner and Arbon (2015) stressed the need for more consistent definitions of disaster to offer a standardised framework for disaster research and study. The authors attempted to harmonise different disaster terminologies and structured a potential definition of disaster. The definition of disaster specified by the UNISDR after adopting the Sendai Framework 2015-2030 plausibly covered the major key concepts. Additionally, the IPCC and the IFRC provided definitions of disaster with greater consensus (Table 2.1).

Table 2.2 Definition of Disaster by different agencies and authors

Authors/ Agencies	Definition		
Lidia Mayner & Paul Arbon	The widespread disruption and damage to a community that exceeds its ability to cope and overwhelms its resources (Mayner & Arbon, 2015, p. 24).		
UNISDR	A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts (United Nations Office for Disaster Risk Reduction, 2017a).		
IPCC	Severe alterations in the normal functioning of a community or a society due to hazardous physical events interacting with vulnerable social conditions, leading to widespread adverse human, material, economic, or environmental effects that require immediate emergency response to satisfy critical human needs and that may require external support for recovery (Intergovernmental Panel on Climate Change, 2012, p. 558).		

IFRC

A disaster is a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources. Though often caused by nature, disasters can have human origins (IFRC, 2019).

The IFRC definition was adopted for this thesis, given the aims of the research. This definition recognises a sudden event disrupting the community's functional capacity, which cannot be alleviated by the community's resources and the need for external assistance. Because the thesis focuses on women from the coastal communities of Bangladesh who seek external assistance as a result of sudden, catastrophic cyclones, the IFRC definition has been used to underpin this study.

The term *vulnerability* has been used in disaster research since the 1970s, but the definition of vulnerability is still evolving, considering the multi-dimensional nature of the concept. An individual, a group or community, a society, and even an institute have been tagged as vulnerable by different researchers to simply suggest *being at risk*. Also, vulnerability has been explained from different perspectives, including the health, social, and economic conditions of individuals or groups of people. Flaskerud and Winslow (1998) defined vulnerability as people with high risks of mortality and morbidity due to limited access to resources. Kottow (2003) added that poor people are more likely to be vulnerable because of their inability to access resources. Bohle (2001, 2002a, 2002b)

suggested that vulnerability has both an external and an internal side, where the external concerns exposure to risks, while the internal involves the capacity to overcome the impact of hazards.

In 2015, the Sendai Framework for Disaster Risk Reduction 2015-30 advocated that vulnerability and exposure are two closely associated factors in disasters, and advised to strengthen strategies and actions to reduce exposure and vulnerability, especially in developing countries to decrease disaster risks. This framework highlighted that understanding the concept of vulnerability and exposure, and following standard definitions, are essential for conducting disaster research. In disaster studies, vulnerability is considered as the *condition*, while exposure is regarded as the *situation* in the face of a disaster. As the UNISDR defined, *Vulnerability is the condition determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, community, asset or system to the impacts of hazards, and Exposure is the situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas* (United Nations Office for Disaster Risk Reduction, 2017a). Exposure can also describe the components that may be harmed through hazards, whereas vulnerability has the potential to underline the reasons for these probable harms.

These definitions and understandings have been used throughout the thesis to interpret the terms vulnerability and exposure.

2.2 DRR and the Sendai Framework for DRR 2015-2030

Disasters have resulted in 1.3 million deaths and losses of US\$2,908 billion globally, over the last two decades (Centre for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2017). Globalisation, increased industrialisation, and international trade have increased connections and dependencies across different parts of the world; which also means that more people and assets are likely to be affected by a single disaster. Loss and damage from disasters are increasing in highincome countries, whereas high population density and limited resources are exposing more people to disasters in middle- and low-income countries. As such, the United States of America (USA) had total damage of US\$95 billion following hurricane Harvey; approximately 20,000 Somalis died in 2010 from drought; and cyclone Nargis killed 138,000 people in Myanmar in 2008 (Centre for Research on the Epidemiology of Disasters & United Nations Office for Disaster Risk Reduction, 2017). While disasters have caused many casualties and economic losses over previous years, recent climate change trends are predicted to lead to more intense and frequent hazardous events in the future. The former head of the UNISDR, Dr. Robert Glasser stated that, as reducing risks from disasters by strengthening preparedness measures has needed to be prioritised globally (Glasser, 2018), disaster research has shifted from post-disaster response, recovery, and rehabilitation to "build[ing] back better" in recovery, rehabilitation, and reconstruction (United Nations International Strategy for Disaster Reduction, 2015, p. 21).

The IPCC (2012, p. 558) defined DRR as A policy goal or objective, and the strategic and instrumental measures employed for anticipating future disaster risk; reducing existing exposure, hazard, or vulnerability; and improving resilience. This definition suggests that

DRR is a national approach, coordinated by government and includes different stakeholders who play roles in mitigating disaster risks and building resilience in communities. Resilience is a significant element of DRR as resilience refers to, *The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.* (United Nations Office for Disaster Risk Reduction, 2017a). In other words, resilience is an indispensable tool in DRR, assisting individuals and/or communities to absorb a hazardous event, respond efficiently, and overcome the situation effectively.

In an attempt to mainstream DRR internationally, in 2015, the Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted at the 3rd United Nations World Conference. This framework ensured the continuation of the preceding Hyogo Framework for Action (HFA) 2005-2015 that focused on building resilience against disasters at the national and community levels. This framework conceived a people-centred pre-disaster approach to reducing disaster risks, and gave deliberate attention to people's livelihoods, health, wellbeing, and culture in risk reduction strategies; it also set seven targets to reach, which would act as indicators to assess national progress in DRR (Table 2.2).

Table 2.2 Overview of the Sendai Framework for Disaster Risk Reduction 2015-2030

- The substantial reduction of disaster risk and losses in lives, livelihoods, and health, and the economic, physical,

Expected outcomes and goals

social, cultural, and environmental assets of persons, businesses, communities, and countries.

- Prevent new, and reduce existing, disaster risk through
the implementation of integrated and inclusive economic,
structural, legal, social, health, cultural, educational,
environmental, technological, political, and institutional
measures that prevent and reduce hazard exposure and
vulnerability to disaster, increase preparedness for
response and recovery, and thus strengthen resilience.

Seven targets

- i. Substantially reduce global disaster mortality by 2030;
- ii. Substantially reduce the number of affected people globally by 2030;
- iii. Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030;
- iv. Substantially reduce disaster damage to critical
 infrastructure and disruption of basic services through
 developing their resilience by 2030;
- v. Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020;
- vi. Substantially enhance international cooperation to developing countries through adequate and sustainable

		support to complement their national actions for	
		implementation of the present Framework by 2030;	
	vii.	Substantially increase the availability of, and access to,	
		multi-hazard early warning systems and disaster risk	
		information and assessments to people by 2030.	
Priorities for	i.	Understanding disaster risk.	
action	ii.	Strengthening disaster risk governance to manage disaster	
		risk.	
	iii.	Investing in disaster risk reduction for resilience.	
	iv.	Enhancing disaster preparedness for effective response	
		and to "Build Back Better" in recovery, rehabilitation,	
		and reconstruction.	

Since the endorsement of the Sendai Framework for Disaster Risk Reduction 2015-2030, global, regional, national, and local level disaster policies and strategies have moved towards a preventative approach through a process involving much perseverance and persistence. The Sendai Framework acknowledged the importance of conceiving an individual's overall wellbeing to build resilience within a community and better preparedness against disasters. This framework also highlighted the need for the empowerment of women to strengthen disaster preparedness, and to integrate DRR into community development. This validates the importance of this research in the present context, where women's experiences of wellbeing in the cyclone shelters are explored and their ideas about improving the shelters have been documented. Furthermore, the

outcomes of the research can direct national policy-makers and related stakeholders to improve their disaster preparedness strategies and build resilience in the coastal areas of Bangladesh.

2.3 Disasters in Bangladesh

The World Risk Report 2018 has identified Bangladesh as the 9th most *high-risk* country for natural disasters (Muchke et al., 2018). From 1980 to 2008, the country experienced 219 natural disasters (United Nations Development Programme, 2018) causing 200,000 deaths and US\$17billion in loss of, and/or damage to, assets (Disaster Management Bureau, 2014). Human-made disasters have been prevalent in past years causing mass casualties and economic loss. Poor construction of infrastructure has resulted in building collapse incidents in 2004, 2005, and 2006 (Rahman, Ansary, & Islam, 2015), followed by the worst ever human-made disaster in Bangladesh in 2013, when a nine-storey building collapsed killing 1,127 people (Ansary & Rahman, 2013). Moreover, every year, fire incidents are increasing in number, exponentially increasing the loss from these incidents (Bangladesh Fire Service and Civil Defence, 2014). The unique geographical features of the country exacerbate the impact of natural hazard disasters in Bangladesh; flawed governance and lack of awareness among the citizens of the country increases the risk of human-made disasters. But it is the high population density that makes a large group of people vulnerable to a single event, and results in an *event* becoming a *disaster*, disrupting lives and property. Cutter, Boruff, and Shirley (2003) suggested that lower levels of income, education, and social status may expose individuals to certain disasters and increase their vulnerability. Since the greater part of the country's population comprises low- and middle-income groups, the people of Bangladesh are more likely to be severely

impacted by disasters, and less likely to recover quickly from the subsequent adversities, making Bangladesh more vulnerable overall to disasters (Rabby, Hossain, & Hasan, 2019).

2.4 Disaster management in Bangladesh

Bangladesh has a long history of struggling with natural disasters that has resulted in loss of lives, assets, and property, and which challenge food security. In the past, the country's disaster management strategies have been focused on the emergency response, which included immediate relief and subsequent rehabilitation during the post-disaster phases. But after experiencing the mass casualties caused by cyclone *Gorky* in 1991, the government acknowledged the need for disaster risk reduction and preparedness strategies designed to reduce the impact and losses caused by disasters by strengthening resilience (Islam & Walkerden, 2017). Since then, Bangladesh has endorsed several policies, plans, and regulations to promote disaster preparedness and resilience, and has surfaced as a global leader in DRR (United Nations Development Programme, 2018).

The country has created the MoDMR, which deals with disaster preparedness and DRR through different levels of collaboration with other national organisations, non-government organisations (NGOs), and international agencies. Apart from the designated Ministry, two other government organisations – the Disaster Management Bureau (DMB) and the Ministry of Environment and Forests (MoEF), play major roles in disaster management within Bangladesh. In 1993, the government-operated DMB was established to improve disaster management strategies and reduce loss and damage from disasters (National Encyclopedia of Bangladesh, 2014). The MoEF works on climate change, DRR strategies, resilience, and sustainability, and contributes to the country's disaster preparedness policies.

2.4.1 Disaster management strategies in Bangladesh

At present, Bangladesh has a well-structured institutional framework to ensure effective disaster preparedness in the pre-disaster phase, efficient response during disaster events, and well-organised recovery during the post-disaster phase. The current strategies have been a result of several ministerial shifts and the creation of different guidelines (Fig 2.1).

Bangladesh became independent in 1971 and the various ministries for the Government of Bangladesh were inaugurated the following year. The Ministry of Relief and Rehabilitation was formed in 1972 focusing on post-disaster recovery only. In 1982, the government prioritised food security following disasters and merged the disaster ministry with the Ministry of Food (MoF). The government realised that ensuring food supplies in the post-disaster phase was only one concern among several other disaster issues, and in 1994, a separate ministry for disasters was introduced, known as the MoDMR. Due to the dual concerns around food security and disaster impacts, in 2004 the MoF and the MoDMR fused again and emerged as the Ministry of Food & Disaster Management.

The government of Bangladesh initiated a collaborative project known as the Comprehensive Disaster Management Programme (CDMP) with the UNDP, and became a signatory to the HFA 2005-2015. Eventually, the government realised the need to modify existing disaster management policies, including those concerning disaster preparedness and risk reduction strategies; moving beyond a focus on *emergency response* based guidelines. In 2010, the DMB introduced the National Plan for Disaster Management (NPDM) 2010-2015, highlighting a paradigm shift in the country's approach to disasters from *conventional response and relief* to a *comprehensive risk reduction* culture (Disaster Management Bureau,

2010, p. III). Although the NPDM primarily focused on 2010-15, it provided regulatory guidelines until 2021. In 2012, there was another ministerial shift and the MoDMR rememerged with the mission of upholding DRR strategies by promoting food security and building resilience through strengthening communities (Ministry of Disaster Management and Relief, 2018). At present, the ministry is leading the disaster management activities of the country, undertaking different projects, and developing or modifying necessary guidelines in accordance with contemporary global disaster management and resilience concerns.

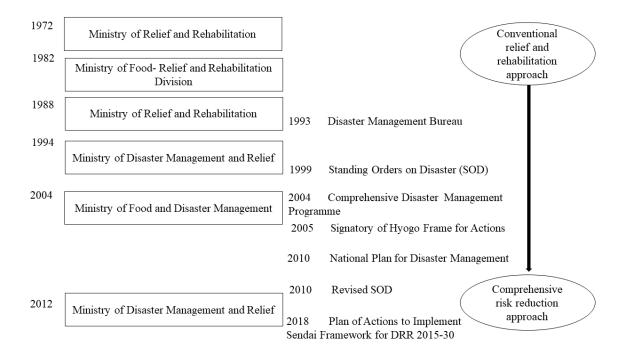


Fig 2.1 Major ministerial shifts and changes in disaster management strategies over time

All these changes and actions over time suggest that the government of Bangladesh has been trying to achieve an appropriate and contemporary approach to disaster management. Similar to international trends in disaster management strategies, the country's disaster management has focused on post-disaster response, relief, and rehabilitation in order to reduce further loss

and damage after disasters and to assist affected people to resettle. Being a low-income country under stress through a high population and frequent disasters, the government has found this approach to be exceptionally challenging in providing adequate assistance to disaster-affected areas, with the conventional strategy proving to be ineffective. Therefore, the bureaucrats made a number of alterations and introduced different policies and guidelines to improve disaster management strategies. Soon after the concept of DRR prevailed, the government of Bangladesh recognised the potential of the disaster preparedness approach under the country's circumstances and attempted to mainstream DRR at the national and local level for substantial improvement of the disaster situation.

2.4.2 Constraints of disaster policies in Bangladesh

At present, three major national policies control the disaster management system of Bangladesh:

Table 2.3 Major disaster policies regulating the disaster management system of Bangladesh

Policy	Supervisory ministry/	Major focus	
	agency		
Disaster Management	MoDMR	To ensure effective emergency	
Act (DMA)	response and humanitarian assistance		
		post-disaster recovery and	
		rehabilitation.	

National Plan for	DMB	To establish institutional accountability	
Disaster Management		for implementation of disaster	
(NPDM)		management policies at different	
		administrative levels of the country.	
Bangladesh Climate	MoEF	To reduce risks of climate change and	
Change Strategy and		increase adaptation capacities by	
Action Plan		initiating community-focused	
(BCCSAP)		adaptation programmes, strengthening	
		government and non-government	
		associations, and building	
		infrastructure, including cyclone	
		shelters, dams, improved drainage	
		systems, repair of embankments, and so	
		on.	

In practice, some provisions of the DMA have led to increased corruption among disaster management officials. Article 36(a), for example, stated that a person will face legal action for insulting a disaster management official. This provision discourages community members from making any claim of misconduct by government officials and may encourage officials to become involved in corruption. In the past, the BCCSAP has been dominated by government bureaucracies and power elites; strengthening social capacity, community adaptation, and other community-focused programmes recommended in the plan have not

been effectively implemented (Raihan, Huq, Alsted, & Andreasen, 2010). As a national plan, the NPDM should have included roles for primary and secondary stakeholders in disaster management, whereas the plan only described the government's role, and this created gaps in the implementation of the plan at the community level (Islam & Walkerden, 2017). Parvin and Johnson (2015) reported that the country's three-layered local level administrative organisations – District level (*Zila Parishad*), Sub-district level (*Upazila Parishad*), and Union⁶ level (*Union Parishad*) – have had gaps in coordination which have affected the implementation and dissemination of policies. The union level mostly remains uninvolved in policy development and planning, even though union level authorities are the first responders from government during emergencies.

It is evident that although existing disaster management policies and strategies appear to be appropriate, poor integration and implementation of the policies, inadequate and/or absent communication between national and local agencies, associated stakeholders, and vulnerable communities, challenges the effectiveness of established disaster management policies. The two major aspects of the Sendai Framework for DRR, building community resilience and a people-centred approach, are not possible without community involvement. This highlights the gap that restrains the government from receiving maximum benefit from the initiatives they have undertaken. Therefore, more research is needed in the disaster field to understand people's perceptions and experiences of disasters, to drive further policy development.

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⁶ Union is the smallest administrative unit of the country.

2.5 Cyclone preparedness in Bangladesh

Due to the vulnerable geographical location and history of cyclones in the coastal areas of Bangladesh, the national and local government, a range of international humanitarian organisations, local NGOs, voluntary agencies, and in a few cases, vulnerable communities from the coastal areas, have been working individually and collectively to strengthen preparedness and build resilience against cyclones. While strategising cyclone preparedness in Bangladesh, the government and all associated stakeholders have emphasised an early warning system (EWS) and the establishment of evacuation centres. Prompt dissemination of early warnings for cyclones alerts local people, and the availability of evacuation centres is required to provide safety to these people during cyclone event. Therefore, EWS and cyclone shelters have been considered as major tools for cyclone preparedness strategies over the years (B. K. Paul, 2009; S. K. Paul, 2011; Saha & James, 2017).

2.5.1 Role of organisations in cyclone preparedness

A number of national level committees are closely associated with cyclone preparedness and risk reduction (Habib, Shahidullah, & Ahmed, 2012), including the National Disaster Management Council (NDMC), chaired by the Prime Minister of the country. The Council reserves the right to allocate additional budget revenue to emergency response and relief in cyclone emergencies (Disaster Management Bureau, 2014). The coastal areas undergo specific cyclone preparedness practice to reduce risks from cyclones; every year, the MoDMR, which has been reconstituted in recent years, orders local level committees to perform cyclone preparedness activities during March-April, in the months before the cyclone season, including revising the emergency contacts of field workers and volunteers,

disseminating cyclone preparedness instructions to local people, and storing emergency relief materials in advance (Disaster Management Bureau, 2014; Habib et al., 2012).

Humanitarian organisations such as the WHO, UNICEF, the World Food Programme (WFP), the UNDP, the IFRC, Save the Children, etc. work in clusters under the supervision of different ministries to ensure food security, health, early response and recovery, shelter, and rehabilitation during cyclone disasters. Additionally, the UNDP recently completed a project known as the "Early Recovery Facility (ERF)" in Bangladesh, and financed and implemented emergency response and early recovery in the cyclone-affected areas (United Nations Development Programme, 2017a).

The Cyclone Preparedness Programme (CPP), a community-based volunteer organisation, has been playing a major role in cyclone preparedness since the 1970s. The organisation aims to reduce the loss of life by disseminating warnings, assisting with evacuation, and providing information about sheltersin the pre-disaster phase, and search, rescue, first aid, relief distribution, health, and sanitation management immediately after a disaster. Moreover, during non-disaster periods, the CPP arranges training programmes, seminars, and workshops for volunteers, local government officials, NGO workers, and community members, stages dramas and concerts, shows films, distributes leaflets, posters, and handbooks, and runs other campaigns to raise awareness in cyclone-prone areas (Cyclone Preparedness Programme, 2018). Local volunteers from the coastal communities execute all the planning of the CPP activities and are considered to be the backbone of the CPP. At present, 49,365 trained volunteers contribute to the cyclone-prone districts of Bangladesh, comprising 32,910 male volunteers and 16,455 female volunteers (Cyclone Preparedness Programme, 2018;

Bangladesh Red Crescent Society, 2017). As part of effective planning and implementation strategies, the CPP has established 3,291 units in the vulnerable areas, with each unit concentrating on 2-3 square kilometres and 2-3 thousand people (Cyclone Preparedness Programme, 2018; Saha & James, 2017). A unit designates 15 volunteers, comprising 10 males and 5 females, to take responsibility for the 5 activity groups – the warning, shelter, rescue, first aid, and relief groups (Cyclone Preparedness Programme, 2018). Although the ratio of male-female population in the coastal areas is almost 50:50, the number of female volunteers is half that of the male volunteers, which suggests that female volunteers do not get enough time and opportunity to provide assistance to the female population. Because of conservative social practices, many women do not talk to men they are not familiar with, so it is assumed that different preparedness and awareness activities, even cyclone warnings, do not reach a number of women in the coastal communities, making them vulnerable to imminent cyclones. This has been reflected in a study regarding evacuation decisions and behaviours during cyclone Aila, where only 33% of the women were reported to have received an evacuation order (Parvin et al., 2019). The study also revealed trust issues in these communities over the information disseminated by CPP volunteers, because some of the early warnings did not result in a cyclone impact, and there had been several mistakes and miscommunications in warning dissemination in previous years.

2.5.2 Cyclone Early Warning System (EWS) in Bangladesh

The Bangladesh Meteorological Department (BMD) has a dedicated Storm Warning Centre (SWC) for issuing marine warnings and special weather bulletins, which includes forecasting and preparing cyclone warning messages. The techniques used by the BMD can only produce accurate storm track predictions 12 hours before the landfall of a storm (Roy et al., 2015).

Because of the high population density in the coastal areas, and people being heavily involved in marine fishing, boating, and trading in Bangladesh, the 12 hour time period is generally not adequate for the dissemination of warnings and the evacuation of vulnerable people. To address this limitation, meteorologists track the low pressure systems forming in the deep sea or over the bay with satellite images. The meteorologists issue an initial warning message immediately after a low-pressure system intensifies and moves northwards. The Standing Orders on Disaster (SOD)⁷ initiates immediately after the first warning, and all government agencies prepare for responding to a cyclone emergency (Disaster Management Bureau, 2010b). Between the first warning message and the cyclone landfall, generally, four warning messages are disseminated depending on the wind speed and length of time before the storm makes landfall (Fig 2.2).

⁷ The Bangladesh Standing Orders on Disaster describes roles and responsibilities in disaster management.

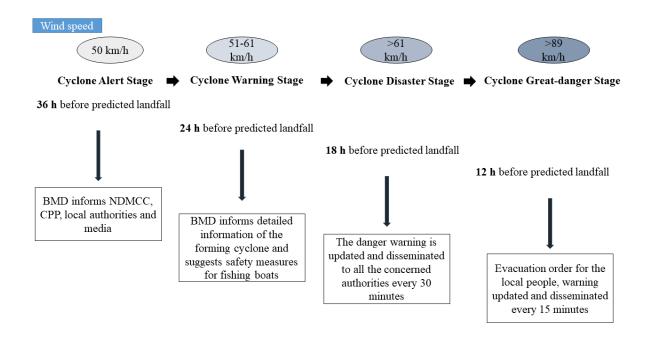


Fig 2.2 Different stages of warning messages for cyclones in Bangladesh

The CPP and the mass media play major roles in disseminating SWC-issued warning messages to the general population. The SWC circulates the warning messages to the disaster ministry, the DMB, the defence forces, the coast guard, and the CPP by fax, telephone, and/or the Internet. The CPP uses its broadcasting system to inform the coastal volunteers, who then mobilise to update the local people living in the coastal areas. In addition, immediately after receiving the warning messages, both electronic and print media publish the warning messages as breaking news (Habib et al., 2012).

Even with limited resources, the country has developed a warning system that effectively incorporates all stakeholders from the local to the national level, and provides a 12 hour timespan for local people to evacuate their households and take shelter in the nearby

evacuation centres. Yet, as discussed in Chapter 1, many local people do not evacuate, risking their lives, and some do not take shelter in the evacuation centres. These facts raise questions about whether not going to the evacuation centres is a personal choice, and whether this choice is derived from socio-cultural preferences, lack of facilities in the shelters, or other factors.

2.5.3 A review of evacuation centres for cyclones in Bangladesh

Among the different preparedness tools, establishing evacuation centres near vulnerable communities has been considered as one of the most important means to reducing deaths and casualties from cyclones. Because of the high frequency of cyclones, a number of cyclone evacuation centres have been built in coastal Bangladesh, commonly referred to as *cyclone shelters*. The purpose of the evacuation centres is fundamentally linked to human security during disasters; therefore, the responsibility of maintaining and operating the cyclone shelters of the country has been given to the MoDMR (Ministry of Disaster Management and Relief, 2012).

The concept of cyclone shelters is quite longstanding in Bangladesh and many national and international agencies have been involved in constructing these shelters in coastal Bangladesh since the 1950s (Choudhury, 1992; Karim & Mimura, 2008; Mallick, 2014). (Shah Alam Khan, 2008) noted that donor-funded cyclone shelters started to be built after the 1985 cyclone. These cyclone shelters were used for other purposes such as schools, community facilities, and later, they became formally known as multi-purpose cyclone shelters. In addition, the government initiated the Multi-Purpose Cyclone Shelter Programme to promote multi-purpose shelter construction, coastal afforestation, and other mitigation strategies

(BUET-BIDS, 1993). The government signed a Memorandum of Understanding (MoU) with several development partners working in Bangladesh, to fund the construction of cyclone shelters (Disaster Management Bureau, 2010a). Consequently, the number of shelters in the cyclone-prone areas of the country has increased to accommodate more people during cyclone emergencies.

In order to ensure structural quality and better maintenance, the Government of Bangladesh has introduced the "Cyclone Shelter Construction, Maintenance and Management Policy 2011" and defined cyclone shelters with the following distinctive features:

A Cyclone shelter is a structured building, constructed on RCC (reinforced concrete column) pillar, the ground floor of which will be kept open for free flow of tidal surges. The structural design will be prepared in such a way so that it can withstand the heavy gusty and squally wind. When specific warnings for cyclone and tidal surges are announced by the appropriate authorities, the buildings would be opened for safe shelters of local communities and cattle. It will be vacated when the warnings are withdrawn. But there is a condition that the cyclone shelters will be used only for temporary shelter during disaster emergencies and cannot be treated as shelters for displaced persons (Ministry of Disaster Management and Relief, 2012, p. 6).

The policy promotes private and/ or community-based construction and maintenance of cyclone shelters by explicating that all multi-storey buildings in the vulnerable areas would be used as evacuation centres when required. According to the policy, apart from the district, sub-district, and municipality headquarters, all existing and future buildings in cyclone-prone areas will serve multiple purposes. The government provided three categories of design, and

organisations intending to construct buildings can follow one of these designs based on the primary purpose for the building:

Table 2.3 Design and details of cyclone shelters

Design	Plinth Area	Capacity
College/ higher secondary school and	275-300 m ² / floor	Approximately 1,000
cyclone shelter		persons per floor
Primary school and cyclone shelter	220-230 m ² / floor	Approximately 800
		persons per floor
Office/ community centre and others	$200 \text{ m}^2/\text{ floor}$	Approximately 750
and cyclone shelter		persons per floor

The policy also specifies that all the buildings, irrespective of their purpose and accommodation capacity, should have at least three storeys, have ramp facilities on the 1st floor for people with a disability, children, women, and elderly people, and contain arrangements for rainwater harvesting to ensure safe drinking water in emergencies. All the buildings should have structures strong enough to endure 260 km/h winds and 6 metres of tidal surge. The old shelter buildings in the cyclone regions which do not meet the criteria need to be reconstructed and/or repaired. Environmental impact assessments are analysed, and cost-effectiveness considered before constructing a new building. Moreover, all the multi-purpose buildings must be not more than 1.5 km away from a vulnerable community, and should have good road access (Ministry of Disaster Management and Relief, 2012).

The policy recommends the establishment of a Cyclone Shelter Management Committee in each union (the smallest administrative unit), which should include the headmaster of the local primary school and a religious leader from a local religious institution, along with a female member of the concerned union, representatives from a private NGO and the CPP, and a member of the Union Disaster Management Committee. It also encourages raising funds from local communities for minor repairs of the buildings. These strategies seek to increase community involvement in maintaining the evacuation centres.

Although the number of cyclone shelters has increased over the years and cyclone shelter policies are promising, in reality, the structures and lack of availability of basic facilities discourages many local people from going to these shelters. Faruk, Ashraf, and Ferdaus (2018) argued that important issues such as gender and disabled equity and access, and children's facilities are absent in the existing shelters. The authors suggested that the topdown approach to the establishment of shelters by the government has created gaps and failed to achieve expected outcomes. For example, an absence of local stakeholders in selecting locations and determining capacity and spaces for the shelters during the design process resulted in a lack of oversight of particular details, such as separate toilets for men and women, women's spaces, children's play areas, and water supplies. Of the 3,739 ministrylisted cyclone shelter buildings in the coastal areas, only 276 have separate women's spaces and 49 have facilities for disabled people; 608 shelters do not have any toilet facilities inside the buildings and 1,744 shelters do not have any water supply system (Disaster Management Bureau, 2014). Miyaji, Okazaki, and Ochiai (2020) reported dilapidated toilet facilties, damaged or no toilet doors, and unusable stairs in a majority of the cyclone shelters in the study area. The lack of availability, and inadequate maintenance of facilities can potentially

hamper people's wellbeing in the shelters and dissuade local community members from evacuating to the shelters.

In addition, cyclone shelters often fail to support people of all socio-economic backgrounds. The financially well-off people in the community build their houses in suitable places closer to the paved roads and other commodities, and have easy access to the cyclone shelters compared to low- and middle-income community members (Mallick, 2014). Mallick (2014) also discussed the inadequacy of, and lack of access to, cyclone shelters in the area of his research, and recorded that only 24% of families had access to cyclone shelters within 500 metres of their household. Moreover, poor road networks made the existing cyclone shelters inaccessible in many cases, as only 5% of people had access to paved roads within 100 metres of their household (Mallick, Rahaman, & Vogt, 2011).

Even though many cyclone shelters had been built, especially since 1991 following cyclone *Gorky*, the number is not yet adequate. In 2013, the national government estimated a shortage of no less than 3,000 multi-purpose cyclone shelters to accommodate the estimated vulnerable population (Disaster Management Bureau, 2014). Moreover, some aspects of the shelters have been controversial and challenge the practicality and sustainability of the evacuation centres. Mahmood, Dhakal, and Keast (2014) pointed out significant inequality in the ratio of population to the number of shelters in the cyclone-prone districts. The study suggests that the cyclone shelters of the Noakhali district can accommodate only 266,000 people among a vulnerable population of 1,807,000. On the other hand, Khulna district has enough shelters for 76,000 people, whereas the number of highly vulnerable communities is almost zero. Many evacuation centres have been constructed in locations that could

exacerbate risks and increase vulnerabilities. For example, the Centre for Environment and Geographic Information Services (CEGIS) (2009) documented that about 88 evacuation centres were destroyed due to river erosion and other phenomena, causing financial loss and property damage. Moreover, *The Daily Star*, a well-known English language newspaper in Bangladesh, reported that lack of maintenance and river erosion completely or partially destroyed almost 1,576 evacuation centres in the same year, before the onset of cyclone *Sidr* (Deabnath, 2007).





Fig 2.3 Cyclone shelters in the study area captured by the researcher during data collection; (Red circles are the toilets available for evacuees while staying at the shelter)

These facts highlight that the existing cyclone shelter policies need modification to improve the condition of the cyclone shelters and to ensure the availability of basic needs for evacuees. As previously discussed, the top-down approach of the government in cyclone shelter construction and maintenance strategies has left breaches, and understanding local people's perspectives as evacuees can provide an insight into the situation that occurs in the shelters, which can play a major role in achieving realistic improvements and/or adjustments to the shelters.

2.6 Women's lives in Bangladesh

Bangladesh has attempted to ensure gender equity and envisioned a gender-balanced society since the independence of the country by including equal rights for women and impartiality over sex, race, and caste in the first Constitution of Bangladesh; article 28(2) under Section 3 of the country's Constitution declared, *Equal opportunity for men and women in all spheres of state and public life*. Yet, gender discrimination and gender inequity have remained a concerning issue over the years. Johnston and Naved (2008) argued that even though the government of Bangladesh has imposed laws to preserve women's rights, women across the country are relatively insecure and often face discrimination, which often starts within their own household. Moreover, repeated Intimate Partner Violence (IPV) and verbal abuse are common in poor households, where women are mostly illiterate and unaware of their rights (Islam, Tareque, Sugawa, & Kawahara, 2015).

Traditionally, Bangladesh maintains a patriarchal society; male dominance is still practiced extensively within the family and throughout society. Hussain (2010) discussed how erroneous interpretations and incomplete understandings of *Islam*, the chief religion of the country, categorises women as the weaker group and empowers men with irrational authority. The author quoted Islamic philosopher Maududdi (2002), *A man is the guardian of a woman; therefore, a good woman remains subordinate to her husband.* Statements such as this make women rely on their male custodians, their fathers, husbands, or brothers, throughout their lives. Men choose women's education, marriage, their extent of social exposure, their

economic activities, and they determine other important decisions. Predictably, the majority of men in society grow up with a sense of superiority and dominance that bolsters the discrimination and underpins other social issues, including domestic violence (DV), sexual assault, and other gender-based crimes. All these circumstances associated with the sociocultural system of the country expose women to multiple risks and make them more vulnerable within their communities (Alston, 2015).

According to Inglehart and Baker (2000), the extent of economic development of a country influences the traditional features of gender equity. Although economic progress and social advancement in Bangladesh are undeniable, only a small portion of the population enjoys the positive consequences. Women's futures primarily depend on their socio-economic background, rather than their personal preferences and interests. Usually, women from higher-income and higher-middle-income communities have better opportunities to explore their ambitions and flourish in their desired areas of work, whereas, the rest still struggle with the conservative male-dominated social system. In addition, as men are considered to be the 'superior' individuals, they are expected to lead and guide not only their households, but also different organisations and development activities in the public and private sectors. As a result, Bangladesh is listed among the lowest positioned countries in terms of gender equity (Sayem & Nury, 2013), being ranked 134 among 160 listed countries (United Nations Development Programme, 2017b).

However, global feminist, gender equity, and women's empowerment movements have influenced Bangladesh as well. The women of Bangladesh have been more easily accepted and even appreciated in the education sector and in politics, and have played a significant role

in economic progress since the 1980s (Alston, 2015). More women are coming out from ageold traditions and pursuing different careers; slowly but surely, the underlying social values
are also changing. At present, there is a fair balance between male and female students in the
education institutes, and the adult literacy rate of women has been increasing every year
(Bulletin-Bangladesh, 2017). To ensure women's involvement in the national administration,
the parliament of the country has allotted fixed parliamentary positions for women (Alston,
2015). Women are successfully contributing to the development of the country as
bureaucrats, policy-makers, physicians, engineers, lawyers, bankers, academics, social
workers, and so on. A large number of women from lower-class and lower-middle-class
social backgrounds are providing their labour in ready-made garment (RMG) factories, the
second-largest foreign income source for the country, and playing an active role in the
national economy (Shoma, 2017). Women from poor communities are also becoming
involved in small-scale business, such as cottage industries, cattle or poultry farming, and
homestead vegetable growing with the help of various loan schemes, especially micro-credit
schemes through the *Grameen Bank*⁸ and other NGOs (Sen, 2013).

Even if the individual success stories and the statistics may seem encouraging, this is not the picture of the whole country, and the overall status of women in society is still quite alarming; despite being led by female leaders, the two major political parties of the country have only 2-3% of female representatives at the national level (Alston, 2015). Women working in the RMG sectors are often paid less than men, do not receive healthcare benefits,

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⁸ A microfinance organisation founded by Professor Muhammad Yunus, to provide banking services to the poor and access to credit. The bank acknowledged the potentials and skills of the poor communities and helped them with loans to utilise their skills to end poverty. The bank and Professor Muhammad Yunus jointly received the Nobel Peace Prize in 2006 for the initiative.

and are discriminated against in various ways by their employers (Shoma, 2017). Also, self-employment among women has not altered the conservative norms of society; they find themselves unevenly burdened with work and become victims of verbal abuse and domestic violence if they fail to meet their male guardians' expectations (Asian Development Bank, 2017). The common tendency of privileging men over women deprives women, and prevents them from practicing their rights individually, inevitably impacting their lives and wellbeing.

2.7 Women's condition in natural disasters of Bangladesh

Vulnerability during disasters is a combination of multiple poverty-induced factors, including an individual's lack of physical and mental capability, nutritional deficiency, livelihood instability, and insufficient self-resilience (Cannon, 2002). All these factors are directly or indirectly associated with financial solvency. Financially affluent people tend to have a stable livelihood, can afford required meals, build strong houses, and basically, their resources make them more prepared for emergencies; whereas, people with inadequate economic capacity remain nutritionally undersupplied, physically weak, and cannot maintain healthy and safe lifestyles, which impacts their mental health, reduces confidence, and leaves them unprepared in emergencies. Consequently, vulnerability and poverty are correlated; additionally, the severity of vulnerabilities and exposure to hazards varies and depends on a range of social and cultural aspects (Wisner, Blaike, Cannon, & Davis, 2004). In Bangladesh, 80% of women live in rural areas where conservative socio-cultural practices and poverty are prevalent, and this makes them extremely vulnerable to disasters and the effects of climate change (Cannon, 2002; Food and Agricultural Organisation, 2008).

The socio-cultural role of women and irrational social expectations increases women's vulnerability at the onset of disasters. Women are expected to maintain *purdah*⁹, look after children and the elderly, and stay inside the household, which narrows their options for preparing, adapting, and/or recovering, and exposes them to the impacts of disaster (Rezwana, 2017). Following the theory of Enarson (2012) regarding women's increased physical and emotional labour in disasters, Islam, Ingham, Hicks, and Manock (2017) suggested that women in Bangladesh become more vulnerable in the face of disasters because they are overburdened by responsibilities with drastically reduced assistance.

Rashid (2002) described that women are expected to maintain *purdah* at all times and move less in the public domain even during flood emergencies; this causes psychological distress among poor women and adolescent girls during floods. Instead of going to the flood shelters, women sometimes stay in their partially submerged houses to save their virtue with, for example, the constant fear of snake bites and electrocution by loose electric wires in urban slum areas. Because of the conservative social setting, women living in the coastal areas often do not attend the cyclone preparedness training and awareness campaigns. During the warning stage of cyclone *Sidr*, many women and adolescent girls did not realise the risk and remained inside until tidal water had entered their households (Rezwana, 2017). Also, Ayeb-Karlsson (2020) captured how people's social values and gendered attitudes adhered to women's delayed evacuation, since women were expected to be accompanied by their male custodians, and women who evacuated without their husbands were reported as being

⁹ Covering women's skin and hair and staying away from men other than family members.

sexually assaulted or physically harmed, and often endured social humiliation and punishment for not following the guidance of their male counterparts.

Women are expected to arrange food and provide assistance to other family members.

Women often find it difficult to fulfil their duties because their *purdah* penalises them if they access information and relief aid, including drinking water, hygiene products, and food. At times, their shyness and hesitation prevent them from going to public areas to look for employment opportunities, credit options, and rehabilitation resources (Juran & Trivedi, 2015). Women also suffer financially more than their male counterparts after disasters.

During the 65 day flood in 1998, the rate of unemployment among women was 64% higher than men (Azad, Hossain, & Nasreen, 2013). Ansari (2013) argued that during *Monga*¹⁰ periods, female-headed families become the first victims, because women in the communities are usually the first ones to lose their jobs.

Women are more likely to suffer from long-term and life-threatening health conditions in Bangladesh during the post-disaster phase. Miscarriages, reproductive complications, infections, and rashes are common conditions among women after disasters; because of prevalent social norms, women have poor health literacy and do not seek healthcare, which increases the risk of morbidity and mortality in women following a disaster (Juran & Trivedi, 2015). Women commonly suffered from UTIs and skin diseases during the 1998 flood because they did not use the toilet as men were present, and they could not change out of

negative impact on the national economy.

¹⁰ Cyclical phenomenon of poverty and hunger; especially occurring in the north-western part of Bangladesh after the rice harvesting period, and while waiting for the next crop sowing period to start. This occurrence is considered to be a social disaster because of the loss and damage it causes among local people and it also has a

their wet clothes due to the lack of privacy in the flood shelters (Azad et al., 2013). Rezwana (2017) documented psychological stress, trauma, and numbness among women in the cyclone shelters following cyclone *Sidr*. Moreover, women are expected to eat less or skip their meals when food is scarce, which can result in severe malnutrition among women during disasters (Ansari & Nayeem, 2013).

Rashid (2002) also reported sexual harassment and stress among women in temporary shelters during floods. Adolescent girls became vulnerable, because it is assumed that being harassed means that the girl must have done something wrong to initiate this kind of incident, and society would not accept them after such dishonour. Domestic violence, verbal abuse, and sexual harassment within the shelters were also reported by women after the flood of 1998 (Azad et al., 2013). Because unmarried girls are considered as unprotected, the percentage of child marriage and marrying off of daughters to incompatible men increases following an extreme weather event to protect the unmarried women from the forthcoming event, which subsequently leads to several social issues and health challenges for these girls (Carrico, Donato, Best, & Gilligan, 2020).

Even though women in Bangladesh are unmistakably more vulnerable to disasters than any other group of people within their community, and many articles have focused on the reasons for their vulnerabilities, there are only a handful of articles and reports which have discussed women's perceptions of disasters, and which attempt to describe their experiences during each phase of a disaster. Without understanding women's stories and opinions of disasters in terms of their sense of wellbeing, safety, and ideas on improving their existing situation, facilitating them with resources to reduce their vulnerability would be an unreasonable

approach. Ran, MacGillivray, Gong, and Hales (2020) highlighted the need for inclusion of political, socio-cultural, and geographical contexts in vulnerability and resilience research, to inform practical decision-making and strengthen response-recovery capacity against a disaster. Therefore, more community-based and disaster-specific research is needed to focus on women's experiences of disasters to strengthen community resilience and facilitate wellbeing in emergencies.

Chapter summary

This chapter has constructed a foundation for considering the research question of the thesis. The research question asks *How do women in the coastal areas of Bangladesh experience wellbeing during their stay in cyclone shelters as evacuees?* to attain an understanding of women's experiences while living in the cyclone shelters and identifying their perspectives on improving life in the shelters. The chapter discusses significant topics associated with this research including disaster, vulnerability, the concept of DRR, cyclones in Bangladesh, available preparedness strategies, and women's lives and vulnerability during disasters in Bangladesh. The chapter has brought out a range of different issues and narrowed down the concepts towards a confined area that has set a context for the research and identified the gaps in knowledge on understanding women's perspectives about their situations and lived-experiences as evacuees in the cyclone shelters. This discussion has strengthened the purpose of the research and acknowledges the need for this research in the practical world.

Chapter 3: Women and Disasters

Chapter overview

This chapter provides a review of the literature pertaining to the experiences of women involved in disasters around the world. A narrative review was undertaken to summarise the selected literature and identify gaps in existing knowledge. I sought articles related to women's experiences during and after disruptive events, their health conditions, safety and security issues, financial situation, and/or approaches of governments, communities, and families towards women in different disasters in different countries around the world.

The search strategy included keywords and combinations of keywords such as *gender* and *disasters/disaster*, *women in disasters/disaster*, *post-disaster*, and *women*. After reviewing the titles of the articles, relevant papers were obtained from a number of electronic databases including Scopus, Science Direct, Elsevier, ProQuest, and Google Scholar. Additional articles and other literature were included from a manual search of the reference lists of the identified articles after an initial read. The relevant grey literature, including national government reports, reports from the IFRC, the UN, UNDP, UNISDR, the WHO, the Committee on Health Care for Underserved Women, and the United Kingdom Health Protection Agency and Partners (UKHPA), was also included because it contains gender-focused information and commentary on recent prominent disasters. A Masters dissertation was also included in the review. The grey literature was accessed through organisational websites and Google Scholar.

Women's experiences of disasters from the recent past was focused on, selecting disaster events occurring after 2000. Some older reports and articles were read and included in the

latter part of the chapter, while discussing the research gaps and the next plausible research steps, to highlight that women's issues in disasters have been rather continuous and recurrent under different circumstances over time, and to establish logical explanations and imperatives of my research in the present disaster context. It was decided to use articles published after 2006 to ensure the relevance and validity of the content to the current context. All the literature used in this chapter was presented in English.

The first section of the chapter describes the evolution of women's position in society, and underlines the fact that, despite the progress made, women still face inequities and discrimination. This section also acknowledges global concerns and contributions to strengthen women's capacities in disasters, also emphasising women's increased vulnerability in disasters, irrespective of their socio-cultural and financial condition. The second section of the chapter consists of six sub-sections describing women's experiences of sexual assault, DV and IPV, health and financial struggles, gender-biased behaviour, experiences of minority groups in disasters, and the underlying reasons behind these undesirable events. The final section provides observations and a summary of the gaps in our understanding of women's experiences, and identifies the current key issues hindering women's advancement in disaster risk reduction which exposes them to poor disaster outcomes.

3.1 Vulnerability of women in disasters

Except for rare female-dominated cultures, women around the world, irrespective of their socio-cultural backgrounds, economic status, and religious beliefs, are considered as inferior to men. The early Greek philosophers defined women as weaker than men. During the 4th century BC, Aristotle described women as *human with lesser qualities*. The concept of

women as *lesser* did not change over several centuries. For instance, Thomas Aquinas described women as *imperfect men* in the 13th century.

Women's psychological features were declared as feminine, comprising only emotion, sensitivity, and gentleness (Jenainiti & Groves, 2007). Women's roles were primarily confined to caregiving within the family and obeying the male members of their household. Women had limited access to the outside world. Some women received higher education in the western world, yet women's public lives were restricted and strictly controlled by their male guardians (Jenainiti & Groves, 2007). Although there were some examples of women's rights movements in the 17th century, and many women from the USA and Europe raised their voices against the patriarchal social systems during the 18th and 19th centuries, women were still known through their husband's identity, even in the late 19th century (Jenainiti & Groves, 2007). Eventually, with the advancement of civilisation, women became more aware and initiated movements for better and more respected lives. These movements increased following World War II and women started to emphasise issues such as voting rights, having equal rights in law, and special assistance for maternity (Walters, 2005).

The movement to improve the situation of women which started in the western world gradually spread to the rest of the world. Some women's movements in Asian and middle-eastern countries were recorded in the 1920s (Loomba & Lukose, 2012), but the feminist movement truly gained strength in these regions in the late 1960s. Women in China, Japan, Turkey, and the Indian subcontinent spoke out against discrimination in education, employment, and politics, and raised awareness of DV (Çaha, 2016; Ray, 2017; Shigematsu, 2012; Zhou, 2003). All these movements brought progressive change in social, political, and

cultural behaviour towards women and the concept of women's rights, gender equity, and women's empowerment have continued to evolve.

Being the cultural hub of the British Indian Empire, Kolkata (previously known as Calcutta), a city in the Bengal region (presently Bangladesh and West Bengal of India) had the western culture and lifestyle introduced moreso than other parts of the Indian subcontinent, which had a subsequent impact on the other parts of Bengal. As a result, the concepts of gender equity, women's education, and women's rights manifested within the educated society of Bengal earlier than in the rest of the Indian subcontinent. The women's movement in Bengal was pioneered by Begum Rokeya¹¹ in 1905, who promoted women's institutional education and spoke out for gender equity in the household (Hasan, 2016; Jahan, 2018). In the early 1970s, after the liberation war of Bangladesh, women's movements evolved and were often influenced by different social forces, political agendas, and the country's socio-economic conditions (Jahan, 2018). The women's movement in Bangladesh progressed rapidly from where Begum Rokeya started; however, it is still a long way from reaching her aspirations for empowerment and gender equity for the women of Bangladesh.

All the movements for women's rights brought a wide range of cultural and perceptual changes across the globe. Yet, even today, women are considered to be the weaker sex in many communities and societies, and often experience inequities and discrimination within the family and the community. In low-income countries, women struggle more with social disgrace and gender-related violence (Palermo, Bleck, & Peterman, 2014). High-income

¹¹ Rokeya Sakhawat Hossain, commonly known as Begum Rokeya, is a well-known author and social reformer from Bengal, who came from a well-reputed Muslim family and advocated for women's education and against gender stereotypes.

countries still experience more patriarchal and male-dominated practices, despite achieving higher levels of gender equality (Enarson, 2012).

Being treated as a secondary group puts women under collective threat of greater vulnerability from disasters (Rezaeian, 2013). The WHO declared women as the most vulnerable group of people in extreme events (World Health Organisation, 2010). Although severity varies from society to society, and culture to culture, and depends on a range of economic aspects (Ginige, Amaratunga, & Haigh, 2014), the pre-existing vulnerability from gender-biased attitudes is a root cause of women's vulnerability in disasters. Male-dominated socio-cultural systems and practices, social expectations from women, and the financial dependence of women on men act as dynamic pressures, pushing women into unsafe conditions and accelerating their risk of harm from disasters.

The 2015 Sendai Framework for DRR labelled issues including gender inequality, women's dependence on men, religious beliefs, and cultural practices as contributing factors for women's deaths and loss in disasters. Because one of the targets of the Sendai Framework is to reduce the death toll and economic losses from disasters, the Framework encourages gender equity and prioritises women's empowerment to reduce vulnerability and develop resilience (United Nations Office for Disaster Risk Reduction, 2015). The IFRC joined with the UN in 2017 to reduce the number of deaths of women in disasters by promoting transformative changes in women's participation in disaster preparedness (United Nations Office for Disaster Risk Reduction, 2017b). The Framework and associated actions underline global concern about women as a disadvantaged group in preparedness measures, survival, and recovery during disasters.

The literature surveyed in this chapter highlights women's poorer situations across the different stages of disasters. Financial hardship, domestic violence, sexual assault, and physical abuse within and outside of the family, discrimination in relief and rehabilitation, and inadequate healthcare facilities hamper women's wellbeing resulting in both short- and long-term consequences. Although awareness within the community and the initiatives of global organisations are increasing, women's negative experiences during and after disasters continues to persist.

3.2 Experiences of women in disasters

This section reviews the literature on women's experiences in disasters across the globe in recent years (Table 3.1), to develop an understanding of women's situations in disasters and to identify the underlying reasons for them.

Table 3.1 List of disasters, affected countries, and year of occurrence mentioned in this section

Year	Name of the disaster	Affected country/ countries
2003	Cyclone Ami	Fiji
2004	Indian ocean tsunami	India, Sri Lanka, Maldives
2005	Hurricane Katrina	USA
2005	Hindu Kush earthquake	Pakistan

2008	Cyclone Nargis	Myanmar
2009	Black Saturday bushfire	Australia
2010	Haiti earthquake	Haiti
2010	Canterbury series earthquake	New Zealand
2010	Pakistan floods	Pakistan
2011	Christchurch earthquake	New Zealand
2011	The Great East Japan Earthquake	Japan
2012	East Azerbaijan twin earthquakes	Iran
2013	Typhoon Haiyan	Philippines
2013	Bushehr earthquake	Iran
2015	Nepal earthquake	Nepal
Recurrent event	Sri Lankan floods	Sri Lanka
Recurrent event	Metro Manila floods	Philippines

Recurrent event	Rautahat district floods	Nepal
Recurrent event	Annual floods and droughts	Cambodia

Although women's experiences are diverse and the extent of their vulnerability varies by disaster, country, and personal circumstances, some of the experiences of women were quite universal and repeated in different contexts. For example, sexual assault and violence, DV, IPV, unemployment, and the burden of social expectations were evident in almost every disaster regardless of the women's and the countries' socio-economic status. Some experiences were more prominent among women from low- or middle-income countries and conservative socio-cultural backgrounds. These included health issues such as reproductive problems, obstetric complications, and psychological stress after disasters, discrimination in relief and rehabilitation, and social isolation. The following sub-sections highlight the experiences of women across a range of countries, and in different disasters, and attempts to identify the issues underlying these experiences.

3.2.1 Sexual assault and violence

Sexual assault or physical abuse of any kind can cause severe injury and impact the mental health of the victim. Disturbingly, incidences of sexual violence and assaults, especially in evacuation shelters, are one of the most recurring harmful experiences described among women in the literature (Campbell et al., 2016; Juran, 2012; Pincha, 2008b; Thornton & Voigt, 2007; Valerio, 2014).

Thornton and Voigt (2007) analysed more than 2,500 newspaper reports on crime during and after hurricane *Katrina* and documented increased rates of sexual violence in the aftermath of the hurricane compared to previous periods. Almost 93% of cases of sexual assault within the six months after hurricane *Katrina* were filed by female victims and 31% of those incidents occurred in the evacuation centres, with many being reported only after the victims had left the shelters (Fagen et al, 2011). Male evacuees took advantage of women's vulnerability and blackmailed them to endure assaults. For example, while being separated from her family and living alone in the shelter after hurricane *Katrina*, a young woman found an unknown man in her room, who raped her and threatened to murder her, which forced the woman to stay silent until the man left the shelter (Thornton & Voigt, 2007).

Female evacuees who stayed in the temporary shelters during cyclone *Nargis* in Myanmar, and typhoon *Haiyan* in the Philippines, spoke about being sexually assaulted or mentioned witnessing sexual assaults on fellow women evacuees in the shelters, both by outsiders and by family members (International Federation of Red Cross and Red Crescent Societies, 2016; Valerio 2014).

Women with particular status such as widows, single mothers, and adolescent girls were most often targeted for sexual assault in the evacuation centres of Tamil Nadu, India following the 2004 tsunami (Juran, 2012; Pincha, 2008b, 2008a). Without any male custodians to provide protection from outsiders, widows and single mothers became the easy prey of the perpetrators. Being young and naïve about the abusive intentions of the men, adolescent girls were assaulted by both known and unknown persons in the shelters without even realising that they had been victims of a crime (Juran, 2012; Pincha, 2008b). Some women were blackmailed or forced by their male rescuers, who helped them to reach the shelters during

the tsunami of 2004, and women unwillingly consented to sexual relationships from feelings of obligation and/or to stop further blackmail (Pincha, 2008b). In most cases, women kept their assaults secret to avoid the shame and blame they anticipated from the conservative gender-biased society. Pincha (2008b) also identified incidents of suicide and attempted suicide among victimised women that remained unrecorded due to the associated social stigma. Incidences of sexual assault were also recorded in the temporary shelters of Sri Lanka and the Maldives after the 2004 tsunami, but statistics on such events during the tsunami are unavailable (Fisher, 2010; Fulu, 2007).

Sexual assaults in the temporary shelters and during the recovery-rehabilitation stages of the earthquakes in Haiti and Nepal resulted in increased stress among women and led to post-traumatic stress disorder (PTSD) in many cases (Campbell et al., 2016; Thapa & Acharya, 2017). Almost 85% of sexually abused women were diagnosed with PTSD in the post-earthquake phase in Haiti (Campbell et al., 2016).

The literature suggests different potential causes behind the increased rate of sexual violence in disasters. The unfavourable law enforcement system, insufficient services to maintain public order and safety, negligence among responsible authorities, insufficient safety and protective aspects of emergency planning including evacuation centre facilities and arrangements, poor policy and infrastructure, and failure of protective systems in evacuation shelters seem to facilitate the perpetrators and exacerbate sexual assaults. During hurricane *Katrina*, victims of sexual assault subsequently evacuated to adjacent states and reported the assaults to the local police, where the victims were informed that the incidents should be reported to the New Orleans law enforcement officials. Also, evidence collected with a rape kit was needed within 72 hours of the assault to be sent to the New Orleans Police, which in

many cases was not possible because of disrupted communication and road networks. Many offenders realised that they would not be convicted without any forensic evidence and took advantage of the situation (Fagen et al, 2011). Negligence by the law enforcement system during the post-hurricane phase played a major role in increased sexual and physical violence (Fagen et al, 2011).

Women with experiences of living in the temporary shelters after cyclone *Nargis* in Myanmar stated that the negligence of law enforcement authorities hampered their security in the shelters and made them easy prey for sexual violence (International Federation of Red Cross and Red Crescent Societies, 2016).

The temporary shelters of India, Sri Lanka, the Maldives, and the Philippines lacked separate women's spaces and toilets, little or no light was provided in the shelters at night, and the relief distribution centres were located far from the shelters. Women did not have privacy inside the shelters and had to travel long distances to collect relief materials. They were easily attacked while sharing accommodation with men, in the dark places of the shelters at night and/or on their way to collecting relief items (Fisher, 2010; Fulu, 2007; Juran, 2012; Pincha, 2008b; Valerio, 2014).

The literature discussed above also underlines the fact that the social construction of women as disadvantaged, and the characterisation of women as the weaker, more dependent group in most societies precipitates incidences of physical violence and sexual assault of women.

3.2.2 Domestic Violence (DV) and Intimate Partner Violence (IPV)

Although the terms domestic violence (DV) and intimate partner violence (IPV) have been used synonymously to refer to physical, psychological, sexual, and/or any other violence

against women by their husbands or partners, the WHO defines DV more broadly by including violence against children, the elderly, or any other member of the family (World Health Organisation, 2012). On average, 30% of women across the globe experience IPV at some stage in their lives (World Health Organisation, 2017). Women can become victims of DV and/or IPV under different circumstances in their regular lives, but their vulnerability increases after a disaster. Unfortunately, these offences are prevalent in both high-income countries with higher Gender Equity Indices (GEI), and in low-income countries with lower GEIs.

In 2009, the Black Saturday Bushfire devastated parts of Victoria, Australia, and women who lived through this emergency reported experiencing IPV (Parkinson, 2017). Parkinson (2017) interviewed 30 women who had experienced IPV following the fires. Among the participants, one had the experience of severe violence after she had ended the marriage before the bushfire, yet her husband returned to the woman after the bushfire and resumed his acts of violence. A total of 16 of the women reported violence after the bushfire, with 14 experiencing it themselves and the other two reporting violence experienced by their family members. Nine of these IPV victims were victimised for the first time in their relationships following the bushfire, while the other seven suggested they had previous experience of violence in their relationship, and that the fire had escalated the violence (Parkinson, 2017).

After the 2010 series of earthquakes in the Canterbury region of New Zealand, DV, including child abuse, and IPV rates increased in the affected areas (Campbell & Jones, 2016). Callouts made to the New Zealand police for DV increased 50% over the "normal" rate during the weekend following the earthquakes (Houghton, Wilson, Smith, & Johnston, 2010). Even

though the number of such incidents doubled, it was projected that almost 76% of total DV incidents during the recovery stage of the Canterbury earthquakes were not reported to police (Campbell & Jones, 2016). After the Christchurch earthquake in 2011, the incidence of domestic violence increased by almost 50% over the previous year (Ingber, 2011).

Harville et al. (2011) tried to determine the extent of IPV after hurricane *Katrina* using the Conflict Tactics Scale (CTS), a recognised instrument in DV research, to quantify different forms of violence. The CTS was completed by 123 women affected by the hurricane denoting the level of violence they experienced. Among them, nearly 5% were raped, sexually abused, and/or battered on at least one occasion after the disaster. Excluding this 5%, the remaining respondents testified that they were emotionally compromised and/or verbally abused; 87.1% were humiliated or insulted, while 18.9% were slapped, shoved, and/or pushed repeatedly by their partners, during the disaster recovery stage. Campbell et al. (2016) interviewed 208 women affected by the Haiti earthquake, with 62% identifying as victims of physical assault, and 80.4% being attacked by their partners, and in some cases, their ex-partners.

Although male dominance within the community and patriarchal social practices prevented affected women from discussing their experiences of DV and IPV, available documents and other evidence show increased domestic violence and IPV towards women in the temporary shelters of India and Sri Lanka after the 2004 tsunami (Fisher, 2010; Pincha, 2008b). Fisher (2010) recorded brutal killings, including a husband burning his wife to death, in the temporary shelters in Sri Lanka.

Most of the literature did not specify the underlying reasons behind domestic violence and IPV among women. The trends reported by the victims suggest that violence was persistent

among their partners, and that frustrations from uncertainty and insecurity after the disaster acted as catalysts for the violence. For example, almost 47% of the female participants in the Australian study, who were assaulted for the first time in their relationship, acknowledged receiving disrespectful gestures from their partners multiple times beforehand and foreseeing the tendency for violence in their partners (Parkinson, 2017). Unemployment and lack of work resulted in excessive alcohol and drug consumption among men, and played a major role in the increased rates of domestic violence and IPV (Campbell & Jones, 2016; Fisher, 2010). Additionally, the culture of denial and deeply embedded male-dominated social structures gave men the opportunity to get away with such offences, because in many cases, these incidents were overlooked by law enforcement personnel, health workers, neighbours, and even the victims themselves, rationalising spousal abuse as an understandable response to post-disaster trauma and frustration for men (Campbell et al., 2016; Fagen et al., 2011; Harville et al., 2011; Parkinson, 2017). The authors speculated that the male-dominated social system provides men with the advantage to control women against their will and exploit women's rights during critical times, which is the root of DV and IPV in disasters.

3.2.3 Health issues and lack of health facilities

One of the major post-disaster concerns is the provision of adequate health services in affected areas and prioritising the health needs of disaster-affected people (World Health Organisation, United Kingdom Health Protection Agency and Partners, & United Nations International Strategy for Disaster Reduction, 2011). However, instituting healthcare services in disaster-affected areas can be delayed due to damage to infrastructure, such as essential services, health facilities, and roads, as well as reduced medical supplies and personnel (B. K. Paul, Rahman, & Rakshit, 2011). Although these limitations might have a negative impact on

any individual regardless of their gender, women appear to suffer more adverse health outcomes than men after disasters (Bhadra, 2017).

Studies have shown that women's physiological needs are often not considered or properly addressed in emergencies and while allocating relief budgets. This contributes to the health issues experienced by disaster-affected women. Women living in the temporary shelters of Tamil Nadu, India after the tsunami of 2004 did not receive any innerwear, female hygiene products such as sanitary towels and/or pads for menstruation (Pincha, 2008b). Temporary shelters for the 2004 tsunami in India and Sri Lanka lacked separate toilets for women; because the women came from conservative socio-cultural backgrounds, they avoided using the toilets (Fisher, 2010; Pincha, 2008b). The lack of both female hygiene products and separate toilets subsequently resulted in an increased incidence of genito-urinary tract infections among women evacuees in Sri Lanka and India after the 2004 tsunami (Fisher, 2010; Pincha, 2008b). Female evacuees of the Indian temporary shelters after the tsunami were unwilling to go to male physicians and preferred female healthcare providers, but the number of female doctors for these women was negligible (Pincha, 2008b). The social system of the affected area was not welcoming to female doctors, which discouraged female physicians from risking their safety and security. Similar incidences were evident in the temporary healthcare services provided in Pakistan after the earthquake, resulting in an increased maternal mortality rate in the affected area (Miller & Arquilla, 2007).

In the aftermath of disasters, several reproductive health issues have been reported in the literature. Following the 2004 tsunami, some women were forced by their families to have reverse sterilization after losing their children, creating health risks for these women (Juran,

2012). Unwanted pregnancies among single, unmarried, and widowed women, often arising from sexual violence and resulting in unsafe and illegal abortions, were also recorded in the temporary shelters of India and Sri Lanka in the post-tsunami recovery stage (Fisher, 2010; Juran, 2012). Sexual violence also resulted in long-term health issues and diseases that caused the social exclusion of women. For example, diseases including HIV (Human Immunodeficiency Virus) were transmitted to women from sexual assaults while staying in the flood shelters of Nepal. As a result, infected women became social outcasts and could not return to their communities after the floods (Aryal, 2014).

Some legal frameworks developed to assist law enforcement personnel and to establish justice do not consider women's wellbeing in disaster situations. For example, The Evidence Act of Myanmar states that government hospitals must obtain consent from local police before treating sexual assault and rape victims. As a result, the medical treatment of women who had been sexually assaulted was delayed in the shelters of Myanmar after cyclone *Nargis*, leading to many health complications (International Federation of Red Cross and Red Crescent Societies, 2016).

In general, resource-poor countries primarily call for volunteers with emergency medicine, orthopaedics, and trauma surgery experience for immediate treatment of injured people in disasters, leaving obstetricians and gynaecologists for the next phase of the emergency response (Nour, 2011). Although childbirth and maternity care remain a secondary concern, pregnant women in disaster-affected areas face significant challenges while evacuating, and during the recovery-rehabilitation stages (Committee on Health Care for Underserved Women, 2010). In 2013, when super typhoon *Haiyan* struck the Philippines, over 270,338

pregnant women were affected by either a lack of skilled birth attendants during the delivery of their babies, and/or inadequate treatment facilities for obstetric complications such as pre-eclampsia, eclampsia, and sepsis. In addition, almost 180,225 lactating mothers faced difficulties with breastfeeding because of inadequate food supply, insufficient supplies of drinking water, and stress in the temporary shelters (Valerio, 2014). In 2005, after the earthquake, the temporary healthcare service centres of Muzaffarabad, Pakistan were not prepared for pregnant women and inadequately equipped to carry out caesarean sections, with a lack of midwifery kits, sanitizer, gloves, lubricants, and hygiene products for childbirth and postnatal care (Miller & Arquilla, 2007). Thapa and Acharya (2017) documented that after the Nepal earthquake in 2015, the care of pregnant women was not prioritised in the disaster areas, with the authorities highlighting that pregnancy was a natural physiological condition and therefore needed no additional attention in emergencies. The resultant uncertainty triggered anxiety and depression among many pregnant women who feared having a problematic childbirth.

Disasters lead to increased anxiety and can cause longer term conditions such as depression and PTSD both in men and women, but more frequently in women. Women's increased vulnerability to domestic violence, sexual assault, inadequate supplies of their special requirements, and social and cultural pressures and expectations eventually have a negative impact on their mental health (Bhadra, 2017; Campbell et al., 2016). Additionally, women's roles as caregivers, and their attachment to their families, expose them to increased risk of short- and long-term psychological disorders after a disaster (Gokhale, 2008; Nour, 2011).

The literature shows that women's health is often compromised during disasters, especially in low- and middle-income countries with a comparatively lower GEI. Women's health concerns are often not adequately incorporated into emergency health services and do not ensure women's health and wellbeing. In addition, conservative socio-cultural perspectives and persisting social pressure on women compromises their health and safety. The combined effect of these problems hampers women's health in disasters.

3.2.4 Discrimination in employment opportunities and financial challenges

Many local and global organisations promote women's empowerment and create initiatives to make women financially independent. Yet, in times of emergencies, women's financial needs often remain unacknowledged, or are overshadowed by men's financial requirements. While strategising post-disaster rehabilitation and recovery policies following the Tohoku earthquake and tsunami, the Japanese government and other organisations preferred to create opportunities for men to find work rather than for women. Women staying in the evacuation centres in Tohoku, Japan after the tsunami of 2011, were required to work voluntarily in the kitchens to prepare food for the evacuees. However, male evacuees were offered paid jobs such as collecting debris (Saito, 2012). After the tsunami of 2004 in the Maldives, many employers recruited internally displaced men to replace their female workers because of the general idea that men are more capable employees. As a result, the percentage of unemployed women rose from 10% to 15% in the post-tsunami phase (Fulu, 2007). In countries with conservative social structures, women are discouraged from involvement in financial activities and are often entirely dependent on their male family members. This places them in more vulnerable situations during disasters (De Silva & Jayathilaka, 2014; Gul, 2015). During recurrent flooding events in Sri Lanka, women's financial dependence has been

identified as a key issue behind women's increased vulnerability (De Silva & Jayathilaka, 2014). The authors reported that during the floods, women were often left isolated without any financial backup or savings, while their husbands stayed outside the villages for work without being able to maintain contact or send money home due to communication disruptions from the floods. Without financial support, women were challenged in taking care of their children. A similar situation was present in Pakistan during and after the flood of 2010, where nearly 88.2% of the women living in the flood-affected areas of Pakistan were financially dependent on their male family members, and experienced extreme financial hardship after the disaster (Gul, 2015).

Because women are considered as inferior and weaker in many communities, they are often deprived of their rights and mistreated by community members, neighbours, and relatives and, in some cases, inadequately supported by government and humanitarian organisations. This discrimination may lead women into extreme financial hardship, delayed rehabilitation, theft, begging, and prostitution following disasters (Juran, 2012; Gokhale, 2008; Fulu, 2007; Takasaki, 2012; IFRC, 2016). Due to the sudden death of male members of families from the tsunami of 2004 in Tamil Nadu, India, land and property were redistributed by other family members and many took advantage of the situation of widowed and unmarried women. Juran (2012) recorded that many single women lost their properties, became homeless in the process, and were forced to stay with relatives as dependents in exchange for house labour. Moreover, community members took away single or widowed women's boats and livelihood-rehabilitation funding provided to re-establish their small businesses or to purchase equipment such as sewing machines, or they claimed a percentage of their compensation money causing additional distress among affected women (Gokhale, 2008).

Women's financial contributions were sidelined during the recovery stages in the Maldives after the 2004 tsunami (Fulu, 2007). The combined livelihood-rehabilitation initiatives of the Maldives government and the UN only rehabilitated men's livelihoods, including replacement of fishing vessels and fishing equipment, and did not consider rehabilitating local women's income-generating equipment such as weaving machines, sewing machines, and fish-processing equipment. In the late recovery phase, women's financial activities were acknowledged by including a female livelihood rehabilitation fund. Yet only US\$150,000 out of a US\$5 million budget was dedicated to replacing women's livelihood items, even though 46.6% of total households were female-headed (Fulu, 2007). Ignoring women's contribution to the household economy eventually lengthened the recovery process in the Maldives.

Takasaki (2012) documented that after cyclone *Ami* in 2003 in Fiji, women faced gender inequities in labour activities as a result of the male-dominated social structure. Male-headed families exchanged their labour for dwelling rehabilitation and crop production, but female-headed families were excluded from such opportunities. Consequently, female-headed families among the affected households took longer to rehabilitate, rebuild, and/or repair their dwellings and crops.

The International Federation of Red Cross and Red Crescent Societies (2016) reported that women being deprived of relief distribution after cyclone *Nargis* involved themselves in illegal activities to fulfil their basic needs such as food, drinking water, and petty cash. Many women started begging, committed theft, or involved themselves in prostitution in the shelters and could not return to their normal lives even after the rehabilitation stage (International Federation of Red Cross and Red Crescent Societies, 2016).

The evidence suggests that women's financial struggles are more prominent in low- and middle-income countries with gender-biased social systems, where women's financial constraints after disasters primarily include women's financial dependence on men.

Governments and associated organisations often do not recognise women's financial needs in emergencies, and the community is often unsympathetic to unemployed and non-empowered women. These factors increase women's vulnerability during disasters and in the post-disaster phase. The above examples and discussion also underline the necessity for women's empowerment in disaster risk reduction.

3.2.5 Experiences of women with special circumstances and women from cultural minority groups

Women with special circumstances including adolescent girls, widows, women with disabilities, and women who belong to minority groups within a community, generally appear to experience more adverse outcomes during and after disasters compared to other women.

Pongponrat and Ishii (2018) focused on the vulnerabilities of a minority group of Thai women living in Ishinomaki, Japan. These women migrated to Japan as spouses, became part of a conservative male-dominated community, and had been deprived of the rights enjoyed by ethnic Japanese citizens. During the tsunami of 2011, their experiences of evacuation and survival were more difficult because they had not participated in any tsunami evacuation drills before the disaster, and did not receive adequate support compared to Japanese citizens after the tsunami. Due to the conservative nature of Japanese society, Thai women were not culturally accepted in the shelters by other evacuees and were often mistrusted by the community, and in some cases, by their in-laws. The government did not allocate any financial aid for them and they were entirely dependent on their husbands for financial

assistance. Even though these women were fluent in Japanese, most of them had not learned to write, and their lack of writing skills acted as a barrier to accessing the facilities provided in the shelters.

During the post-tsunami recovery phase in Tamil Nadu, India, women from the lower-caste Hindu *Dalit*¹² community were identified as the most deprived group, remained largely excluded from the recovery policies, and did not receive any compensation and/or financial aid (Pincha, 2008b).

Enarson (2012) described how racial issues in the USA put women of colour into vulnerable conditions in disasters. Although the proportion of African-American women in many US states was about equal to the proportion of white women, they did not receive equal assistance.

Several women with disabilities were exposed to recurring floods and droughts in Cambodia in the past, and the participants of a study reconciled their negative experiences of receiving limited or no assistance from the government at different stages of these disasters. (Gartrell, Calgaro, Goddard, & Saorath, 2020). The study also revealed women's experiences of being isolated and deprived of their rights because of social stigma and inadequate institutional capacity. These experiences discouraged women with disabilities from seeking help from the government, and from trusting the local authorities on disaster response-recovery issues.

 $^{^{12}}$ An ethnic group in India who are considered as backward and placed at the bottom of the Indian social hierarchy.

In some societies, gender-biased socio-cultural perspectives negatively affected widows, single mothers, and adolescent girls. In India, male relatives claimed to be the custodians of widowed women from the 2004 tsunami, and received their husbands' properties or compensation offered by the government instead of the women (Juran, 2012). As previously mentioned, the widows, single mothers, and adolescent girls living in the temporary shelters of India and Sri Lanka after the 2004 tsunami became easy targets for sexual violence. Many parents living in the affected areas of Sri Lanka married off their young adolescent daughters to older and widowed men to protect them from sexual violence in the temporary shelters (Fisher, 2010). Young girls who were forcefully married off were reported to be sexually exploited by other male family members. Fathers abandoning their young children after second marriages and husbands forcefully involving their new wives in prostitution for money and goods were also reported in the post-tsunami phase.

Where women in high-income and higher GEI countries are vulnerable to disasters, it is unfortunate, but rather expected, that minority groups and women with special circumstances would face more challenging experiences in disasters. Women from these groups need maximum attention to reduce disaster risks because their exceptional circumstances make them more exposed to disaster events.

3.2.6 Challenges for women due to household and community responsibilities and expectations

Day-to-day gender-biased socio-cultural practices, household and community responsibilities, and expectations of women may cause undesirable experiences for women during and after disasters and have a negative impact on their rights, health, and safety. In many communities, women are solely responsible for household activities, and play the role

of caregivers, food producers, and community actors (Nelson, Meadows, Cannon, Morton, & Martin, 2002). These multiple household roles increase women's vulnerability during disasters.

During the recurrent floods in Manila in the Philippines, 68 female survey participants noted the expectations of them to take care of the family during flood emergencies, with almost 77.9% being responsible for providing food for family members, and 55.9% looking after sick family members (Reyes & Lu, 2016). In fact, in listing women's priorities, Reyes and Lu (2016) found that women themselves prioritised caring for their family members including the elderly, children, and sick or injured family members, and protecting their households over personal care and safety. Likewise, the tendency to prioritise the safety of family members and households led many women to their death in Sri Lanka during the 2004 tsunami. Women kept gathering their household belongings and family members, instead of evacuating to a safe location (Jayarathne, 2014).

Fagen et al. (2011) identified that, during the evacuation phase of hurricane *Katrina*, women from New Orleans were not well-prepared for evacuation; many did not get any assistance from their partners and children solely depended on their mothers, which delayed the evacuation process for women. The situation remained unchanged in the post-hurricane stage. In some cases, the lack of willingness of their male counterparts, and the taken-for-granted maternal culture, pushed women to take full responsibility for their families and households after the hurricane. Men living in the shelters during the recovery stage, or in their houses after the recovery-rehabilitation stage, were reported to be more interested in spending money on personal entertainment, such as buying air tickets or movie tickets, rather than looking

after their families or spending money on household needs, and as a result, many women had to take sole responsibility for their families (Thornton & Voigt, 2007).

Many men driven by a false sense of ego and superiority refused to attend the relief centres and forced their wives, daughters, and female family members to travel from the shelters to relief distribution centres multiple times a day. Women had to stand in line for several hours to collect relief materials on the men's behalf, which put additional physical and psychological stress on the women along with having to attend to the existing household responsibilities (Jayarathne, 2014).

The male-dominated social structure also deprived women of equitable relief distribution. The male-controlled relief distribution management system in India, Sri Lanka, and the Philippines did not recognise the need to purchase women's essentials, such as sanitary napkins, hygiene products, nutritious food for pregnant women, and birth control pills after the 2004 tsunami and typhoon *Haiyan* (Jayarathne, 2014; Pincha, 2008b; Valerio, 2014). Gender-blind disaster management guidelines were also apparent in Iran after the East Azerbaijan twin earthquakes in 2012 and the Bushehr quake in 2013. Despite women comprising half the total population (Statistical Centre of Iran, 2013), women were not made part of any disaster management and rehabilitation activities, as an outcome of the maledominated government structure. While investigating the reason for women's absence in the planning of disaster management, it was revealed that women in the affected areas were considered a weaker group in the community, and therefore, incapable of making such decisions and contributing to issues as important as managing disasters (Sohrabizadeh, 2016). As a result, women continued to look after their families and did not get involved in any

planning, which might have eventually lengthened the recovery process from the earthquakes (Sohrabizadeh, 2016).

The studies discussed in this sub-section highlight the fact that irrespective of a country's GEI, certain household and social expectations of women are similar. In addition, women's participation in decision-making authority is minimal. These factors aggravate women's increased vulnerability in disasters.

3.3 Learning from the literature and identifying research gaps Although the literature discussed in this chapter has focused on disasters that were no more than two decades earlier, the earlier literature also addressed women's vulnerability in disasters, the underlying reasons for this vulnerability, and potential strategies to improve women's situations. Sapir (1993) presented field evidence to demonstrate women's disadvantaged position in the 1990s emergency context, and identified women's lack of contribution to emergency and humanitarian policy as the underlying reason behind women's vulnerability in disasters. A set of guidelines was prepared in 1994 for the Disaster Management Training Programme of the UNDP and the Office of the United Nations Disaster Relief Coordination (presently known as the United Nations Disaster Relief Organisation or UNDRO), elaborating the variety of circumstances faced by women in disasters, the need to integrate women's roles in disaster research, and incorporating femalefriendly response-recovery phases in emergency management (Wiest, Mocellin, & Motsisi, 1994). Yet, from the literature discussed in this chapter, it is evident that over the years, all the research, reports, and strategies have not resulted in the expected outcomes, and thus, the vulnerability of women remains a constant in disasters and impacts on women's wellbeing

around the world. Women experience violence, unfair social conditions, gender-biased

cultural practices, and inadequate health support, irrespective of their country's human development index, economic conditions, and socio-cultural status. Often, women's safety is compromised during and after a disaster, and women face discrimination in the relief, rehabilitation, and health aspects of the post-disaster recovery and rehabilitation phase.

The findings of the research that has been undertaken over the years during different disaster events around the world remain quite similar. Women's vulnerability shows a distinct and recurring pattern – sexual assault and domestic violence are common offences towards women after disasters, regardless of the home country's GEI and women's individual social status; but women from conservative socio-cultural backgrounds and countries with lower GEI scores suffer more from multi-dimensional issues, including financial instability, inadequate healthcare facilities, and social injustice. The need to incorporate women's needs during the different phases of disaster management has been discussed in the literature on a repeated basis.

Recommendations from these studies and reports have been acknowledged by many governments, the UN, and other humanitarian organisations. At present, national governments, UN organisations, other levels of government, and non-government organisations are working to create a safety net for women by planning and confirming safe provisions for women in disasters through appropriate disaster preparedness policies and risk reduction strategies. For example, the UN and all the signatory countries are working to implement the Sendai Framework for DRR, including the reduction of women's levels of vulnerability within the given timeframe; the IFRC has established collaboration with the UN to strengthen women's capacity in disasters (United Nations Office for Disaster Risk

Reduction, 2017b); the WHO has introduced a policy to integrate reproductive health in emergency health and disaster risk management to save lives from obstetric complications following disasters (World Health Organisation, 2019); and CARE International is working towards vulnerability reduction in 84 disaster-prone countries in Asia and Africa by empowering women and girls from poor communities (CARE International, 2013). Several other national and international organisations are working independently and/or in collaboration with government agencies from many countries to improve women's situations in disasters. While all these attempts are well-intended, their success and impact are difficult to determine because effective interventions to improve women's experiences in disasters have not yet been identified.

The DRR strategies that have been applied are primarily based on empirical evidence focusing on the vulnerability of women in disasters, which are mostly derived from a general understanding of women's vulnerability. The strategies rarely consider women's perspectives, their thoughts about being vulnerable, and their priorities to overcome the situation, which may vary in different socio-cultural and economic contexts. Therefore, the effectiveness and credibility of these interventions are not guaranteed for women in all socio-cultural contexts. These research gaps indicate that more research is required focusing on women's experiences and identifying potential strategies to ensure their wellbeing during and after disasters. It is important to understand the real-world experience of women, to perceive what it is like for women to experience disasters and what they themselves consider to be the problems and issues, in order to introduce strategies that are truly supportive for women. Only the women who have lived-experience of surviving a disaster can answer such questions by sharing their experiences. Understanding the experiences of women may assist

in discovering their priorities and aid in the development of DRR interventions that are favourable for women.

The present research addresses the existing research gaps and the research question and objectives: to understand women's experiences in the cyclone shelters of Bangladesh. The aim of this research is to illuminate women's experiences as evacuees in the shelters and their understandings of wellbeing. These would help to prioritise their needs and to identify the areas to consider for improving the current condition of the cyclone shelters for women through a more practical and effective approach.

Chapter summary

This chapter establishes that globally, women are relatively more vulnerable compared to their male counterparts in all phases of disaster events, and that this vulnerability stems from ingrained socio-cultural discrimination against women. The chapter also indicates that while government and other concerned national authorities have initiated emergency management strategies and plans, women's requirements have been frequently overlooked or not prioritised. This recurring issue highlights that before strategising disaster management policies, women's voices should be heard, because women who have experienced disasters can inform the most important considerations for women in disasters. These considerations led to the establishment of the research objectives of this thesis, which are to understand what it is like to be an evacuee in the cyclone shelters of Bangladesh and what types of experiences women encountered in the shelters that affected their wellbeing.

Chapter 4: Wellbeing

Chapter overview

This chapter discusses the background and diverse use of the word *wellbeing* from different viewpoints and determines a frame of reference for the term in the context of this thesis. The literature on wellbeing will be identified, studied, and reviewed to explicate the concept and build a foundation to understand wellbeing. This understanding will be employed to analyse the participants' narratives on experiencing wellbeing in the cyclone shelters, which will assist with interpretation of the narratives.

4.1 Wellbeing: A multidimensional concept

Although the term wellbeing has been associated with different fields of research in recent times, the concept of wellbeing was quite elemental to Aristotle and Buddha's philosophies (Gough, McGregor, & Camfield, 2007). Initially, the word wellbeing was used to indicate one's happiness and prosperity, synonymous with the word welfare (Raymond, 1983). The term wellbeing gradually became more common in the 20th century and, over the years, has been interpreted and defined in different ways highlighting a variety of factors. For example, Galtung (1994) marked wellbeing as a cross-disciplinary concept comprising economics, health, nutrition, and psychology. The *Oxford Companion to Philosophy* defined wellbeing as the ideas that constitute human happiness, and which identify the sort of life which is good to lead (Honderich, 2005). Gasper (2007) suggested that wellbeing is an umbrella concept that comprises psychology, ethics, and economic welfare, and that it needs standardisation for effective understanding and communication among different stakeholders concerned with wellbeing. Wassell and Dodge (2015) suggested that wellbeing represents the ideal balance between available resources and challenges, where a change in one side of this equation

would have a potential impact on wellbeing. Scaria, Brandt, Kim, and Lindeman (2020) proposed a definition of wellbeing based on the perspectives of physicians, as the ability to appropriately respond to expected and unexpected stresses in order to thrive in a healthy, happy and successful manner in work and in life (Scaria et al., 2020, p. 8). Although the authors called the definition physician wellbeing due to a focus on wellbeing of physicians in their field of work, the definition could be applicable for individuals from a range of different backgrounds. In the Sustainable Development Goals, the UN used the term wellbeing to address a variety of issues including poverty elimination, promoting human rights, reducing inequity, ensuring spatial safety, and conserving nature from the ongoing ecological crisis (UN General Assembly, 2015).

Deci and Ryan (2008) argued that the concept of wellbeing has branched out from two schools of thought, eudaimonism and hedonism. Eudaimonistic wellbeing emphasises the individual's growth and development, whereas hedonistic wellbeing focuses on the individual's quality of life (Mock et al., 2019). This dichotomy subsequently leads the conversation of wellbeing towards two views of human life, the economic and the psychological.

Researchers focusing on wellbeing from an economic perspective have emphasised on *elevation from poverty* to measure wellbeing, and identified positive changes and improvements in resources, livelihood, and quality of life of the individual as significant markers of personal wellbeing (Doyal & Gough, 1991; Gough et al., 2007; Sen, 1979). Economic concepts of wellbeing largely concentrate on procuring goods, earning resources, and one's capabilities to fulfill the requirements to achieve satisfaction (Doyal & Gough,

1991; Sen, 1979). Nobel Laureate economist Professor Amartya Sen (1979) stated that wellbeing and poverty are inversely associated; he also suggested that wellbeing in poor settings is generally limited to reducing suffering as a result of financial limitations and a lack of resources. However, in his more recent work, Dr. Sen addressed the importance of mental conditions and adaptive expectations in wellbeing, and explained that poverty-stricken people manage to achieve some kinds of (psychological) wellbeing through hard work, resilience, and an innate resourcefulness to overcome hardship (Sen, 2014). A similar perspective was taken by Layard (2005), who argued that the relationship between wealth and wellbeing is non-linear, and income only offers wellbeing to poverty-stricken people who meet certain criteria in their lives; individuals look for mental peace and satisfaction once the basic requirements of life have been fulfilled.

Alkire (2007) argued that people would want to ensure a sound emotional and psychological state after reaching minimum economic solvency, and therefore, economic stability is just one factor and is not enough to define wellbeing in a proper sense. This stresses the importance of psychological wellbeing, which highlights a person's feelings of being happy, fulfilled, and satisfied. Psychological wellbeing focuses on the individual's ability to access pleasure through a higher level of life satisfaction and positive feelings, as well as low or no negative emotions. Zaré et al. (2004) defined psychological wellbeing as a state of mind with no psychological distress, which would be possible when an individual has an understanding of their capacities, embraces their true self, and is able to set life goals within their capacity, and successfully access resources to reach their goals (Deci & Ryan, 2000; Mock et al., 2019). This synchronises with the determinants of psychological wellbeing, which include self-acceptance, personal growth, purpose in life, environmental mastery, positive

relationships, and autonomy, as proposed by Ryff (1989). Deci and Ryan (2000) proposed a similar notion and identified that psychological wellbeing can be measured through three psychological traits of the individual, autonomy, relatedness, and connectedness. Thus, the dynamics of psychological wellbeing fundamentally revolves around personal contentment and the potential to grow and flourish as an individual within their own capacity.

4.2 Components of wellbeing

Since wellbeing is a multidimensional concept, attaining and maintaining wellbeing is a complex notion and depends on a range of components. Additionally, wellbeing can be relational or dynamic and can vary largely from community to community and among individuals. Socio-economic security, including social capital and resources, cultural values and beliefs, and both physical and psychological health, are identified as significant components of wellbeing (Chirkov, Ryan, Kim, & Kaplan, 2003; Rojas, 2007; Ryan & Sapp, 2007; Wood, 2007).

Socio-economic security often provides both economic assistance and psychological support to individuals living within the community, and is thus considered to be one of the major components of wellbeing. Socio-economic security works as a safety net for vulnerable people in poor societies, and therefore, serves as an important contributor to wellbeing. Wood (2007) demonstrated the significance of the informal aspects of socio-economic security practiced within poor communities in low- and middle-income countries, and argued that many people around the world perceive a sense of security through showing loyalty towards, and/or being dependent upon, powerful stakeholders, either by choice or under constrained conditions. Moreover, social capital within communities sometimes remains the only available resource of people living in poverty to deal with problematic economic systems

(Gough et al., 2004). Achieving financial stability, at least to some extent, and the sense of being under an influential stakeholder provides them with contentment, and ensures psychological wellbeing.

Chirkov et al. (2003) suggested that cultural values and practices also have an impact on wellbeing. In some societies, certain cultural considerations often cause class stratification, as being subordinate to other groups risks an individual's sense of autonomy, which eventually affects their competence and relatedness, which eventually hampers the individual's psychological wellbeing. Joseph and McGregor (2020) argued that people's understandings of wellbeing may vary in terms of their cultural, religious, and historical backgrounds.

Therefore, the argument made by Ryan and Sapp (2007) for the inclusion of cultural analysis is a potentially valid and practical idea to understand an individual's state of wellbeing.

A person's capacity for optimal physical and mental functioning is a key component of wellbeing (Ryan & Sapp, 2007). Yet, among poor communities in low- and middle-income countries, the psychological aspects of life seldom get any attention due to lack of awareness and dealing with more prominent struggles, which eventually have a negative impact on their mental health and overall wellbeing (Deci & Ryan, 2000).

Wassell and Dodge (2015) suggested multiple arenas of wellbeing, happiness, health, work-life, environment, security, society, and education to determine an individual's wellbeing; however, the authors suggested that one formula is not sufficient to perceive the wellbeing of people around the world, and the perception of wellbeing varies significantly from one person to another depending on their preferences, expectations, and life philosophies.

Joseph and McGregor (2020) demonstrated that despite a growing interest in research into psychological wellbeing over the past decade, the economic aspects of wellbeing have dominated in both the policy arena and in academia. The authors also argued that psychological wellbeing studies have primarily focused on wealthy North American and European countries, resonating with Gough et al's (2007) claim that research on psychological wellbeing has focused more on developed countries, whereas economic wellbeing has been studied mostly in relation to developing and under-developed countries. However, it is equally important to identify the components of wellbeing for people in developing countries to understand their need to enhance human development and wellbeing along with economic progress. Wassell and Dodge (2015) highlighted the diversity in the meaning and understanding of wellbeing both conceptually and empirically among nations, regions, communities, and even individuals, and that understanding a person's perspective of wellbeing requires a comprehensive methodological approach, which will be discussed in the following section.

4.3 The methodological approach to understanding wellbeing

A person's wellbeing tends to be related to situations in every domain of life (Rojas, 2007). Given the discussion on the components of wellbeing, an individual's wellbeing should be understood within a particular context, culture, and the person's relationships with their surroundings. Therefore, the best approach to understanding an individual's wellbeing is to ask the person about their wellbeing, and how they perceive wellbeing in the *flesh and blood* (Unamuno, 2002 as cited in Rojas, 2007). Rojas (2007) underlined that a person is the best authority to evaluate their own satisfaction and to describe wellbeing from his/her point of view. In a way, a person's wellbeing is directly or indirectly connected to his/her values,

beliefs, education, happiness, dependencies, problems, fears, insecurities, memories, intellect, emotional capabilities, family and relationships, friends and social bonding, and culture. The role of the researcher is to understand the nature of a person's wellbeing assessment, rather than to assess it. This approach to understanding wellbeing is used in this research because the women participating in the study appraised their own idea of wellbeing and their state of wellbeing in the cyclone shelters, considering all the personal and circumstantial factors in both normal times and while staying in the shelters.

Bevan (2007) attempted to develop a framework for wellbeing research, providing guidelines for researching wellbeing across the disciplines, including in social anthropology, sociology, political theory, psychology, and economics. Given the nature of the current research, Bevan's model for social anthropology was chosen (Table 4.1), through which hermeneutic interpretation has been used to conceptualise an individual's notion of wellbeing.

Table 4.1 Bevan's (2007) model for wellbeing research

Research considerations	Potential measures				
Epistemology: How can we know	Through the interpretation of local meanings through				
about reality?	an abductive research approach.				
Ontology: What is the reality of	Understanding that there are different realities				
what we are interested in?	associated with different standpoints.				

Theorising	Hermeneutic interpretations and reflexive theorising.
Theoretical and empirical	Understanding of people's actions and relationships in
conclusions: What (kind of)	a cultural context.
conclusions can be drawn?	
Rhetoric: How can we inform	Interpreting local culture in academic writing;
others about these?	advising practitioners; providing feedback to the
	research community.

Based on the literature on wellbeing and the chosen guidelines for this research, interview schedules were designed, and local cultural repertoires were considered and valued to recognise the actual meanings that underpinned the participants' statements on wellbeing. Abductive research, the research of contemplating a situation through observation, was used to understand the local socio-cultural and economic context. During the first interview session, the participants were asked to describe their ideas on wellbeing, and any discussion of wellbeing beforehand was carefully worded to avoid giving prior indications of the concept to them. This helped to bring out an unbiased and non-imposed concept of wellbeing as perceived by the women. Understanding wellbeing from the women's points of view provided a background for moving onto the next step of the interview that involved probing women's state of wellbeing in the cyclone shelters. In the second interview, the women were asked about their wellbeing as evacuees in the shelters, and the underlying reasons that

impacted their state of wellbeing. Women's descriptions and explanations were interpreted through hermeneutic interpretations, and personal observations during the interviews, and were then accumulated with their statements in the data analysis to draw meaningful conclusions.

Chapter Summary

This chapter explores the dimensions of the term wellbeing, and attempts to understand wellbeing through various lenses. This helped to scaffold the interview schedules – how, at which point of the conversations, and what should be asked concerning wellbeing, which would potentially prompt responses from the participants. The wellbeing literature has been reviewed through a diverse range of angles which has helped to build the researcher's insights into the phenomenological conversations which hold the key to answering the research question.

Chapter 5: Research Methodology

Chapter overview

This chapter presents the context and rationale for the philosophical framework chosen for the research and describes the research methods that align with the philosophical approach. The chapter comprises three major sections. In the first section, the justification for the use of an interpretive research approach is discussed, followed by an overview of phenomenology and then hermeneutic phenomenology from a historical and philosophical standpoint. The contributions of prominent philosophers in phenomenology are described, and the section also provides an overview of the theoretical underpinnings that support the use of hermeneutic phenomenology as the philosophical approach for the study. The second section describes the research methods for the study, the ethical considerations, and the details of the data collection procedures, including an overview of the study areas, the recruitment process, and the interviewing of the participants. The last section presents the data analysis process for the study.

5.1 The research paradigm

In 1962, Thomas Kuhn first introduced the term *research paradigm* into methodological studies, defining it as a combination of ideas, variables, and problems associated with corresponding methodologies and tools (Kuhn, 1996). According to Lather (1986), a research paradigm reflects the researcher's beliefs about the world they live in, and also the world they want to live in. A research paradigm refers to assumptions and views that lead to the development of a scientific and academic framework and a structure to guide the research. The study of social phenomena is usually shaped by two philosophical concepts, epistemology and ontology. Epistemology is concerned with the theory of knowledge and

with the study of the nature and form of knowledge (Cohen, Manion, & Morrison, 2007, p. 7). Epistemology asks *what it means to know* and informs the best approach to conducting research (Scotland, 2012). Ontology is a form of metaphysics focusing on the nature of *being* (van Manen, 2016). Ontology asks *what it is* to focus on concepts of existence, reality, and meaning (Scotland, 2012). The epistemological-ontological assumptions and fundamental considerations lead a researcher to adopt a particular paradigm suitable for their research. For example, when studying a more subjective and existential phenomenon, an interpretive methodological approach is often used to interpret individuals' perspectives of a phenomenon into subjective reality.

Interpretive research is a paradigm based on the assumption that social reality is not objective or generalisable, and is formed by human experiences and their contexts; thus, social reality should be studied within a socio-historical context through the subjective interpretations of the participants (Bhattacherjee, 2012). Interpretive research follows certain principles (Bhattacherjee, 2012, p. 106):

- Inquiry into a social phenomenon must be made in its natural setting and within a social context;
- A researcher's observations, and their ability to retrieve correct information, knowledge, and insights are major instruments of the research;
- Participants' descriptions need to be interpreted at two levels, from the subjective perspectives of the participants, and within the social context and understanding of the meaning of these experiences;

- The findings of the research must be documented in expressive language, portraying the emotions of the participants for the readers;
- The research focuses on *making sense* of a phenomenon, rather than having a definitive answer;
- Interpretive interpretation includes moving back and forth from the text (observations) to the context (social phenomenon) in order to construct a theory that bridges the diverse subjective viewpoints and experiences of the participants. The iterative process of understanding the meaning of a phenomenon and the researcher's observations continues until it reaches *theoretical saturation*, at which point the data gathering process would not provide additional insight to the existing understanding of the phenomenon.

The research presented in this thesis explores the perspectives of female evacuees in cyclone shelters in Bangladesh and investigates their experiences of wellbeing based on their real-life experiences. The research question and objectives call for detailed and in-depth conversations with participants, in order to thematically analyse their perceptions. The project was developed as a form of exploratory research. The research focus was to capture the *subjectivity* of women's experiences in the shelters, rather than the *objective reality of them*. This research documents the perspectives of the participants in relation to their lived-experiences in the shelters, and attempts to understand the meaning of those experiences. People living in the coastal areas of Bangladesh belong to a social group with distinctive socio-cultural practices and norms. Therefore, there was an expectation that diverse stories, rationalisations, and insights from the research participants would arise, closely associated

with their experiences and social context. It was also anticipated that the researcher's reflections and views, followed by the fieldwork, would be a significant and explicit source of knowledge. These assumptions led to choosing the interpretive paradigm for this research.

5.2 Phenomenology

Phenomenology is a branch of interpretive research which focuses on humans' lived-experience (LoBiondo-Wood & Haber, 2006). Phenomenology is, in principle, a philosophical discipline (van Manen, 2016). The word phenomenon evolved from the Latin word *Phaino*, meaning to bring to light or to place in brightness (Heidegger, 1977). Hegel first defined the term *Phenomenology*, referring to it as the science that describes what one perceives, senses and knows in one's immediate experience and awareness (Moustakas, 1994, p. 25). The term *Phenomenology* had been used by Kant, Hegel, and Brentano in anthropocentric philosophy and psychological philosophy. German philosophers Edmund Husserl and Martin Heidegger started the phenomenological movement during the early 20th century. Whereas Husserl defined phenomenology as a descriptive science and gave epistemological language to phenomenology, Heidegger developed the ontological grounding for phenomenology and introduced 'hermeneutic' phenomenology. Hence, the work of both these philosophers paved the way for phenomenology to be applied as a methodological approach in disciplines that study the human experience.

As a research method, phenomenology concerns the systematic reflection and exploration of human experiences. It focuses on understanding the deep-rooted meanings of these subjective experiences that appear in people's consciousness, and derives social reality from the study of participants' diverse subjective perspectives. Phenomenology is the deliberate exploration of acts, perceptions, and the constitution of the perceived world. Phenomenology addresses *what*

it is like to have particular experiences, and places emphasis on extracting information from human experience.

The research seeks to improve conditions for Bangladeshi women in shelters out of concern for the gender-specific problems discussed in the previous chapter. The first step towards this goal is to improve the understanding of what they have experienced and what it is like to be a woman in a shelter. Phenomenology provides a pathway into achieving this.

The philosophical movement of phenomenology has evolved and been re-invented over the centuries. Philosophers have contemplated phenomenology through a range of different insights, while researchers have adopted their preferred philosophy and incorporated the philosophical concept into the methodology of qualitative research, especially in research involving lived-experience (Gill, 2014). The next part of this section discusses the philosophical approaches of the two most prominent phenomenologists, Edmund Husserl and Martin Heidegger. The history and development of Husserl and Heidegger's phenomenological concepts laid the philosophical foundation for phenomenology, which helps to understand hermeneutic phenomenology and its application to the methods for this research.

5.2.1 Husserlian Phenomenology: To the things themselves

Edmund Husserl, a mathematician turned philosopher, is known for introducing the philosophical stance of phenomenology (Rutt, 2006). Husserl was a perfectionist by nature as reflected in his writings on phenomenology. He had a collection of 40,000 pages of documents written in shorthand; his work was so detailed, original, and in some cases dense, that the works are still being interpreted by scholars. Husserl's first step towards philosophy

started by attending the lectures of Franz Brentano. Brentano was not a phenomenologist, and worked on descriptive psychology, but his idea of intentionality, that human consciousness is directed towards an object, influenced Husserl (Moran, 2002).

While experimental science was taking over most fields of knowledge in the 19th century, Husserl realised that experimental approaches often failed to grapple with the meanings of newly attained knowledge. He recognised the necessity for subjective openness and placed greater emphasis on the *science of essences* rather than the *science of matters of fact* (Husserl, 1983). Husserl described phenomenology as the *science of science*, since it investigates the essence of individuals' very own *objects* - their own *facts*, which other sciences simply ignore (Husserl, 1965). Husserl established phenomenology as the *science of essences* and *cognitions of essences*, where essence means *making a thing what it is in itself, rather than becoming something else* (van Manen, 2017, p. 3). Merleau-Ponty's later philosophy supported Husserl's concept of essence, arguing that a person's bodily existence makes a meaningful relationship with this world, that results in experiencing phenomena from the person's own perspective. Exploring individuals' experiences and understanding the essence of these is the aim of phenomenology (Merleau-Ponty, 2013).

Husserlian phenomenology mainly focuses on consciousness – the unique quality which gives humans the ability to access different experiences of the world and to perceive the attributes of phenomena. Husserl suggested that phenomenological research is a detailed understanding and analysis of a phenomenon, the way people experience it in their consciousness (Husserl, 1983). In other words, phenomenology is the systematic analysis of the consciousness of individuals, and recognises the objects toward which individual

consciousness is directed. While consciousness is most important for understanding a lived-experience, the essence of the experience is essential for describing consciousness; this notion led to the origin of Husserl's most famous phrase *zu den sachen – to the things themselves*.

From Husserl's perspective, phenomenology is the study of real experience regardless of its independent existence. Any experience that occurs to one's consciousness is of potential interest to phenomenological inquiry, where the object can either be real or part of the imagination. For example, if a woman is asked to describe her experience of a cyclone at night, she is likely to explain how she experienced the night from her consciousness; in the darkness, the woman may have seen very little, but she will have heard the sound of the strong wind and rain, she may have felt a sense of chaos, and her awareness may have been influenced by her ideas and thoughts, beliefs, perceptions, and past experiences. The woman's experience will not provide an objective reality of the cyclone, rather it will reveal her experience in her consciousness, which is the *focus* of phenomenological research.

It is not always certain that all the moments of a person's experience will be the same as the moments experienced by others. For example, the woman mentioned above may have felt safe in the shelter because she had previously experienced the noise and confusion of a cyclone and knows what they *mean* and that she had been safe in the shelter before.

Alternatively, she may have felt fear because of a past experience or even a lack of experience. Even though these perceptions can be wrong in the real world, the internal experience cannot be denied, because the meanings drawn from this experience and understanding will influence how she responds and behaves in her lived world.

Although Husserl's phenomenology focused primarily on consciousness, he also argued that a person cannot describe objects appearing in his/her consciousness while living through the experience. Therefore, phenomenological queries are always recollective, reflecting experiences that have been lived through. Husserl categorised phenomenological reflections as retrospective studies, and his quest for retrospective phenomenological reflection led to the creation of another phenomenological concept, epoché. He defined epoché as a bracketing of the natural world for the true essence of the experience while eliminating, but essentially not forgetting, the minds' judgements and contents (Husserl, 2001). According to Husserl, an individual's pre-reflective sense mediates one's awareness that may influence or alter reflections of experiences. So, while listening to an experience, all pre-suppositions and beliefs should be bracketed to absorb the true essence of the experience and perceive the lived-experience that appeared in the individual's consciousness.

5.2.2 Heideggerian Phenomenology: Being in the world

German philosopher Martin Heidegger is considered to be one of the most influential philosophers of the 20th century. His work had an effect on a great number of subsequent philosophers from the human sciences, social sciences, arts, and humanities. Similar to Husserl, Heidegger was introduced to phenomenological philosophy after reading a book by Brentano. Heidegger was Husserl's student, colleague, and successor, and he dedicated his most important publication *Being and Time* to Husserl.

Despite being guided by Husserl's concept of phenomenology, Heidegger developed a different view, contradicting Husserl's philosophy in a number of ways. Heidegger stood against the concept of subject contemplating object, suggesting that things only appear in

people's consciousness when something unusual occurs. He also argued that bracketing is unlikely to be achievable because people cannot truly bracket their presuppositions. He introduced the concept of existentialism and attempted to reveal *the complex of lived-experience in its full concretion* (Heidegger, 2010, p. 91). Heidegger focused on the meaningfulness of the lived moment; how persons (beings) describe themselves in that moment (time) and elucidated it as *to get to the things themselves* (Heidegger, 1962).

Heidegger further expounded his notion of existentialism in his famous book Being and Time and presented the widely used term being or dasein (Heidegger, 1962). The term dasein originated from the German words da (here) and sein (being), referring to the existence of humans in this world and their interactions with different components and individuals of the world in certain ways (Heidegger, 1962). Heidegger believed that it is not possible for a human being to bracket all the taken for granted suppositions of their lived world while articulating phenomena; neither would it be practical to differentiate subjective and objective stances. So, he introduced the concept of *dasein* to reveal a person's relationship with their surroundings, to understand the meaning of being there to witness a lived-experience. Heidegger identified disposition and discourse as the major factors of dasein's characteristics. People move from one experience to another in their mind. Thus, individuals react to experience according to their pre-existing characteristics, the way they want to present themselves to the world. By discourse, Heidegger argued that a person articulates the world in their context of significance. An experience may appear to a person in various ways. When a person uncovers new perspectives and knowledge over time, the appearance of the experience also changes. Therefore, the appearance of the experience depends on the

phenomenon, but it is not the phenomenon itself, and the appearance has a close association with time, which Heidegger phrased as temporality (Heidegger, 1962).

Heidegger defined temporality as the structure of time, past, present, and future, and proposed that time is the horizon needed to understand being. Heidegger suggested that *dasein* is embodied in time; a person's interaction with the lived world in the past culminates in perceptions and understandings of things over time, which influence their encounter with the present and the possibilities of the future.

Additionally, Heidegger highlighted the fact that lived-experience can be rather shallow at first glance, but once a person starts to reflect on the experience, it gradually becomes enigmatic (van Manen, 2017). For example, if a woman living in the coastal area of Bangladesh is asked, *What it is like to be a woman evacuee*? and the woman can answer simply, saying *It was stressful*. A phenomenological study goes beyond this textual meaning and attempts to extract the deeper meaning of the statement, how the experience was understood in the moment of being in the shelter. This understanding would reflect the meaning of the experience for the woman (being), and the meaning might be created from her past experiences, suppositions, and perceptions about the current situation. Therefore, different individuals having the same experience might draw upon or attribute different meaning and behave differently, because their lived world has been created from their own perceptions, interpretations, and understandings.

In his later works, Heidegger was more concerned about the *essence of language* and its significance in phenomenology (van Manen, 2016). Heidegger pointed out that talking can be meaningless, but that language reveals the ontologies of life. He also suggested that speaking

has a particular meaning, and even silence can have a concealed significance. For example, while describing the evacuation experience during a cyclone emergency, an abrupt pause may indicate a woman's experience of grief and/or loss. The speechless gesture resonates with meaning, and the essence of the phenomena comes to the fore.

Heidegger pointed out the significance of the researcher's creative insight in phenomenological practice. He argued that it is important for phenomenologists to seek the primordiality (used to describe the essential nature of being) of the lived-experience, and suggested that the success of phenomenological research depends on the inventive thinking of the researcher (van Manen, 2016; Heidegger, 2012).

Heidegger's concept of interpretation to reflect the actual meaning of the experience by contextualisation of the experience and comparison with other's experiences, pioneered hermeneutics in phenomenology (Gill, 2014). This approach was later adopted and further developed by Hans George Gadamer (van Manen, 2016).

5.2.3 Hermeneutic Phenomenology

The word hermeneutics is derived from the Greek mythological being *Hermes*, the interpreter, who was the translator between the gods and humans (Bulhof, 2012). Hermeneutics has been part of philosophy since Aristotle introduced hermeneutics in his 2nd text "On Interpretation" (Thomas & de Vio Cajetan, 1962). Hermeneutics, i.e., the art of interpretation, had been a well-known methodology used by ancient scholars to interpret scriptures or difficult texts.

An experience can appear to be one single incident for the external world, but behind that one experience, there can be multiple pre-existing conditions, determinants, and moments, that widen the horizon of that experience, and *a mere experience* transforms into *the experience*. Understanding the wider horizon of the experience is hermeneutics (Dilthey, 1976). If phenomenology sets the context of an event or experience, hermeneutics explains the circumstantial depth of the experience through interpretation (Rutt, 2006). Therefore, hermeneutics is the art and science of interpreting and drawing the meaning out of humans' lived-experience (Moran, 2002).

Heidegger believed that *being in the world* cannot be described without interpretation (Heidegger, 1962), and developed a philosophy which would allow the inquirer to understand and search for embedded meaning within experience. Heidegger's hermeneutics was text-based hermeneutics, which was initially developed by Friedrich Schleiermacher in the 18th century, and further developed by Wilhelm Dilthey. Later, Hans George Gadamer, a German philosopher, largely influenced and mentored by Heidegger, published his masterpiece *Truth and Method* in 1960 (van Manen, 2016). Gadamer explicated the hermeneutic method in phenomenology and referred to hermeneutic phenomenology as essentially interpretive and principally oriented to the explanation of texts.

Schleiermacher emphasised the importance of reading texts with an open mind and thinking about the greater significance and/or consequence of the text to understand and interpret the meaning. He asserted that there are two aspects of hermeneutics, grammatical interpretation and psychological interpretation (Klemm, 1986; Stiver, 1996). Schleiermacher said, *The vocabulary and history of an author's age together form a whole from which his writing must*

be understood as a part (Schleiermacher, Kimmerle, Duke, & Forstman, 1984, p. 113). To understand the experience, one must conceive the meaning of each sentence and word, incorporating each text within the content of the paragraph. Apart from understanding the linguistic aspects, the readers must understand the inner meanings and/or indirect statements by the authors, considering the biographical and historical contexts, in order to grasp the entire content.

Heidegger introduced the concept of the hermeneutic circle for interpreting text. While interpreting a text, the reader would go back and forth, read a particular section developing a supposition, read the whole text, and then return to the previous section again and re-read it with a different perception. The reader circles within the steps continuously to understand and perceive the meaning of the text, and the circle dissolves once the reader understands the meaning. Heidegger said that the hermeneutic circle is not a prescription for hermeneutics, but a way of understanding text (Heidegger, 1962). Gadamer supported Heidegger's philosophy of hermeneutics and attempted to clarify the process of understanding through language; Gadamer's hermeneutics considered language and the embeddedness of the language as fundamentals for understanding the world we are living in and our activities in the world (Gadamer, 1989). Gadamer argued that understanding historical backgrounds, linguistic traditions, and socio-cultural contexts provides an experiential sense to the interpreter and a better understanding of the experience; in other words, an experience of the truth (Phillips, 2007). He used the term fusion of horizons to signify the role of the historical, cultural, and linguistic preconceptions of the interpreter to understand the meaning of the text (Gadamer, 1989). For example, the female evacuees from the coastal areas of Bangladesh are a group of individuals with a particular history, cultural traditions, social contexts, and

language. Understanding their *lifeworld* to understand their lived-experiences would be essential to establishing a rigorous interpretation during the data review process.

Schleiermacher (1984) explained the necessity of using the concept of *divination* by the interpreter to entirely understand the author's personal characteristics and situations to explain the uses of certain words and sentences in the text. This concept of entering into the author's creative mind, known as *authorial intent* (Stiver, 1996), had been pointed out as being problematic by Gadamer (van Manen, 2016). Gadamer agreed with Schleiermacher about the importance of approaching texts with openness and considering historical perspectives, but opposed transforming the interpreter into the author through the divinatory method. Instead, Gadamer (1989, pp. 259-260) suggested recapturing *the perspective within which he (author) has formed his views*, rather than recreating the author's mind and intentions. Gadamer claimed that the understanding of texts is subjective, and readings can differ from one person to another, and therefore, when text and interpretation are merged, often different interpreters develop different understandings. Therefore, in this methodology, there is no singular truth; each individual has a different cultural and historical background and a unique set of prejudices which influence their perceptions and understandings.

5.2.4 Philosophical application in the research

Hermeneutic phenomenology concerns the interpretation of experience.. The concept of consciousness and essence in Husserlian phenomenology built the foundation of phenomenological understanding, but his concept of epoché was not used in the data collection and analysis for this thesis. Heidegger's phenomenological explanations seemed more appropriate for this study. Although Gadamer's perception of hermeneutics was useful

for portraying ideas about textual interpretation, Heideggerian hermeneutic analysis was considered the basis of the research method. Therefore, this study did not rely on text only, as Gadamer suggested, and instead adopted Heidegger's idea of following the interviewees' silences and language, and the researcher's own expertise to analyse the data. Field notes on reflections after the interviews, and repeatedly listening to the audio recordings to hear pauses and voice tones were also taken into account to ensure greater depth of interpretation, and to yield new knowledge.

5.3 Time, Temporality, Memory, and Truth

After determining the methodological approach and establishing the research question and objectives of the research, a deeper understanding of time, temporality, memory, and truth were required. These concepts underpin the research methodology and help to unravel the meanings of the experiences described by the participants.

5.3.1 Time and Temporality

Questions about time have remained pertinent from the pre-Aristotelian period to the contemporary world. The first hypothesis on the concept of time occurred in Aristotle's Physics. Aristotle argued that time is a number of movement in respect to before and after (Aristotle, 1969). Aristotle explained time as a determinant of motion, with no substantial entity that can exist independently of time. Therefore, time can only coexist with other substances, and can be measured when the substances are in motion. Aristotle explained that time is continuous with all the present moments linking past and future, where the present terminates the past and begins the future. While Aristotle attempted to measure time by connecting it with the motions of the physical world, Augustine took a different approach and argued that time exists in the human mind and is a phenomenon of human consciousness

(Hernandez, 2016). He argued that *human time is the distending of the soul* (Augustine, 1876). Time is nothing but a protraction of the human mind, where a person's memories, sight, and expectations serve as past, present, and future, respectively. Since we can only experience time in the present, the past and the future do not actually exist. In fact, past and future appear in the present as continuous sequences, the events that can be described as *no longer* and *not yet*. Yet, we can only experience the present because time passes and becomes past.

The concept of lived-experience in phenomenology suggests that phenomenological research attempts to explore the present moments, the existence of *now*, but in reality, we are always too late to capture the present. Humans are continuously living in the present, leaving it to the past and rushing towards the future. So, lived-experiences must be retrieved from the past in phenomenology (van Manen, 2016).

As mentioned previously in this chapter, Heidegger described that without time, there would be no existence of being (Heidegger, 1962). Heidegger also believed that the present is merely a connecting point between the past and the future, and argued that present experience of *being* is coherent with the past, what happened previously, and indicates the future, what to expect next. He introduced the concept of temporality in phenomenology, which reflects how time is experienced during a phenomenon (van Manen, 2016). A participant's detailed description of the experience of time plays a significant role because the description recognises the participant's involvement *in the world* within a temporal horizon. Heidegger defined temporal horizon as a range of potential ways to disclose the experience of time (Heidegger, 1962). While stating the experience of time, a person practically narrates the

things and/or phenomenon distinguishable in the flow of time. Additionally, temporality provides insights that help to understand certain characteristics of being. This philosophical concept of temporality reveals a person's experience of time for ontological understanding and must be reflected in interpretive phenomenological research.

5.3.2 Memory

Memory is a significant component of the human self. The human brain encodes and stores an event as a memory that is influenced by the individual's attention, motivation, cognitive skill, and social background (Lexcellent, 2019b). The coherence between experience and the human self, belief, and emotion develops a memory of the experience, which is reflected while recollecting the event from the memory (Conway, 2005; Lexcellent, 2019b). A person's recollection of a past event from memory is known as reminiscence, which can be either volitional or non-volitional and both veridical and non-veridical (Fitzgerald, 1996).

Events occurring in daily life and surprising or consequential events are both stored as memories, but people remember the experiences of surprising events vividly because the neural mechanism stores both central and peripheral details of the events (Casey, 2000; Wright & Gaskell, 1992). Yet, while recalling such an event, people typically recollect their experiences and personal circumstances based on their emotional reactions and reflections on that event, which are often quite discrete from the event they tend to describe (Wright & Gaskell, 1992). Most people believe that their memory is exceptional and accurate (Talarico & Rubin, 2007), but in reality, because of emotional leverage, the memories are not guaranteed to be accurate, even though these memories are clear, vivid, and consist of more detail than memories of day-to-day events. Some memories get distorted or fabricated by

internal and external factors; people even describe false memories, which never actually happened (Loftus & Bernstein, 2005). Memories can be restructured and reworked with changes in human perception, context, personality, and emotion (Bluck & Levine, 1998). A single experience might be remembered by various people differently because of the way they focus on particular parts of the experience, or because of their past experiences and the meanings and interpretations they have built around that kind of experience.

Conway (1992) suggested that individuals save their experiences of an exceptional event as autobiographical memories, and that these experiences impact their bases of general knowledge. When asked for reminiscence, the recollection of events remains rather stable, but the retrieved information may vary depending on the situation when they are reminiscing and the questions that were asked to know about the experiences. There is a likelihood that if asked about experiences of an event in more than one interview, one person may give different information based on the asked questions and the interview context, and the remembered materials may be elaborated with each interview and question asked (Bluck & Li, 2001). Therefore, memory carries the knowledge of an individual, and when a person reminiscences, the listener needs to interpret carefully considering the individual's sociocultural context, emotions, and cognitive abilities to understand the meaning of the memory and retrieve the truth from the memory.

5.3.3 Truth

The term *truth* usually has two sets of interpretations. The first one is the traditional explanation drawn from theology and metaphysics, where truth is defined as absolute, complete, and consistent. The other is the interpretation of modern science, defining truth as

logical and verifiable (Dicenso, 1990). However, the meaning of truth is far more complex in human science, where truth has an association with history and human existence. Heidegger distinguished truth through two notions, *veritas* and *aletheia*. *Veritas* is pragmatic, technical, and provides certainty. This truth is derived from controlled methods and procedures and precisely identifies the real, whereas, *aletheia* means disclosure, where truth is determined by understanding meaning and meaningfulness. Because of the nature of the philosophy, phenomenological truth mostly operates as *aletheia* rather than *veritas* (van Manen, 2016).

Heidegger (1998) argued that in hermeneutical inquiry, the reflection of *being* includes both self-showing and self-hiding. Individuals only disclose certain parts of their experiences, while guarding the rest. Again, the perceptions and judgements of people are shaped by their personal and cultural forces, impacting their standpoint from which they perceive a phenomenon. The greatest challenge in hermeneutic analysis is to reveal the concealed meaning of texts by explicating the language of the texts to disclose the truth. Because people perceive and experience a single event in different ways, their explanations about the event differ from one another, altering the truth. Yet, no version of the truth can be marked as false, because they happened in someone's reality. Therefore, both Heidegger and Gadamer proposed that hermeneutic phenomenology is more about providing experience of the truth of being rather than the actual truth (Gadamer, 1989; Heidegger, 1998). The researcher conducting hermeneutic phenomenology needs to understand the cultural, historical, and linguistic features of individuals to interpret their experiences and extract the truth by understanding the meaning of their experiences.

5.4 Research method and research framework

Understanding phenomenology and hermeneutics from a philosophical perspective is essential to producing insightful and captivating outcomes from the research. Yet, these philosophies offer flexibility in choosing methods or rules for conducting phenomenological research. As Gadamer pointed out, the purpose of my investigation is not to offer a general theory of interpretation and a differential account of its methods (Gadamer, 1989, p. xxxi). Therefore, Max van Manen's methodological approach was adopted to determine the research method for this study. Contemporary philosopher van Manen explored phenomenological traditions and combined phenomenology and hermeneutic philosophy with a pedagogic orientation, to employ hermeneutic phenomenology in human science research (van Manen, 1990; van Manen, 2016). According to van Manen, The fundamental model of this approach (hermeneutical phenomenology) is textual reflection on the lived-experiences and practical actions of everyday life with the intent to increase one's thoughtfulness and practical resourcefulness or tact (van Manen, 1990, p. 4). van Manen's ideas were constructed through three understandings, phenomenology as the study of questioning what it is like; hermeneutic phenomenology as the study of persons; and hermeneutic phenomenological research as fundamentally a writing activity to reflect the experiences of the individual. Since van Manen's approach to interpreting hermeneutic phenomenology builds upon philosophical foundations and aligns with the requirements of this research, his approach was adopted to structure the research method for this study.

In one of his most influential texts, *Researching Lived-experience*, van Manen discussed six research activities (van Manen, 1990, pp. 30-31) and the interplay between them in

hermeneutic phenomenological research. These activities provided guidance while formulating the research question and establishing the research design (Fig 5.1).

I. Turning to the nature of lived experience II. Investigating experience as we live it Data Collection III. Hermeneutic phenomenological reflection IV. Hermeneutic phenomenological writing V. Maintaining a strong and oriented relation VI. Balancing the research context by considering parts and whole

Fig 5.1 Use of van Manen's research activities in the project

The first stage highlights that every phenomenological study begins with a thoughtful mind and deep questioning from the researcher on a topic of particular interest, and the research proceeds with a quest for the answers. The researcher's personal interest in, and background knowledge about, the project help the researcher to construct a question so well-formulated and clear that it will not only pose a question to the participants, it will make the researcher and readers wonder about the nature of the experience. Lived-experiences are often closely associated with each other, so it is also important for a researcher to consider the *structural nexus* when research participants reflect upon their experiences (Gadamer, 1985, cited in van Manen, 1990). As a researcher, interest in this topic was expressed earlier in the Prologue and Introduction sections, which was confirmed or expanded in the literature review. The

frequent disasters in Bangladesh and women's disadvantaged position in the country were the initial motivation to understand women being constantly affected by disasters in Bangladesh. After reviewing the literature, it was evident that women are indeed more vulnerable during disasters not only in Bangladesh but all over the world. This pre-existing and newly attained knowledge helped to understand the *sensitivity* of this research and produce a research question which would help to illuminate the essence of the phenomenon.

The second stage directs the researcher to actively explore a particular lived-experience through different plausible modalities and aspects of the phenomenon. The need to achieve a robust view on lived-experience led to the adoption of in-depth interviews as the primary source of data for this project. An in-depth interview is essentially a purpose-focused conversation; this technique extracts the participant's authentic insights about a livedexperience (Silverman, 2016). Because in-depth interviews mostly contain open-ended questions and usually offer a flexible timeframe, participants can reflect on their experiences from various perspectives, which provides the researcher with information and more diverse insights from a small group of people. Additionally, if the researcher is confused about any points made while interviewing the participants, these can be clarified immediately. In phenomenological inquiry, the researcher's reflections play a significant role in describing and interpreting the phenomenon being studied. The in-depth interview provides the researcher with an opportunity to observe the participants closely and record their non-verbal reactions, gestures, and body movements, which can also be used to develop and understand their views on the narrated experiences. The details of the data collection procedure and related ethical issues are addressed in the latter part of this chapter.

The third stage is associated with the data analysis process and focuses on the thematic analysis of the interviews. The aim of phenomenological research is to reveal the truth of lived-experience, which is often obscured by the everyday nature of the experience.

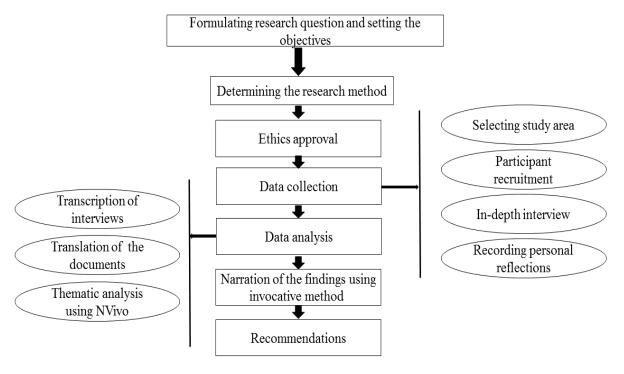
Therefore, true reflection and appropriate interpretation greatly depend on understanding and reflecting on the essential themes of the narration. van Manen's thematic analysis is further described in the data analysis chapter.

The fourth stage comprises another essential aspect of hermeneutic phenomenology. As van Manen stated, *Hermeneutic phenomenological research is fundamentally a writing activity* (van Manen, 1990, p. 7). Basically, the interpretation and description process for this project involved focused acts of writing and rewriting. Translating and transcribing all the interviews initially helped to gain a better understanding and grasp over the participants' experiences. The researcher's reflections and observations were recorded in a journal and stored on a computer, which assisted with the interpretation process.

van Manen's fifth and sixth stages are precautionary activities rather than instructions per se. While searching for the truth from the experiences of human beings, it is common to be distracted, side-tracked, and/or overwhelmed by the amount, or intensity, of the information the researcher receives from the participants. van Manen reminds the researcher how important it is to focus on the particular research question and to repeatedly look back to this question to remain on track. He also insisted on uniformity in the research context, so that the researcher does not lose sight of their purpose in the middle of the study. So, during the preparation of the interview schedule, conducting the interviews, transcribing the interviews,

analysing the data, and in the writing phase, it is important to check and re-check one's previous work to keep the research focused on the intended phenomenon.

Considering the stages outlined above, a framework was prepared to recruit women who have had experience living in the cyclone shelters of Bangladesh, conduct the in-depth interviews, translate and transcribe the interviews, analyse the data, interpret and describe the findings, and finally, to achieve the objectives of the research (Fig 5.2). While structuring the framework, the literature review and research question were consulted multiple times to ensure the harmonious orientation of all the components of the study.



All components were revisited repetitively with progression of the research to achieve the intended objectives.

Fig 5.2 Research framework for the project

5.5 Ethics approval and ethical considerations

Ethics approval was obtained from the Social and Behavioural Research Ethics Committee (SBREC) of Flinders University, a human research ethics committee recognised by the Australian government (Project number: 8197) on 19 December 2018 (Appendix 1).

Phenomenological research involves the lived-experience of people; therefore, planning and conducting the study, interpreting or describing the collected data, and preparation of documents and reports should be undertaken with greater caution to ensure participants' safety and to safeguard their anonymity and privacy (Walker, 2007). Ethical issues were considered at every step in the field, including selecting the study area, travelling to identified locations, informing the potential participants about the project, recruiting key informants and participants, and securing places to conduct interviews to ensure safety for both the researcher and the participants.

Strict confidentiality was maintained at every stage of data collection and analysis to keep the identities of key informants and participants anonymous. All data were transcribed and translated by the researcher; while transcribing the interviews, the participants' names were removed and replaced by numbers. All the names of people, organisations, and locations that came up in the interviews were replaced in the transcripts with codes. All individuals, organisations, and locations were placed into three categories, I for individual, O for organisation, and L for location. Numeric characters were added after these letter codes while transcribing the interviews, such as I-1, O-2, L-3 etc. I listed all the codes and their respective identities for the record, which was not shared with any other person or organisation.

The recorded and transcribed interviews were shared with the supervisory team only. Both the audiotapes and transcripts of the interviews were stored in my password-protected desktop computer, which is the property of Flinders University and located in the Torrens Resilience Institute. The Institute works on potentially sensitive projects and has swipe card security for entry to all office spaces.

5.6 Data Collection

5.6.1 Selecting the study area

As mentioned in Chapter 1, Chattagram, Cox's Bazar, and Bagerhat districts were chosen as the study areas for this research. Among all the unions of the coastal region that have been categorised as highly vulnerable, the majority are located in the eastern coastal region of the country, especially in the Chattagram and Cox's Bazar district. Most of the other highly vulnerable unions are located near the Sundarbans¹³ in the western coastal region (Rabby et al., 2019). Among the western districts, Bagerhat was one of the districts that had been severely affected from devastating cyclones in the recent past. Therefore, these three districts were chosen as study areas (Fig 5.3).

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¹³ A mangrove forest in the Ganges delta that spans from West Bengal, India to Southern and Southwestern Bangladesh.



present, the people of the sub-district have participated in many other social research projects. More than four million people live in the three selected districts, and frequently face cyclone emergencies, suggesting that recruiting participants with cyclone shelter experience would be attainable. Initially, three sub-districts (*Upazila*) from each of the districts were selected, Banshkhali from Chattagram, Cox's Bazar Sadar from Cox's Bazar, and Rampal sub-district from Bagerhat. Because variation in the data was anticipated, three sub-districts with different levels of exposure to cylones were chosen.

Banshkhali sub-district of Chattagram and Rampal sub-district of Bagerhat consist of 81 and 135 villages, respectively. Although most of the villages are typical in Bangladesh with conventional lifestyles, livelihoods, and limited access to urban facilities and outside contacts, these two chosen sub-districts belong to two different divisions with distinctive cultural practices. A male-dominated society, traditional cultural practices where women are expected to be inside the household and subordinate to male family members, and the financial dependence of women on men are prominent features in these sub-districts. Cox's Bazar Sadar (or town) is a well-known tourist destination in Bangladesh and attracts many national and international visitors. The people of this sub-district are more exposed to urban culture and accustomed to the modern world. The hospitality business has been expanded in this area which has created job opportunities for both men and women, and this has empowered women to some extent.

It was assumed that the differences in the geographical and social setting of the three chosen sub-districts might have had different impacts on local women's lives and their perceptions of wellbeing, which results in this research exploring more diverse experiences and

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understandings. Before travelling to the study areas, the available government demographic statistics and related information were reviewed to gain an informed perspective about each area before approaching the key informants face-to-face (Table 5.1).

Table 5.1 General overview of the three selected sub-districts

area (in km²)	Population		Women's literacy rate (%)	Marital status of women (aged above 10 years)		Number of cyclone shelters	Union health centre	Community
	Female	Male		Married	Unmarried			
376.9	219,151	212,011	36.3	60.5%	31.9%	148	3	15
228.23	217,445	241,637	47.9	60%	34.6%	80	10	26
	km²) 376.9	Female 376.9 219,151	Female Male 376.9 219,151 212,011	Female Male 376.9 219,151 212,011 36.3	Female Male Married 376.9 219,151 212,011 36.3 60.5%	Female Male Married Unmarried 376.9 219,151 212,011 36.3 60.5% 31.9%	Female Male Married Unmarried 376.9 219,151 212,011 36.3 60.5% 31.9% 148	km²) rate (%) years) cyclone shelters centre shelters Female Male Married Unmarried 376.9 219,151 212,011 36.3 60.5% 31.9% 148 3

Source: Bangladesh Bureau of Statistics (BBS), 2013; MoDMR, 2014

58

68.4%

20.1%

11

9

78,000

5.6.2 Participant recruitment

77,000

Rampal

335.45

The aim of the recruitment phase of the data collection process was to recruit 15 adult (aged 18 or above) women from the study areas. The only inclusion criteria was that they had to have had experience of staying in cyclone shelters. This could have been during and/or after a

cyclone, or during a cyclone warning when a cyclone was approaching but did not strike the study area, at any time in the last two decades (cyclone warnings and emergency evacuation situations since 2000). The study was open to including pregnant women, women with disabilities, and women who had experienced mental health problems (such as anxiety, depression, and suicidal thoughts, whose symptoms were well managed at the time of signing for consent, but who had experienced these conditions in the aftermath of their cyclone experience).

To identify potential participants in the study areas, persons with knowledge of the local community were needed. The Banshkhali, Cox's Bazar Sadar Branch, and Rampal Branch of BRAC¹⁴ were approached, and the local branch managers were requested to suggest local employees who could act as key informants. Local volunteers from Banshkhali, Cox's Bazar, and Rampal sub-districts were also met. These people were found to be self-driven and served the community out of their own conscience. Key informants were people with local knowledge who helped to identify potential interviewees. The local managers were contacted face-to-face and provided with a *letter of introduction* for the key informants, signed by the research supervisor (Appendix 2). These letters were intended for the potential key informants and explained their role in the research and provided with the researcher's contact number. Five of them called and conveyed their interest in the study. Three key informants from each sub-district contributed to the identification of potential participants; 17, 10, and 7 names of potential participants were provided by the key informants from Banshkhali, Cox's Bazar Sadar, and Rampal respectively. A total of 7 women from each of the sub-district's

¹⁴ An international development organisation based in Bangladesh working extensively in the areas of microfinance, education, public health, and humanitarian assistance.

potential participants' list were chosen by using a convenience sampling method. The women were contacted and meetings were arranged at local meeting places (in most cases, the interviews were held in the playgrounds of the local schools, because women do not stay outside for long, and do not go to local market places or tea stalls), where the study was explained to them. Each potential participant received an *information sheet* (Appendix 3) and read the *letter of introduction* for participants (Appendix 4) signed by the research supervisor. The participants were also asked about women with experiences of living in the cyclone shelters within their social circle. A number of local women who were potential participants were suggested. In this way, through a combination of convenience sampling and the snowball technique, a total of 19 women were chosen as participants from the study areas; 9 from Banshkhali, 7 from Cox's Bazar Sadar, and 3 from Rampal.

5.6.3 Interviewing the participants

The major part of the data collection for this study was undertaking two in-depth interviews with each participant. A semi-structured schedule was followed (Appendix 5) for both interviews to elucidate effective and sufficient information to understand the experiences of women's wellbeing in the shelters. All the interviews were undertaken in public places including near playgrounds, community meeting places, under the shade of trees, or based on the participants' other preferences. Some participants in Banshkhali requested to talk in private without the fear of being seen or heard; therefore, a local NGO in *Sadhanpur* Union was approached to use one of their offices as an interview room. Each participant signed a consent form (Appendices 6 and 7) before each interview session, acknowledging their understanding of the purpose of the research, any potential risks from the interview sessions, and their rights as a participant. They were also advised to consult a general health

practitioner, who signed a confidentiality agreement to provide support to the participants if it was needed, without affecting their privacy (Appendix 8).

Phenomenological research routinely uses two interviews to attain satisfactory in-depth data for a study. Because the participants were asked to recall difficult periods in their lives, and to discuss sensitive issues in this study, good rapport between the interviewee and the interviewer was important; therefore, conducting two interviews helped to establish trust and positive rapport. The first interview started with greetings and small talk, before proceeding towards a discussion of the women's situation within their households and their idea of wellbeing while living in their community; once the participants relaxed, cyclone-related questions were asked and the participants started talking about cyclone emergencies, the location of the cyclone shelters, and their overall experiences. The second interview focused on following up on conversations and topics raised in the first interview, as well as engaging in detailed discussions about particular incidents that affected the women. The women were asked to give their opinions about improving the current situation within the cyclone shelters, and to talk about difficult experiences they were less likely to reveal in the first interview. Both sessions were intended to be 50 minutes long, which was altered in some cases because of the nature of the interview process and the sensitivity of the discussed topic. Some women had time constraints, and although they were willing to talk, they were unable to spend more than 30 minutes because of their household engagements. Two participants interviewed on their way to picking up their children stopped the interview once their children arrived at the interview venue. Two interested women could not come to their second interview session because of their household responsibilities. One of the potential participants did not show up on her appointed day because her mother-in-law did not approve. Given that their

participation was voluntary, and they had a busy schedule and their movement outside of the home was restricted, the timespan of the interviews was flexible, and the primary focus was the content, rather than the length, of the interviews.

During the interviews, particular verbal expressions were cross-checked, and any confusions were clarified to assist with interpretation. While conducting the interviews, the women's movements, facial expressions, pauses, silences, and hesitations were observed and recorded in my personal journal. Later, these personal reflections were used to identify themes in the data analysis.

5.7 Data Analysis

5.7.1 Transcription and translation

All the recorded interviews were transcribed as closely as possible to verbatim, although the participants spoke in their regional dialect which was subsequently changed into formal Bengali language. Transcribing all the interviews allowed the researcher to reflect on the participants' narratives along with their language, their communicative styles, and any other patterns that emerged. These helped to unfold a new horizon of understanding the participants and what they *actually* tried to express in their interviews.

After completing the transcription process, the transcribed interviews were translated from Bengali to English, which was a tedious process. Nevertheless, it provided an opportunity for the researcher to engage with the texts and identify potential keywords or phrases that later helped to articulate the themes and sub-themes. The translation process was carried out with scrupulous attention to ensuring that the translation remained as close as possible to the actual meaning of the interviews. Both literal and abstract translations were used to maintain the

conceptual equivalence of the Bengali and English versions of the texts. Initially, a word-to-word approach was taken to keep the translation unambiguous and to stay closer to what the participants had said, but sometimes literal translation was not possible because it would have changed the meaning of the statement. In such cases, abstract translation was applied to restore the credibility of the translation. Some English words are used in the local spoken language, but have different meanings or slightly changed meanings to the local people. For example, the participants repeatedly used the word *tension*, *current*, and *centre*, which mean 'being in stress or being anxious', 'electricity', and 'cyclone shelter' respectively. Three of the participants used the word *cyclone* to mean cyclone shelter, since they did not know the actual meaning of cyclone and shortened the term 'cyclone shelter' into cyclone.

5.7.2 Data analysis framework

While translating the interviews, it was perceived that multiple readings would be required to gain an explicit understanding of the meaning, because of the nature of the conversations. In undertaking a phenomenological approach, the researcher had to portray *What is going on* during the data collection and data analysis process. Hence, the interview data demanded a flexible framework for data analysis which would allow going back and forth within the text, and would complement the process of the hermeneutic circle. van Manen suggested that thematic analysis does not go by any rule-bound process, it is more about *seeing* meaning (van Manen, 2016). Yet, a recognisable and well-accepted approach was required for the data analysis to ensure that a pragmatic approach to the research was taken (Robertson-Malt, 1999). Therefore, a rather malleable three-stage approach introduced by van Manen was chosen for the analysis of the phenomenological data. The three stages offered by van Manen are listed below:

- i. The wholistic reading approach: We attend to the text as a whole and ask, "How can the eidetic, originary, or phenomenological meaning or main significance of the text as a whole be captured?" We then try to express the meaning by formulating such a phrase.
- ii. The selective reading approach: We listen to or read a text several times and ask,
 "What statement(s) or phrase(s) seem particularly essential or revealing about
 the phenomenon or experience being described?" These statements we then
 circle, underline, or highlight. Next, we may try to capture these
 phenomenological meanings in thematic expressions or through longer reflective
 descriptive-interpretive paragraphs. Some phrases that occur in the text may be
 particularly evocative, or possess a sense of punctum. These phrases should be
 copied and saved as possible rhetorical "gems" for developing and writing the
 phenomenological text.
- iii. The detailed reading approach: We look at every single sentence or sentence cluster and ask, "What may this sentence or sentence cluster be seen to reveal about the phenomenon or experience being described?" Again, we try to identify and capture thematic expressions, phrases, or narrative paragraphs that increasingly let the phenomenological meaning of the experience show or give itself in the text. If the whole experiential account is particularly powerful then we try to lift it out as an exemplary story or anecdote (van Manen, 2016, p. 320).

van Manen suggested that these three stages need not be sequential; this made the method flexible and provided me with the freedom to move back and forth between the stages, depending on my analytical focus at the time. However, van Manen's process of analysis is

systematic because the themes are searched from the data, similar to any sequential or stepped approach, although the pathway of achieving the themes complements Gadamer's search for understanding. The analysis process assisted with looking for meaning within the text, which reverberated with the chosen philosophy and corresponded to the logical process of the hermeneutic circle. The three stages were used in the analysis and themes were identified and described in the latter part of the thesis. Although the stages were described sequentially, while analysing, a circular process was adopted, going back and forth consecutively between the stages.

5.7.3 Using NVivo in thematic analysis

The software programme NVivo 12 was used to assist the thematic analysis of the data. The first step was to import the translated interviews to the software. The software helped the researcher to keep track of significant words, phrases, and sentences within the text. Sections that seemed interesting were highlighted, and it became easy to track them back to the original text. The highlighted sections from the translated interviews were aligned and easily referred to the segments of the interviews they came from. This was a useful way to maintain proper documentation of the hermeneutic circle. The software's tracking capabilities enhanced the rigour of the data analysis (McCloud, Harrington, & King, 2012). However, the NVivo software did not generate the themes (the themes were generated through the previously described process); it was used primarily for its capacity to store large amounts of data.

Chapter summary

This chapter has discussed the philosophical framework that underpins the research inquiry, presented the principal tenets of hermeneutic phenomenology, and explained how this approach synchronises with the context of the research to identify the answers to the research question. The significance of understanding the meaning of being in a situation as a mode of obtaining new knowledge has been highlighted in this chapter, which is the key concept of this research. Interpretations of the phenomenology of prominent philosophers, including Husserl, Heidegger, Gadamer, and van Manen, have been discussed to rationalise the philosophical framework chosen for this thesis. The second part of the chapter described the specific research framework undertaken for the study, including a detailed participant recruitment procedure, ethics-related considerations, and the interview process to attain effective data for the study. The last part of the chapter outlined the analysis framework starting with the detailed translation and transcription techniques and considerations, the procedures followed for the thematic analysis, the use of NVivo software, and the reflections of the researcher to explain how rigour was maintained throughout the research process.

Themes and Sub-themes

The next section comprising of seven chapters, from Chapter 6 to Chapter 12, consists of the themes and associated sub-themes that revealed the sets of emotions and issues that the women experienced as evacuees in the cyclone shelters. The themes and sub-themes are as follows:

Theme 1: Being understood (as a woman)

Theme 2: Being a woman during crisis

- Not being recognised as an individual
- Being helpless
- Being overwhelmed

Theme 4: Being fearful

- Existential fear
- The what ifs- fear of the unknown

Theme 6: Being faithful

- Optimism- finding peace in prayers
- Hoping for a normal death

Theme 3: Being in a hostile situation

- Experiencing challenges (to face the shelter facilities)
- The experience of struggles

Theme 5: Being uncertain

- Being in dilemma- despair or hope
- Longing to hear from kin and loved ones
- The sense of anticipation of returning to usual lives

Theme 7: Being against the odds

- Being compassionate
- Being outside the square

Chapter 6: The fundamental insight: Being understood (as a woman)

Chapter overview

This chapter aims to create an image of the participants' *lifeworld*, their reality, and the meaning of their existence from their interview narratives. The discussion regarding women's understandings of *being* in their space and time is the fundamental insight that gives the research themes meaning and sense. This background information provides an empathic power to the themes and findings of the research, which are discussed in the following chapters. Therefore, the views discussed in this chapter will be referred to, and expanded upon, in the next chapters.

6.1 Being understood (as a woman)

The first theme that surfaced was the experience of *Being understood as a woman*. Each participant was asked about her lifestyle, socio-cultural position, and expectations of life in her *lifeworld* to initiate the conversation and build rapport between the researcher and the participant. The introductory conversations helped the participants to reach their comfort zone and, as a result, the women shared their experiences in the cyclone shelters without concealment as the interview sessions progressed. Being understood as a woman appeared as a mode of *being*, a concept that was echoed throughout the narratives. The constant challenges of being a woman in everyday life were explicitly described by the participants. As the hermeneutic engagement increased, the theme *being understood as a woman* emerged as a fundamental concept, the singular thread that represents the women of the community in the study areas and unfolds the true essence of their lived-experience described in the research themes.

The theme evolved out of the Heideggerian concept of existentialism, as described in Chapter 5. Heidegger used the word *Dasein* to describe an individual's existence in the world. This represents how a person relates their being to others and their surroundings. The participants described many aspects of themselves, what they think of themselves, their relationships to others and everything around them; the essence of their being resonated with their experiences in the cyclone shelters. The hermeneutic analysis captured the reality that lies within the theme, and proided a better understanding of how the women from the coastal communities think and their mindsets, which later helped to unfold how they perceived their experiences in the cyclone shelters. Being understood as a woman evolved from the participants' repeated statements about the hardships and limitations they faced in their dayto-day lives, which subsequently made them vulnerable and negatively impacted on their wellbeing in the shelters. The notions of women being less significant than men, and underestimating women's needs as individuals formed the core of this theme, which linked to the participants' personal experiences in the shelters in the following themes. The *dasein* of the women in their *lived-space* (the cyclone shelters) is the locus from which the other themes branched out and became intertwined. The following section comprises the evidence for the theme, as well as how being understood as a woman led to the six ensuing themes.

It was essential to realise that the participants belong to particular social settings and that each of the individuals has a unique background, culture, and experience.

Women in the study areas are expected to be subordinate to a male guardian both before and after marriage, which was reflected in their answers. For example, I-1 stated:

Researcher: So, how long you have been here?

Participant: Both my father's and father-in-law's places are here.

The response of I-1 made it apparent that women in the study areas lack independence and live under the control of male custodians, and therefore, when asked about how long she had been in the area, she described how long her father and husband had been residents, implying that she had been living in the area all her life. The thought has been embedded within the community to such an extent that women cannot describe their being without reference to their male guardians. A similar mindset was also found in the comments made by I-12, I-13, and I-18 respectively,

I-12 sounded rather upset yet helpless in her situation,

Researcher: How far did you study?

Participant: I could not continue my study after S. S. C. 15 My father died when I was young, and my brothers did not bother much about my education ... I do not do anything. There is no opportunity here. There are works in Chattagram and Cox's Bazar. But my husband does not want me to go there for work. My sons do not like it either. If I want to do something good, I have to go to the town. There is nothing in this village.

Researcher: Your husband does not want his wife to go away from home.

Participant: Yes, that is why I cannot go. I could work at a garment factory or maybe at a hospital if I lived in a town. There is nothing in this village. So, I am spending my time idly.

¹⁵ Public examination conducted by the national Ministry of Education for successful completion of secondary education.

I-13 stated,

Researcher: Did you pass the S. S. C.?

Participant: Yes, I was married before my result was published. I could not continue

my study after that.

Researcher: Did you work at any stage of your life? (There are a lot of NGOs and

organisations working near this area. With your certificate you could get a job).

Participant: No, all my time went behind the family. My first daughter was born just a

year after my marriage. Then the two came and I was completely involved with my

daughters and household works. I did not get any time to do something else.

Regret was voiced by I-18,

Participant: I could not sit for my S. S. C. examination.

Researcher: Why?

Participant: My parents married me off! I was naïve and did not understand much; if

I only realized, then I would not have married like this. Earlier, parents used to marry

their daughter off when they were 15/16 years old.

It was evident that these women were obliged to follow the decisions of their male family

members. The decision-maker could be the father, brother, husband, or even the son, but not

a woman herself. Even though the women desired otherwise, they were unable to speak out

and make decisions about their own lives. Women did not always agree with the decisions

imposed on them willingly, but they could not alter those decisions either.

It was perceived in the study areas that family honour lies with the virtues of their female

family members. Women were taught to stay inside to safeguard their honour and protect the

family reputation. These social norms were preferred by many participants, as I-9 admitted,

I like this rule (staying inside the household) anyway. I do not like talking to unknown

people or go outside; I am too shy for that. I like to stay inside, protecting my privacy.

This resulted in a disconnection from the outside world and made women dependent on men.

The participants expressed their dependent nature in their conversations. For example, when

asked about financial dependence and their daily lives, I-3, I-10, and I-8 described their

financial situations as follows.

I-3 explained,

Researcher: Your son sends money?

Participant: Yes, he even does the grocery when he visits. I do not go for groceries or

anything after my husband died. My son comes and does the groceries, I do not go

outside.

Researcher: Is there any particular reason?

Participant: I feel very shy dear, I do not like to be out.

Researcher: Have you always felt this way? Or it happened recently?

Participant: I used to be like that from the very beginning. My parents would never let

me go out when I was young. After I came to my in-laws', I lived like that. My

husband used to be drive autorickshaw (three-wheeled public transport) and I lived

with him in the city for a while; I stayed there inside the home most of the time as

well.

I-10 gave a similar response,

We women do not go (to the groceries). Either my husband or my son does groceries

... This is not allowed within our community. If we go to the market area people would

talk about us. We would disgrace our families. The male family members do outside works.

I-8 stated that she would rely on men from her neighbourhood, instead of going herself or sending her teenage daughter to the grocery shop,

Now that she (her daughter) is grown up, she cannot go to the shop. The people will talk about it, they will point at her and say that her family may not be a decent one. I do not go to the shop either. If someone else is going I request them to do my groceries too. The men in my family do not come back to the house every day. What else I and my daughter can do!

Women's social exposure outside of their households was also limited due to a lack of social safety and a sense of insecurity. The participants preferred not to go out, and were discouraged from doing so by their family members and neighbours. As a result, they passed this sense of insecurity on to their female children. As I-11 mentioned,

Researcher: What is this area like? Is it safe?

Participant: It is not so safe here. I do not get out of my home at night, I feel scared. If I need to go out for some work, I do it by daytime.

I-18 explained that the sense of an unsafe environment outside their home discouraged them from going out alone,

Women cannot go out at night; also, cannot go anywhere alone. We always live in fear that something might go wrong.

I-13 voiced her concern for her daughters,

Researcher: Do you have to worry about your girls' safety here?

Participant: There were some troubles while going to school. Young boys are indiscipline now, the girls faced some teasing on their way ... Most of the time I

accompany my daughters on their way to school and pick them up when their school ends.

A similar comment was made by I-6,

My daughter does not go outside to take tuition, the teacher comes to our home because her father does not want her daughter to go out.

This social practice has led to women's financial dependence on men. Even though some participants earned money from working outside their households, they were not well-accepted in their families and in the community; in fact, the participants were embarrassed about working. They considered working outside only when it was absolutely necessary for them in order to feed their children and/or arrange money for their education. Additionally, some women were willing to work outside, but they did not dare go against the social norms. For example, I-14 complained about her financial struggles and how the social norms were opposed to her earning money.

To be honest it is very difficult for me to maintain all the expenditures of the households and the children's studies with this income. I keep adjusting to fulfill the needs of the family. I would have started working, but my daughters will be eligible for marriage soon, and if I work outside, people might talk about it. It would become difficult for me to find good grooms for my daughters because they would not believe that my daughters belong to a respectable family.

I-1 described how she worked to support her family in the past, but from her gestures, it was palpable that she despised the experience of work and that she was more comfortable staying at home. When asked about whether her daughters-in-law worked outside of the home, she strongly denied this not only verbally, but also with her body language, shaking her head and giving a disapproving look, which showed her dislike towards women working outside of the family home.

Participant: I used to give domestic support at other people's houses, we needed

money at that time. Now my sons are earning, I do not need to work outside anymore.

They earn enough. I do not need to go outside, that saves me from all the gossips too.

Researcher: Do your daughters-in-law work outside?

Participant: No, no.

I-2 shared her life challenges of how she was unable to live with her in-laws because she

needed to do odd jobs for money to continue her sons' education. The participant mentioned

it as being disgraceful, and the personal stress and shame were clear from her body language

during the interview.

Researcher: Do you work?

Participant: No, I do not work. I have two ducks, sometimes I help in someone's field

and they give me rice in return. I do not want to share these things, you are like my

sister, that is why I am telling you. I try to work, do not always get work. Still, I try my

best because I must educate my sons.

Researcher: Yes, that is very good.

Participant: I mean, my sons need to continue their studies, so I am working like a

man ... Can I do these things at my in-law's place? That is why I am staying at my

parents' house.

Researcher: Okay, are there any restrictions at your in-law's place about going out or

working outside?

Participant: Certainly, they are village people. I could not go out for work if I lived

there. They did not even give rice, curries, and clothes for my little kids. So, I returned

to my parents' place.

I-17 stated how a lack of social exposure and opportunities demotivated women who needed to work for their families or who wanted to work to better their lives.

We do not have that much exposure and opportunities. Women mostly live inside the houses in our village.

Being a woman implied staying under a male patron, not making their own decisions, living under social restrictions, and having the fear of insecurity. In other words, women were understood as exposed and vulnerable by their families, their community, and by the women themselves.

6.2 Revealing the coherence

This section acts as a bridge to transit through the socio-cultural context of the women to the research themes discussing the lived-experience of women in the cyclone shelters. While the women shared their lifestyles, their ambitions, and defined their being, they not only depicted their background, they repeatedly compared, and referred to, their contextual situation with their experiences in the shelters. The participants frequently articulated that the existing challenges and struggles increased exponentially immediately after a cyclone emergency had been announced. The meanings of the participants' statements portrayed that women felt vulnerable and were potentially threatened by the approaching cyclone both as part of a community and as individuals, and also revealed their shared experiences of discrimination associated with being a woman. Their understanding of being within their lifeworld increased their adversities in the cyclone shelters, where all the evacuees of both genders found themselves in peril due to the imminent disaster. In the interviews, the women expressed how they suffered during cyclone emergencies and while staying in the shelters, specifically because of their gender. Being nervous and frightened immediately after the cyclone

warnings were comprehensible, but the participants mentioned feeling helpless when asked about their immediate reaction after learning about an approaching cyclone.

I-1 said,

I feel weak. Everyone starts running around. I start worrying about the upcoming storm and panic. I cannot do much.

I-11 stated,

I feel helpless, I wonder where to go for safety. I evacuate the house to save my life. The participants added that being a woman made them more exposed and at risk at the onset of a threatening cyclone. Women could not go to the cyclone shelter until the men from their family permitted them to do so. Because the women in the study area were not self-sufficient, they felt they lacked resources during emergencies. The following remark of I-11 put forward a similar message,

Even if I have seen many storms, I am still afraid of rainy days. Generally, there are no men in the house, just me and my daughter. The cyclone shelter is far away from our house. I pack my clothes and wait (for the men to arrive). My son told me to keep my cell phone with me all the time and light a lamp, during the storms. No one helps each other during the storms ... We get scared too, but we cannot leave our property. For us, life is like a war.

Based on the interviews with the participants, it is quite apparent that men and women both perceive women to be the weaker group. This mindset led to many unfortunate and uncomfortable situations for women in the cyclone shelters. The participants revealed their experiences of enduring gender-specific persecution while staying in the cyclone shelters. I-7 described how she was teased by the male evacuees, which put her in a stressful situation and

affected her psychological wellbeing.

We girls have so many problems, that we cannot share with others, we were unable to do anything about our problems at the shelter. Our clothes were completely wet, and boys were looking at us, they were laughing at us. It was shameful. We did not want to go in front of the men, they teased the women.

Men mocked us, teased us. Some pushed us while getting up or down of the shelter ... I mean, we women have a lot of problems. There were times in the shelter when I was so ashamed and embarrassed that I could not think of coming out of the shelter.

Although women were not responsible for the ill-treatment they received from the male evacuees, many felt guilty and were too shy and frightened to share these incidents with others. Women felt that hiding these incidents and tolerating them in silence would preserve their honour. Therefore, such experiences were rarely mentioned by the women, despite this being one of the more concerning issues in the cyclone shelters. As I-10 explained,

Their impertinence was common in the shelter ... We lived in fear all the time ...

During the emergencies, we went to the shelter because we were at risk, but for many, it was an opportunity to take advantage of women's situation ... They were bad people with ill intentions. Everyone was vulnerable. We are scared to go to the shelter because these things might happen again. Many women will not admit it, but this is the true scenario.

Chapter summary

This chapter has provided an overview of the context of the women living in the study areas, based on which the women's narratives have been interpreted and themes have been constructed. The latter part of the chapter introduced the conversations regarding women's lived-experiences during cyclone emergencies and in the shelters, which act as a backdrop to

understanding the following themes and which will be continued and extended in the next chapter – *Being a woman during a crisis*.

Chapter 7: Being a woman during a crisis

The narratives of the women resonated with their lived-experience of being a woman during a cyclone emergency, and revealed their inherent responses towards a crisis, and their roles within their family and community. The participants' descriptions of actions, mental states, being watchful of potential threats, and the stress associated with the crisis underpins the theme of *Being a woman during a crisis*. To the participants, being a woman during a cyclone is about keeping their children, valuable materials, and livestock safe from the upcoming catastrophe. These roles caused them to face many challenges, including the experience of stress and insecurity, that usually began immediately after receiving the emergency warning and which continued throughout their stay in a shelter and through to the post-cyclone rehabilitation period. Additionally, as discussed in the previous chapter, being understood as a woman gave women a sense of vulnerability that was exacerbated during cyclone emergencies.

The hermeneutic analysis of the narratives provided an understanding of the lived-experience captured by the theme – $Being\ a\ woman\ during\ a\ crisis$. The next section comprises the statements of the participants that underpin the emergence of the theme.

When the participants were asked about their experience of crisis, their first response was about their experiences of suffering and hardship. I-18 articulated that, we suffered a lot, where she spoke for all the women in the shelter in general who had the experience of surviving a cyclone emergency. Similar emotions were reflected by I-5, *I suffered a lot, sister. A lot.*

With the progress of the interview sessions, the participants became increasingly engaged in the conversations and discussed their lived-experiences, the experiences that created a sense of being exposed, feeling vulnerable, and increasing their stress and their feeling of insecurity. I-7 described one of the recent cyclone emergencies she survived,

I was sitting with my daughter the last time water came (to the village). I did not know that a water surge is coming towards our village. One of my nieces called me and warned me about it. I was sitting alone, and I thought that there was no way I could reach the shelter on time. At that time, I was visiting my parent's house. My niece then called one of our relatives and requested him to help us get out. They came to save us. I sent my mother and daughter with them to the shelter and I ran to my house. I had some chickens and ducks, I put them in a safe place and then ran to the shelter. I left the chicken at my grandmother's place. Their house was a little bit elevated. It was raining continuously. The water rose as high as my neck. I went back to the shelter. My house a clay-made, it was not in good condition. I was worried because I knew my house would not be standing after the storm. I had rice stored in big drums, I saw the drums were falling into the pond.

Researcher: Oh!

Participant: My cousin lived next door. We tried to save some rice drums. I kept looking for my chickens, one was floating on the water.

... My clothes were completely wet, I was cold. I did not take any extra clothes with me. There were no dry clothes at my home too, all were underwater. I stayed in wet clothes for the night, the next day I came to my house for dry clothes, but my house was destroyed, and I had nothing left.

This narrative provided an image of a woman being tangled with several responsibilities towards her children, elderly family members, livestock, and the household, that jeopardised her safety and security at the onset of the cyclone emergency. Even after the effort and risks

taken to save all the belongings, the participant could not ensure her comfort in the shelter and was continuously stressed about the post-cyclone consequences.

A similar experience was narrated by I-18, who found herself alone with all the household responsibilities and needed to take prompt action for herself and her children. Although she could reach the shelter with her children, she struggled to ensure the children's safety and comfort, which gave her a sense of guilt and failure that was visible through her gestures and her voice while she was narrating the experience.

I used to be at home (during cyclone emergencies) before the landfall of cyclone Sidr. I was told that it would become impossible to stay at home. So, I had to go to the shelter with my children. There were signals that there would be a storm and water surge. And there was a possibility of drowning in the water. So, I considered the situation and found that it was true. Somehow, even if I could survive the situation, my children could get into trouble. So, I packed some food and went to the shelter. I went there a bit earlier and thought that I could live with my baby in that place. Then the place became crowded by the evening. We were finding it hard to keep standing even, let alone sit. Finally, I managed to sit with my two children. It started to get more and more crowded and I could no longer sit on the floor. My children were crying that they could not stay there any longer. It was difficult to give them food at that time. Yet, I tried to feed them food out of my side-bag, in a little portion, and gave them drinking water. My children wanted to sleep at night, but I did not find a suitable place for them.

The desperation for her children's safety, the struggle associated with assuring the children's comfort, and enduring personal miseries were also issues mentioned by I-9,

When the wind starts tree branches fell, tin-roofs blow away, so I prefer going to the shelter early. I took some food with me because there is no food at the shelter, no one

would give us any food. I packed my kids' clothes, take the food, took the jewellery and ornaments I have, and my cell phone in a pouch.

... It was very stressful, but I had to do it no matter what. My kids are my world and during the cyclones, I needed to keep them safe and save myself too. I took my kids and ran towards the shelter. I ran to the shelter with the rain over me. My umbrella broke, I was completely wet. Sometimes I could change the wet clothes, sometimes I could not. I put my faith in Allah and waited for the storm to stop.

I-6 described how having an elderly person in the family increased her challenges during the crisis,

There were (my) three kids and my father; he is younger than the kids ... Whenever he hears a storm is coming, he gets paranoid, because of that incident (past trauma and injury from cyclone). Handling him is even more difficult than handling my kids.

I-14 remembered being judged by fellow evacuees,

I could not feed my cow, hens, and ducks. There was scarcely any place to keep them. People said that they were not getting space, let alone animals. People cursed me for thinking about animals.

I-9 alleged that men were exempted from such responsibilities and only women were expected to serve their families and their household, which put an additional burden on them during a crisis,

Men have fewer responsibilities, and they can relax a little bit, but this is not the case for women.

I-15 added,

The mothers struggled the most at the shelter. They took care of their children day and night, they looked after them when their children were sick, they kept them safe

from all the dangers. Yet, people scolded the mother if something had happened to

them.

In addition to the excessive responsibilities that were placed on women in cyclone

emergencies being women, and being understood as a woman in theirs and other evacuees'

conscious minds, devalued the women's experiences in the shelter. As I-6 explained,

Participant: People of our community are shy, so they do not want to (go to the

shelter). Many pregnant women do not go to the shelter.

Researcher: Is that so?

Participant: Yes. I also feel shy to go there, but I have kids and I must keep them safe.

If I cannot save myself, how would I save them!

Researcher: Yes, and the kids are more vulnerable when there are water surges. Why

is this shyness? Is this because you had to stay with other people?

Participant: Yes, we stayed with people we did not know. People laughed at women

when the water increased, and our clothes got wet (because of crossing the water to

reach the shelter). Some people laughed at us because we went there to save our lives,

they said we were scared, and they mocked us for being weak.

I-10 professed,

Even if I said I wanted to maintain my dignity, it was not always possible.

For the participants, being a woman during a crisis was stressful and undignifying. Women

narrated their experiences of their stay in the shelters, including finding themselves without

assistance or support, being overwhelmed with responsibilities and by social pressures, and

not being recognised as an individual by family members and/or people in the community.

These experiences were described under the following sub-themes – *Not being recognised as an individual, Being helpless*, and *Being overwhelmed*..

7.1 Not being recognised as an individual

This sub-theme arose from one of the characteristics of women's *being*, which became more prominent in times of crisis. Being understood as a woman captures the orientation and adaptation of women's thinking, and their mindset during a crisis, in this case, during a cyclone emergency and/or staying in a cyclone shelter. The narratives of the women explained how the decisions they took and the experiences they faced being in a crisis evolved from being understood as a woman.

One of the most interesting observations from the interviews was the repeated use of the words *our*, *we*, and *us* rather than *my*, *I*, and *me*. This tendency of divesting from their individuality may have several explanations; however, the potential explanations in this scenario would be women's lack of confidence to articulate their actions and experiences as their own. Their use of the collective terms could also mean that women in the study area considered themselves inseparable from others of similar socio-cultural backgrounds and lifestyles. After evaluating the statements in which the women used plural instead of singular terms to describe their individual experiences and thoughts, it was perceived that women lacked individuality in their *being*, which prompted them to narrate their experiences and issues through collective terms. This was evident from the statement made by I-7, which also shed light on the fact that women's needs had not been recognised, and as a result, they were unable to restore their wellbeing in the shelters.

We girls have so many problems, that we cannot share with others, we were unable to do anything about our problems at the shelter.

On the contrary, many participants were not focused on their own safety and wellbeing. The immediate response after asking about their experiences was keeping their children safe in the shelters. As I-9 narrated,

When you asked me about my experiences, all I could remember that my kids were healthy and safe. So, I told you that I was fine at the shelter. Then suddenly it occurred to me that I had a fever, and it was an awful experience.

I-4 did not consider going to the shelter without her children. When asked about her first reaction following the cyclone warning, she replied that she searched for her children or waited for them to return home. She did not consider going to the shelter and leaving her children, even though her children were over 16 and capable of going to the shelter on their own.

I have always taken my kids (to the shelters). What is the point of a mother to survive, if her children are no more?

Women despised themselves for not providing enough facilities for their children and family members. I-10 generalised herself as *women* and expressed her disappointment for not providing her children with adequate facilities at the shelter,

Women could not keep their children and other dependents well. If I cannot give comfort to my children if I do not get minimum facilities for them at the shelter, why would I go there? Is it not better to die at home?

Women tend to prioritise their responsibilities, especially their role as a mother first. This decision of women is mostly voluntary, but women's willing response towards their children's wellbeing was also expected and influenced by their families and communities. I-9 lived with her two children in the village while her husband worked in the city and visited the family twice a year. When asked about how she kept contact with her husband in the shelter, she replied:

Researcher: Could you contact him (the husband) while staying at the shelter?

Participant: He kept reminding me (over cellular phone) that I must take care of the children. He said that it is okay if I die protecting my kids.

I-15 used collective terms and generalised herself as 'mothers' when asked about her experience at the shelter:

The mothers struggled the most at the shelter. They took care of their children day and night, they looked after them when their children were sick, they kept them safe from all the dangers, yet people scolded the mothers if something had happened to them.

Women with children were solely considered as mothers; the protectors and caregivers of the children. Their individual identities were not apparent to their partners or to people in their community. These two statements made the notion of *not being recognised as an individual* at the shelter apparent.

This created adversity for women without children and for widows in the shelters as well.

Women were identified with the names of their fathers, husbands, and sons. Being a single woman meant a person with no identity. Therefore, some of the participants took these

women into their families as an act of kindness. I-6 described an incident regarding a particular single woman from her community,

I have a neighbour who is a widow and childless. We take her with us; she sits with us. But everyone does not do that ...

This reflects that women in the shelter needed to be associated with a man or a family.

Women live in a diverse range of situations and may live alone, which is not even considered in the shelters; these single women need to be tagged with some other families or men while staying in the shelters. Women's lack of self-recognition as individuals made them vulnerable, helpless, and exposed them to different overwhelming situations that are discussed in the next two sub-themes.

7.2 Being helpless

As discussed in the *Being a woman during a crisis* section, women found themselves in a disadvantaged position and faced constant struggles and challenges during cyclone emergencies, as a result of a diverse range of issues. The experience of *Being helpless* was described by the participants in different ways, using different anecdotes and analogies to express their experiences during cyclone emergencies, especially in the cyclone shelters. Some participants, for example I-5 and I-7, used the term *helpless* to describe themselves in the shelters. Additionally, it was evident from the participants' narratives as well as their emotions and gestures while narrating those experiences, that being a woman during a crisis often placed them in helpless positions, which impeded their state of wellbeing in the shelters. Thus, the phrase *Being helpless* appears to be an appropriate description for summarising the experiences of women as it echoes the essence of their narratives.

I-18 stated that inadequate space for all the evacuees, and the poor food and water supply and toilet facilities were the major reasons for being helpless in the shelter,

The major problem was regarding the food and toilet facilities. Many suffered from hunger, but there was nothing to do. It was not possible to go out to get some food during the storm. All the shops were closed at that time. People who took food with them from home could eat in the shelter. But it was not possible for everyone, because they did not have food stored in their houses.

... We suffered from thirst. There was no drinking water, and it was not possible to go out and fetch water from the tube-well. Also, it was already underwater at that time. In that situation, people were exhausted, and we needed water, but we could not get any drinking water or food. The shelter had no light.

... It (the shelter) was always too much crowded. During cyclone Aila, I had seen that the number of people exceeded the capacity of the shelter to such an extent that many people took shelter in the staircases, some were standing in the water. Everyone went there for their safety. There are not too many arrangements to accommodate people. People stayed in the staircases or hold the door of the shelter boundary just to be safe. Many people got out of the shelter to find a better place right before the storm.

I-14 recalled a similar experience,

There were a lot of people there. Many people live in this area and so the shelter became overcrowded. If people of this whole area went to the shelter, many would not get any space.

... So many people. Still, we stayed there for hours to save our lives. Sometimes we had to spend the night there. Everyone sat, there was no place to lie down.

... Sometimes there was food, sometimes there was not. Sometimes we got dry food such as puffed rice, dried rice, biscuits, and bananas. They (the local authority) said that they did not get any funds from the government and they would give us food after

getting a fund. Still, they gave us bread and biscuits sometimes. But the food supply was not regular, they gave it whenever they wished to.

I-7 added,

No one came with help. No one asked about our condition, how we are managing to live in the shelter, what we are eating, or in fact, whether we are even eating or starving. No facilities, there were mosquitoes and bad odours. Where else people could go? People sit there helplessly.

These issues raised by the participants could potentially affect evacuees of any gender. However, the recollections of I-5, I-7, I-19, and I-2 suggested that generic challenges in the shelters impacted women more than other evacuees, because of women's obligations towards their families and communities.

I-5 compared life in the shelter to her daily life and how her usual life was hampered while staying in the shelter, and her experience of being the sole caregiver of her children without any arrangements inside the shelter and/or any external assistance,

I could not cook rice, could not do any grocery. It was a hard time. I could not even go to the toilet. Life was very difficult. I was unable to do my daily activities, there was no timetable for having a bath, meal, taking a nap, or praying. I could not read the Holy Qur'an. I could not even comb my head or put oil in my hair. There was no rice to eat, no water to drink.

... Can you imagine what a mother goes through seeing her children in miseries? They cried for their father. I could not give them any good food. I mixed salt with rice and fed them. Everything was wet because of continuous rain. There was water everywhere. There was no place to dry our clothes. I was always in the dilemma that whose clothes to put first, mine, or my children's. When it rains and we are at home we could dry our clothes above the stove, so that is usually not a problem at home.

... There was nothing in the shelter. We lived in that shelter for days. It took days, we stayed for 3/4 days. My legs hurt a lot. I felt helpless. The children cried for food, for rice. They cried for biscuits and asked for money. The shops were closed because of the storm and rainfall.

I-7 described her experience of being alone with her infant child and helpless during a cyclone emergency,

I was alone during an emergency. My elder one was an infant then. The water entered our village and started to rise fast. My nephew was going to the shelter too. I saw him, so I called him to help me out with my baby and my mother. He did not help me, he kept moving. I somehow managed to swim and walk to the shelter with my baby and mother.

We did not have any food. We starved for the whole night. It started to rain all of a sudden, water came to the village quickly, we were having an afternoon nap. We were not prepared. So, we could not take any food at the shelter and we spent the night without eating anything. All the shops were closed. We had nothing to eat. No one offered us any food. No one came with any relief; the chairman or members of the village did not think of us. We stayed there in the darkness, without any electricity, with poor toilet facilities. Yet, no one thought that they should help us.

I-2 stated,

My son cried a lot. I could not feed him; he did not get enough breast milk because I was starving.

I-17 reflected on being helpless in relation to the teasing and harassment at the shelter, and used the collective term 'we women' to recall this particular incident,

It has happened many times. But we women went there to save lives; if we speak against teasing people would think we had done something provocative and we would

lose our honour. In this rural area, saving our virtue is as important as saving our lives. So, no one raised their voices against teasing.

I-19 exclaimed how abiding socio-cultural norms made their stay in the shelter uncomfortable,

We felt suffocated with stress and nervousness (inside the shelter). But we could not uncover our faces or relax in front of the men.

I-17 shared her experience of being pregnant during a cyclone emergency and showed her concern for the pregnant women in her community who were rather helpless during the cyclone emergency, and often stayed in their homes and put themselves at risk instead of moving to the shelter,

Once there was a storm when I was pregnant; then we went to the cyclone shelter. I left that place after a while because it was too hard for me to stay there. The shelter was too congested, so I left that place. There was a brick-made building of a wealthy family, I stayed at their house instead. There was always at least one pregnant woman in every 100 people. In the cyclone shelter, every time there were more than 800/900 people; people came from the other villages as well. So, it became very difficult to stay in such a condition; some were forced to return to their (unsafe) houses too.

At the shelter, adequate food, toilet facilities, resting areas, and basic requirements for female evacuees were not guaranteed at all times. The inadequacy of certain facilities for the women and their children created a sense of helplessness among the female evacuees. Although it is expected that normal lives are disrupted during an emergency, the participants described the lack of availability of the necessities as pushing their patience levels and hampering their wellbeing at the shelter. Moreover, they felt guilty and helpless for not providing comfort to their children, even though this could scarcely be considered as a lack of capability of the

individuals concerned. It was understood from the narratives of the participants that insufficient amenities at the shelter, the responsibility to ensure their children's wellbeing, and the associated mental stress of fulfilling the duties bestowed on them, increased women's workloads, and gave them a sense of being helpless.

7.3 Being overwhelmed

The sub-theme *Being overwhelmed* is intertwined with the previous sub-theme *being helpless*. The experiences narrated by the participants contributed to the theme *being helpless*, and this sub-theme was surfaced by understanding the participants' emotional journey when they were sharing their experiences. Consequently, the examples of the participants' narratives in both sub-themes are similar, but this sub-theme focuses on the *emotional* experiences of women during their time at the shelter. The sub-theme describes the overwhelming feelings experienced by the participants and the series of events that happened within their lived-time and lived-space.

As discussed in the *being a woman during a crisis* and *being helpless* sections, the responsibilities that fell upon women increased their workload and stress levels. Sometimes, it pushed the tolerance level of individuals and left them overwhelmed by a combination of negative emotions. For example, I-13 explained how her husband refused to accompany her and her daughters to the shelter, which resulted in her being left alone to look after her daughters. She was very stressed from the ongoing storm outside the shelter and felt anxious about her daughters' safety. In addition to this, inadequate resources and meeting her daughter's requirements engulfed her and made her stay at the shelter a harrowing experience,

Researcher: Where was your husband?

Participant: He was inside his shop.

Researcher: Did he not go to the shelter?

Participant: No. He told us to go to the shelter and he would guard the shop and he would join us at the shelter if water entered his shop. He stayed at the shop, not at the house.

Researcher: Was the shop away from here?

Participant: It is in L-13 (2 km from the area).

Researcher: So, you were alone at the shelter with your three daughters?

Participant: Yes. It was frightening. But the fear of the storm was more than this fear, that kept me going.

... It was a long night. I could not sleep that night. I was sitting the whole time. I assured the girls that I would be awake and told them to sleep. There were people from different backgrounds, I did not know them, it was dark in the shelter too and so, I decided to keep a look on my daughters while they slept.

... While living in the shelter I continuously stressed about the water surge, whether the water was rising or not. I was alone with three daughters; different people came (to the shelter) from different places. I was scared that something bad would happen. It was a frightening experience. My charger light did not have a sufficient charge for the night. On top of that, I had to take one of the daughters to the toilet downstairs.

I-18 added that she had to take responsibility for both her married daughter and her grand-daughter,

Researcher: Your daughter lives in L-17, did she go to the shelter?

Participant: Yes, I took her there when there was a surge. I have a grand-daughter who is now 3 years old. They live on the other side of the river. There is no shelter on the other side of the river. So, I was bound to bring them here and took them with me.

... It was stressful. I got scared. I could not manage myself and not even them. I had to take responsibility. When you are a mother you had to take the responsibility quite seriously.

I-14 described being overwhelmed with responsibilities while looking after her children and her sick parents-in-law during her stay in the shelter. She also mentioned going back to the house to cook for the family, which exposed her directly to the storm,

If the signal gets down some people went back home, some waited at the shelter. We usually kept the small kids at the shelter the whole time. We travelled back and forth from home to shelter.

... We had a tough time without access to any medical support, there was no doctor and medicines. All the shops were closed. We did not even know which medicine to buy. Now, I take my medicines, but I suffered with my parents-in-law when they went to the shelter with me. Inside the shelter, everyone was my responsibility. While I stayed there, I spent the entire time taking care of my children, kept my eldest daughter safe. Then I came back to my house to cook some food.

Researcher: Was it not dangerous for you to travel during an emergency?

Participant: It was, the tree branches frequently broke down from the wind. It seemed like my clothes would blow away. Once a branch of a tree fell over me and I was injured.

It was evident from her voice and gestures that she despised going outside the shelter during the storm; however, she was expected to ensure that there was cooked food for the family, so she had to go back home to cook.

Similar to this experience, I-4 was responsible for her elderly mother-in-law; she prioritised her role as a caregiver, and as a result, did not look after herself and fell sick. She explained,

I was worried about my mother-in-law. She is old and frail. So, I was worried that she might get sick or something bad might happen to her. I was stressed out thinking of her wellbeing.

... I did not eat much, drank less water. Moreover, I was in stress and overthinking about the storms and what would happen after the storm ... My head was spinning, and I felt a tightness around my neck.

Even though she willingly took responsibility for her mother-in-law, getting sick as a result of taking care of someone else was an overwhelming experience for her, which was apparent from her expressions while narrating the experience.

I-5 recalled being sick from the overwhelming stress she felt at the shelter because of her anxiety about the storm, the challenge of staying in the shelter, and worrying about the safety of her relatives whom she could not contact,

I got scared thinking of the past experiences of the storms. I got puzzled, could not decide what to do and where to go. I went to the shelter as soon as I can. But then I felt sick from the bad odour inside the shelter. I overstress and get sick (often). Still, if I go there, I will survive.

... Some people stole (stuff). Most of us went there to save lives. Some took food, some took the money, and some scoundrels stole them.

... I could not contact my husband, my relatives, and my parents, because the cell phone had no charge. I was worried about them and felt sick from all the stress.

Because of the socio-cultural settings of the study areas, women were more absorbed in ensuring their children's wellbeing and comfort before their own wellbeing. Yet, all their attempts at providing for their children could neither alter the limitations of the shelter, nor

could they entirely reduce the misery of the children, which upset the women at the shelter. I-9 and I-7 described being overwhelmed seeing their children suffering in the shelter. I-9 exclaimed,

I felt awful for my kids. I was having so much trouble, even though I was a grown-up, I could not imagine how hard it would be for them. They were crying. I felt guilty, we brought them into such a world where everything is miserable. We fetched our kids and ran towards the shelter in the middle of wind and rainfall. They could not sleep; they were wet and cold.

I-7 concurred,

I sat at the shelter and thought why we had been given such curses, why our life was full of struggles and miseries, if we had a brick-made building we did not need to come to the shelter. These thoughts made me cry, I felt awful. My child started crying loudly, they could not eat, the place was very dark, there was no light, I could not go to the toilet. Nothing was positive there. Children slept on the ground, we had to jump to avoid stampeding them. My child was restless, she cried when I lied her down, she continued crying when I took her took my lap. There was no space for the children where we could safely lie them down.

In addition to this, the women were obliged to remain under the veil along with all the chores and struggles which created further stress; women felt compelled to go back to their homes during the emergency to bring their *Burkha*, and left their children in the shelter. As I-6 described,

We suffer more in the morning, you know. We stay awake the whole night. After spending the night nervous and terrified, we leave the shelter, while everyone sleeps. Because sometimes we cannot bring Burkha with us, our clothes are wet. So, we go to

our home, change our clothes and wear Burkha, pack some clothes and then come back again.

... Because most of us could not take all the clothes we needed. But we needed to keep ourselves covered. There were people from different places, we did not know who they were, and they could harass us. We felt shy too. So, we left our kids for a while and went out to put on Burkha.

I-10 also stated that living during a cyclone emergency was life-threatening for herself and the others. Everyone living in the shelter shared a similar situation. Yet, some were at greater risk and suffered more than others. The participant claimed not being able to assist those who needed help, thinking about the grief and the fact that they were close to death, which gave her a sense of failure and trauma. She explained,

Staying there is nothing better than death. I could not give everyone (all the evacuees) food, I did not have that supply. People around me were starving. I was helpless, what could I do? There were a lot of people. People from the nearby villages came here at this shelter. Their villages were more affected than ours. They were helpless and if we did not give them a place who would help them. They would die.

Theme summary

The theme *being a woman during a crisis* was revealed by the women's specific way of understanding their *lifeworld*. Women prioritised their family members, their children, the livestock, and other valuables willingly or forcibly, which exponentially increased their stress and the complexities they faced during the crisis. Because of their background, women were often disregarded as individuals with particular needs which impacted their state of wellbeing in a crisis. Additionally, the roles, responsibilities, and unrealistic expectations imposed on women increased their challenges and put them in a helpless and/or overwhelming situation.

This theme initiates the journey of women in crisis which leads to women's experiences in the shelters. The next theme elaborates on the challenges women experienced during their stay in the shelters.

Chapter 8: Being in a hostile situation

This theme encapsulates how being a woman was foundational in their lived world and influenced their experience of staying in the shelters. The women found themselves in hostile situations, and their experience of being a woman in such situations was understood within their lived-space (*spatiality*), lived-body (*corporeality*), and/or lived-human relations (*relationality*). While women recollected their experiences of facing hostility in the shelters, it became apparent that, at times, their sense of being in hostile situations was not evoked by actual threats, but from their presuppositions and past experiences. However, the sense of facing hostility was nonetheless powerful in their reality, and therefore, the theme is referred to as *Being in a hostile situation*, highlighting the truth and reality of the participants' lived-experiences. Because the narratives of the women's experiences of hostilities were distinguished in three aspects, spatiality, corporeality, and relationality, the theme will be discussed under these three categories.

Lived-space – Spatial challenges and experiencing hostility

Understanding *being in a hostile situation* requires understanding the environment in the cyclone shelters and how women reacted to being in that environment. The limitations and/or adversities in the shelters created a sense of hostility among the female evacuees. I-19 described how the limitations of the lived-space increased the difficulties of residing in the shelters, and gave women the sense of being in a hostile situation,

Water entered through broken windows and people were unable to sit or stand in those places. Then they stood in front of the toilet or corridors. Men and women all stayed together; there was no separate place.

... It was uncomfortable, but everyone came to the shelter to survive. So, we were sort of obliged to stay together in that place. Everyone was there for saving their lives. So, somehow, we managed to survive through the tough time.

I-2 explained how the lack of space and the facilities provided in the shelters, and the uncooperative attitude of the local shelter management authorities put them in a hostile situation,

Was it possible to feel good? The teachers at the school did not unlock most of the rooms, first, we were seating outside, then some people came and opened the door. There was no toilet, they made one later which was kept locked anyway. The floor became dirty with feces. What to do?

I-9 assumed that most of the evacuees belonged to the poverty-stricken households of their communities, whose safety and wellbeing were neglected by the concerned authorities.

Additionally, the unapologetic nature of the evacuees and the inconsiderate behaviour towards other evacuees increased the sense of hostility in the shelters,

People like us, who have houses made of clay or tin-fenced come to shelter. If more rooms were opened people would make all of them dirty. So, they just opened one room and one toilet. Maybe they thought it was alright if we struggled.

... Little children urinated and defecated inside the room and many parents did not bother to clean that up. Everyone was not the same, some were like that. They would deny that their children had done it. It was unbearable, but still, we had to endure it. What else could we do? we had nowhere else to go.

I-5 mentioned the space limitations and the unhygienic environment, and how being constrained to stay there until the cyclone emergency was over created a sense of living in a hostile situation.

There was no bed, there was nothing. Little children vomited and defecated everywhere (which caused) bad odour. But we had to stay there anyway.

I-9 added,

The shelter was very crowded. Someone was standing, someone was sitting. It was not possible to take some rest or relax because of the crowd. It was hard.

I-6 clarified that the spatial challenges the women faced in the shelters exacerbated the existing stress and anxiety resulting from the insecurity and uncertainty of the emergency.

It is always a hard time during storms. I feel stressed and become worried about the upcoming destruction. The dirtiness of the shelter makes things worse.

I-1 reflected,

It (the shelter) was crowded. Heavy rain was pouring outside, I could hear the noise of the strong wind. Everyone was praying loudly. I could not sleep or lie down (at the shelter), it was not possible to stay calm there, my blood pressure increased.

Lived-body – Personal challenges and experiencing hostility

The participants reflected facing hostile situations within their lived-body, by relating their corporeal and mental experiences while staying in the cyclone shelters. The participants admitted being concerned about their physical existence. It was significant that their concerns were more psychological, based on presuppositions and past experiences, rather than actual experiences.

I-4 confessed to being doubtful and feeling a sense of insecurity from the presence of unknown male evacuees, even though she admitted not being harmed or teased by them.

People could tease them (us) in the shelter. We went to the shelter to save our lives, but we were concerned about saving our honour too. We had to stay there the whole night.

A similar view was expressed by I-13, where she had a difficult time ensuring the safety of her daughters at night in the shelter. Although neither the participant nor her daughters experienced any incidents of harassment, she sensed an unfriendly environment that kept her vigilant and made her stay in the shelter stressful.

I was alone with my three daughters and there were many people in the shelter whom I did not know, which was also very stressful for me.

I-6 described experiencing discomfort because of not being acquainted with all the evacuees and staying in wet clothes that made her feel exposed and gave her a sense of being in a hostile situation,

There were a lot of people, I knew some and did not know the others. So, I felt conscious all the time ... The wet clothes made me more vulnerable. I tried to look decent, but maybe it was not decent to some people and they would stare at me. They might have ill-thoughts about me.

The women kept their inconvenience to themselves because of their innate conservative approach to day-to-day activities. I-7 explained why women could not change their clothes after they were soaked with rainwater while moving from their houses to the shelters during the cyclone emergencies; most of the shelters did not have any space for changing clothes and lacked separate spaces for male and female evacuees. As a consequence, women could not change their clothes and were forced to stay in their wet clothing, which was troublesome for the women,

We women are very shy. Many women do not even change clothes in the presence of another woman, how could we change clothes when there were men? We were not well there at the shelter.

I-9 added,

I could not change the wet clothes, because men were sitting right next to me. I sat in wet clothes. I was shivering, but I could not tell anyone. It was raining outside, and the men would not go out. I did not even ask them to leave, how could I? We both are in the middle of an emergency.

Lived human relations - Challenges in interaction and experiencing hostility

While residing together in the shelters, the female evacuees willingly or unwillingly interacted with other evacuees, these interactions became challenging at times, which developed a sense of hostility and contempt among the women in the shelters.

I-14 stated that disagreements leading to arguments and quarrels were common incidents in the cyclone shelters. She recalled being accused by a female evacuee and dragged into an argument. Although she was not vocal about her feelings over the incident, her restless body language and the emotion in her voice indicated feeling intimidated at the shelter,

... There were always some arguments and quarrels. It was quite common.

Researcher: What were the arguments about?

Participant: The fights were mostly about space, children's screams, and so on. There were many problems. Several families were staying together after all.

Researcher: Did you have such experiences?

Participant: Yes, I had a dispute. Someone blamed that my son had urinated inside the shelter, and I argued with her. These were very common. Even if I had not done this, many did.

I-17 substantiated that some evacuees were prompt to pick up a fight or quarrel at the shelter, whereas other evacuees attempted to maintain peace,

If anyone was unable to find a seat or if anyone sat at another person's spot; then people picked up fights over these issues ... The rest of us patched them up by moving them in different directions. We tried to keep peace among the evacuees.

Contrary to this, I-7 alleged that when there was a dispute between two groups, the rest of the evacuees did not help and actually enjoyed the feuds, which was an unkind gesture and increased the sense of being in a hostile situation,

I used to breastfeed my daughter then, she was hungry and crying a lot. My mother (she was helping) could not handle her (the infant) any more. One of the men got annoyed with all the screaming and crying of my daughter and reproached us. He asked why we came to the shelter, we were creating trouble for everyone, we could have stayed at home. My mother replied that our houses were destroyed, and we had nowhere else to go. Those who were nearby and could listen to our conversation, were enjoying the feud and laughing at us.

The women had to interact, or at least share the same space, with unknown men in the shelters, which made them more aware of being a woman and put them in hostile situations. I-17 used the generalised term *many girls*, and confessed to being harassed by the male evacuees. These experiences were uncomfortable and stressful, yet this participant was uncertain whether these incidents were intentional harassment or innocent mistakes,

Sometimes many girls had to stand up all night, some of them were good looking. They tolerated teasing including inappropriate nudges by some wicked men. It was a crowded place. There was nothing to do when they said those nudges were unintentional and it could happen in that crowded place.

I-3 explained how the sense of relationship of the evacuees sometimes had opposite effects on two groups of evacuees. She along with her family members and neighbours stayed awake all night to accompany the single and vulnerable women. Even though she could have chosen a comparatively comfortable and secure stay in the shelter, her relationality and obligation towards other evacuees placed her in difficulties,

Was it possible to sleep? Could anyone sleep? People from 10-20 houses (not the actual number) were there, but the place was not big enough for 10 people even. I was with my family, many were. But some were alone, some had half of their family members, while the rest were away. If we lied down together, where would the single people go? So, we sat on the floor and talked through the night.

I-18 concurred,

It was so overcrowded that if anyone wanted to sit, 5 people would stand over you and might stampede you. There were young children, pregnant women, and elderly people – we sometimes gave them some space to sit. The rest of us would stand for the whole night. This was the least we could do to serve the community people.

Otherwise, those vulnerable people could not have survived that place.

I-10 described how her sensible gesture towards other evacuees was misunderstood and left her in a disrespected position,

How could I be at peace? I offered to share my food with another family, and I asked them to share their food as well. In that way, both families could have a good meal. But some people did not think that way. Everyone must think the same way, but some people do not understand it. 5 out of ten people understand, but the rest would not understand. This is my problem. I wanted everyone to eat together, we could drink some water. That way everyone would find peace. But some people did not understand it.

This theme explicitly articulates the experience of hostility among the women evacuees in the shelters. Based on the interviews, it was evident that the experiences of the evacuees and their sense of being in a hostile situation were closely associated with the shelter facilities.

Additionally, as the interviews progressed, many participants recalled encountering unique incidents which generated a sense of hostility in the shelters. Subsequently, this theme has resulted in two sub-themes that have been developed from the participants' descriptions and statements – *Experiencing challenges (in using the shelter facilities)* and *The experience of struggles/Experiencing unique incidents*.

8.1 Experiencing challenges (in using the shelter facilities)

This sub-theme highlights the actual adversities the female evacuees faced during their stay in the shelters, which can be attributed to *Being in a hostile situation*. At the beginning of the theme, it was discussed how women sometimes sense being in a hostile situation without any *actual* threats and/or complexities, yet the participants did experience challenges that prompted them to sense hostility while staying in the shelters.

The participants complained about inadequate facilities in the shelters. I-10 expressed her frustration and questioned the poor quality of the shelters,

I go to the shelter to save my life, but if the shelter cannot provide any facilities, what good it brings for me? So, we need at least some facilities to live there with respect.

I-17 agreed by stating,

The storms remind me of what I suffered in there and I would have to go to that place to suffer again. There were many problems; there was no light, and the toilet facilities were worst. The storms remind us of those miseries.

Additionally, I-14 explained that many of the cyclone shelters had toilets outside the main building and that the women did not feel safe going out at night during the storms,

We could not go to the toilet outside in the rain. My girls were not comfortable to go either. There should be a space to change dresses or something that needs privacy. The government has made a shelter for us, but we can only go there and sit during the storms. The place offers no facilities for us.

Initially, these complaints came across as gender-neutral and as limitations of the cyclone shelter management authorities, rather than experiences that were unique to the women. Later in some of the interviews, the participants revealed that it was not only the limited facilities in the shelters that caused these challenges, being understood as women in the shelters also increased their challenges to using the available facilities. I-10 specified these issues, which included inadequate toilet facilities, no separate arrangements for men and women, and reflected being conscious about *being* a woman in front of the men, which resulted in her experiencing challenges to the use of the facilities in the shelters,

Even if I felt miserable, there is nothing I could do. We (men and women) stayed together. I could not go to the toilet, there was only one toilet. Men were rushing towards that toilet, it was hard to get in. It was troublesome.

... Those were problematic situations. I mean, I went there taking all the preparation. I had an umbrella, so I was not drenched with water. But many women did not even have an umbrella at their home. They were completely soaked with water and they stayed that way for hours. I think that was unbearable. It would have been better if there were separate spaces for men and women. There was no facility in the shelter.

While discussing the usage of the facilities in the shelters, I-12 explained that, *being* a woman, it was inappropriate for her to go to the toilet in front of men, which caused a painful

stay in the shelter,

I was in trouble once. I wanted to use the toilet and the place was overcrowded. It was not possible for me to go to the toilet crossing all the people. So, I controlled myself and did not go to the toilet. It was painful. Yet, I survived the storm. I hope we get lesser cyclones in the future.

The challenges associated with using the toilet facilities was a recurring issue raised by the participants. These challenges included both the personal struggles of the participants and increased adversity for other evacuees in the shelter.

Being an elderly person with multiple health issues, I-1 could not climb down the stairs to use the toilet and soiled her clothes – from the researcher's reflections, it was apparent that this was a shameful and embarrassing experience for her, and she shared this experience in the second interview,

I could not go to the shelter toilet. I ruined my clothes and changed it to take prayers.

I-14 discussed a similar experience. In her case, she found it difficult to take her toddlers to the toilet outside the shelter. Instead, she told them to urinate inside the shelter which made the place unhealthy and troubled the other evacuees. Although she was ashamed of her actions in that moment, she could not think of any other options,

It was difficult. I mean, I had to climb down and went to the toilet if my children needed to go. I had struggled a lot. Sometimes I did not take the children to the toilet. Instead, I told them to urinate inside the shelter.

The participants also mentioned that women's special requirements were not considered in the shelters, which exacerbated their challenges. I-13 spoke for her fellow evacuee, who was

pregnant during a cyclone emergency, and who could not use the toilet at the shelter, and sat in the same place for a whole night,

Women have some special requirements. For example, I had a fellow female evacuee who was pregnant, but there was no facility for her. Her special requirements should have been considered. But the shelter offered nothing. What if the girl had to go to the toilet?

Researcher: Did she not go to the toilet?

Participant: She was sitting the whole night, did not go to the toilet. It was a huge problem. Especially the elderly, children and pregnant women need special arrangements. But such arrangements were unavailable at the shelter.

I-10 explained how women who were menstruating faced challenges in the shelters because of the lack of availability of facilities and men's inconsiderate behaviour towards them,

Everything gets worse with that (menstruation). In the shelter, there were people everywhere. Women could not throw away the used napkin, they could not wash the used cloth (napkin) and dry it to reuse. It was a huge problem. Many experienced this situation. They just sat in a place. People were asking about her, that what was wrong with her. We, women, understood their embarrassment and some of us sat with them for support. It was quite embarrassing and that is why there should be a toilet dedicated to women evacuees.

I-17 expounded,

Participant: The toilets got even dirtier because of the used napkins.

Researcher: Did they dump those there, in the toilet?

Participant: Yes, there was no place to wash the cloth napkins or change it.

Sometimes, they threw the used napkins inside the shelter. You could not even tell who did this. The place got filthy due to these. These were the reasons I had gone back to my house once the storm weakened.

From the conversations with the participants, it was conjectured that the cyclone shelters in the study areas had limited access to resources and facilities for all evacuees, irrespective of their gender, age, and their physical conditions. Yet, women experienced more challenges in using the available facilities in the shelters because of being a woman, or more specifically, *Being understood as a woman*.

8.2 The experience of struggles/Experiencing unique incidents

This sub-theme highlights the unique struggles that women encountered in the shelters. Being a woman during a cyclone emergency resulted in diverse and exceptional experiences for the participants. These experiences depict the personal struggles of the participants, accentuating the discrimination and challenges they faced as evacuees, and heightening their sense of *Being in a hostile situation*.

Each participant's lived-experience had unique features. Some experiences were exclusive, and some were referred to by more than one participant. Even though each participant shared diverse real-life stories, focusing on various aspects of the cyclone shelters, some issues were brought out by the participants frequently, including harassment by male evacuees, the struggles of pregnant women, and the physical and mental post-cyclone struggles that were initiated through the poor living conditions in the shelters. This resemblance in individuals' lived-experiences leads to the realisation that women's state of wellbeing has been compromised during their stay in the shelters.

I-1, an elderly woman who has been living in the study area all her life, described more than one traumatising event she experienced at the shelter. She complained about increased blood pressure because of the crowding in the shelter and the associated challenges because of this,

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It was crowded. Heavy rain was pouring outside, I could hear the noise of the strong

wind. Everyone was praying loudly. It was not possible to stay calm there; I could not

sleep or lie down there, my blood pressure increased ... My blood pressure was high.

There was a numb feeling in my head because of that, veins of my neck were

throbbing.

She also recounted being injured while climbing up the stairs in the shelter, feeling helpless,

and being assisted by a stranger,

It was very hard for me to climb up the stairs. I have joint pain. Once I fell and hurt

myself. A boy helped me out and took me to the hospital. He called my son too. Then

he bought me medicines. May Allah bless the boy.

Although these experiences caused much trauma for the participant, she was most disturbed

by an embarrassing event during her last stay in the shelter that she kept to herself for a long

time and revealed in the second interview.

Participant: I could not go to the toilet. It was very uncomfortable.

Researcher: Did it cause any health issues?

Participant: Yes, it was painful, I had lower abdominal pain ... (Long pause and

hesitation) ... I could not go to the shelter toilet. I ruined my clothes and changed it to

take prayers.

The participant even considered not going back to the shelter during the next cyclone

emergency,

I do not think I am going back to the shelter again.

I-2 described her struggle with her three month old infant child, which caused excessive physical and mental strain, and subsequently affected her reproductive health. The participant's manner of narrating the experience reflected the pain and hardship she had gone through,

Participant: I have seen a lot of cyclones, a lot of destruction. I saw the cyclone in 1991. It does not look like, but I am not that young. I got married a little bit late. Once there was a water surge, my son was 3 months old then. I grabbed my 3 months old and ran to the shelter.

... I was very weak then. I had this small baby, I was taking care of him day and night, this made me tired and weak. Living in the shelter was even worse; I was afraid that the baby would fall, would die from the stampede, it was very stressful. There was no place to keep the baby, I somehow managed a mat to lie him down, but I could not fit in there and I tried to breastfeed him that way. After some time, I pushed a table aside and made someplace to lie down.

... My son cried a lot. I could not feed him; he did not get enough milk because I was starving. My son is still very thin.

... I was upset, stressed. My stitches were taking time to heal, I was weak, his father was not earning well, that was a constant stress for me.

Researcher: It must have been tough to sit on the floor with those stitches.

Participant: What can I say? It was terrible. I sat on the floor for hours, went to urinate just at the last moment. These caused too much pain and discomfort, in fact, because of all these I needed to restitch my wound.

I-5, a single mother claimed to have an *awful* experience when she fell sick, did not receive any medical treatment, oral saline, or food as relief, even though relief was distributed among the evacuees,

... Some people started to smell bad. People had diarrhea. People could not maintain their hygiene. The unhygienic condition caused different diseases among the evacuees. People were not even in the condition to move.

... Once I had diarrhea too. I needed saline to avoid dehydration. There was no doctor to treat me.

... I did not get any oral saline. I made it myself using salt and sugar. I had anything. Someone (relief) gave sugar, someone gave biscuits to the evacuees. But I did not get anything, that is the reality. When my children needed food or medicines, there was no one to help me. It was an awful experience.

The participant (I-5) also mentioned her struggles when she was menstruating at the shelter,

I could not go (to the toilet) during the storms. It was uncomfortable, very painful. Sometimes I had to go outside for the toilet during the storm anyway.

... Everything was wet. There was no place to dry the used clothes (napkin) or put on a dry one. I stayed with the wet napkin; it was disgusting.

I-8 described the *terrible* experience in the shelter associated with her pre-existing reproductive health. The participant remembered having the feeling that she might not survive the cyclone emergency,

I had my tumour then, but I did not know about it. I was bleeding (vaginal bleeding) for a long time. At that time, I could not take any extra clothes (napkins) with me. It was a terrible experience. I had to put on the same napkin for hours. I managed a

long piece of cloth and used it for hours. I took some clothes in my bag, I used those as my napkins. I did not know about my tumour, I thought I had a curse upon me. The tumour was very painful, but it was not even in my imagination that it was a tumour. I suffered a lot and thought I would be dead. I think that I am blessed that I am still alive.

A similar incident was recollected by I-7 as *shameful* and *embarrassing* when she was menstruating at the shelter,

There were times in the shelter when I was so ashamed and embarrassed that I could not think of coming out of the shelter.

Researcher: Is that so?

Participant: Once I did not find any cloth to use as napkins during my menstruation. That is the most shameful experience for all women. My clothes were soaked with blood. People could see me that way, I was ashamed. I remained seated that way, it was very embarrassing. You agree that it was embarrassing, right?

I-7 also remembered being in a distressing situation, when she could not breastfeed her baby because it was socially inappropriate to feed in front of unknown men,

Researcher: Your daughter was breastfed then. Did you feel any problem while feeding her at the shelter?

Participant: How would I feed her? I gave her on my mother's lap. My child wanted to be fed but there was no way I could feed her. There was no privacy. Other men could see me. It was very crowded, and people could see me from different angles. If I fed her, men would look at me. Besides, all my clothes were wet, it would have been worse if I tried to feed her there. So, I did not feed my baby. There were many lactating women at the shelter who could not feed their babies.

... She cried, screamed, became very stubborn; she was cold from the wet clothes I was wearing and she was shivering.

While I-7 did not consider feeding her infant child in front of other men, I-14 attempted to feed her baby when she felt she could feed unnoticed. However, feeding her child in such a way affected her mental wellbeing, which was well understood when she hid her face with her scarf while describing the experience,

Researcher: Were you breastfeeding (your youngest son)?

Participant: Yes. I stood in the crowd and fed my son covering the baby with clothes. Sometimes I could feed him and sometimes I could not.

... I was ashamed while doing that. But I had to keep my son alive. My son would die if I had not fed him and so, I did it anyway.

I-14 also mentioned being constantly vigilant for her daughter's safety in the shelter. She confessed that her daughter was teased in the shelter, which is why she would have preferred not going to the shelter and staying for a long time,

Participant: We had been through a lot ... My niece and nephew stay nearby. We were particularly concerned about our daughters' and niece's safety.

... People could tease them in the shelter. We went to the shelter to save our lives, but we were concerned about saving our honour too. We had to stay there the whole night ... We kept them in the middle and sat surrounding them. Our male relatives checked on us. There were some government employees too, they also came to inspect the space to ensure our safety.

Researcher: Did such an incident ever happen?

Participant: (Long pause) Yes, it happened, men teased them ... I saw men were staring and throwing bad words at them. These were huge problems. We had to look after the young girls all the time. We were always cautious while taking them to the

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toilets or while they changed their clothes. Managing all these was troublesome too.

That is why I did not prefer staying at the shelter for a long time.

I-10 admitted being harassed by male evacuees while staying in the shelter, and drew

attention to the fact that teasing and harassment were quite common in the shelter, even

though many women would deny being victims of such misconduct,

Those outsiders (evacuees from other neighbourhoods) misbehaved with some of our

women. People (men) of our community did not treat us like that.

Researcher: What did they do?

Participant: Would you like it if someone teased you?

Researcher: No.

Participant: They did things like that. They created much nuisance at times.

Researcher: Can you please describe to me such incidents.

Participant: Would you like it if some outsider touches you?

Researcher: No.

Participant: It made me very uncomfortable.

Researcher: Did they do it?

Participant: Yes.

Participant: We lived in fear all the time. That is why I am telling you about separate places for men and women. During the emergencies, we went to the shelter because

we were at risk, but for many, it was an opportunity to take advantage of women's

situation.

... They were bad people with ill intentions. Everyone was vulnerable. We are scared

to go to the shelter because these things might happen again. Many women will not

admit it, but this is the main scenario.

I-17 reconciled returning home from the shelter before the storm had subsided because of the chaotic environment in the shelter. Although the participant did not acknowledge being harassed, her facial expressions and some phrases such as *death is better than shame*, and *those nudges*, were testimony to her experiences of harassment,

Once I return to the home after the signal was lowered. Neither I, nor my son like that chaotic environment (at the shelter). So, once the storm had started weakening, we returned home.

Researcher: Does that mean you came back home before the storm fully subsided?

Participant: Yes. Some people had stayed at the shelter for a longer period in case the storm increased again.

... I felt sick after staying there for a while. There is a proverb, you know, death is better than shame. I felt it there. Those nudges (from unknown men) and suffocation from congestion were intolerable. I put my faith in Allah and left that place.

I-18 shed light on the perils of the pregnant women from the coastal communities, who faced difficulties in the shelters, and in many cases, could not stay there. I-18 stated,

Many pregnant women go there in the shelter; and men and women stayed together in that place. It might become a problem if she is pushed by someone. Last time, during cyclone Bulbul, my niece (sister's daughter) was pregnant. Her due date was close. We were a bit worried about her. The condition of the shelter was not that good that we could keep her there. She could not be kept in the house either. She could not run to the shelter as we did. So, I told her to reach the shelter as early as possible and reserve a space for herself. She sent her husband to reserve some space, but there was hardly any space to sit and she had to stand. She told me that it was not possible for her to spend the night standing.

... A woman from my neighbourhood went to the shelter, who had her c-section just a week ago. It was a painful experience for her. She needed a high commode in the

toilet because she could not sit on the latrine. She needed different types of facilities. She was not the only one, there were many female evacuees with this issue.

I-19, a young newly married woman shared her experience of seeing her sister going into labour inside the shelter and giving birth without any medical assistance. Although her sister and the child are healthy at present, the experience of childbirth during her adolescence traumatised her to the extent that she was slightly shivering while describing the experience,

Once my elder sister was sick, she was pregnant basically. She came to our house to have her baby (days before the delivery date). Then there was a cyclone emergency and we had to take her to the shelter through the water. Her water broke in the shelter and her labour pain started. There was a storm outside, and the neighbourhood was flooded. We could not find any doctor or any health professionals there. Then after a lot of complications, her baby was delivered in the shelter.

Researcher: She delivered her baby in the shelter?

Participant: Yes.

Researcher: Who did the delivery of her baby?

Participant: There was a woman who said she knew how to deliver a baby; we did not know her. My sister's pain started in the very moment of the storm; then we started to cry and panic. By hearing that, the woman came forward and claimed she could do the delivery. Then she made a place covered by clothes and she moved the people from there.

Researcher: It was good that you found an experienced woman there.

Participant: Yes, she did not have that much experience. There were no facilities for treatment, that is why we had to take her for help.

Researcher: Did your sister face any problems later?

Participant: No, she is healthy now. I will remember this until my death. We were awake all night long. It became a matter of life and death. The baby was alright.

Later, we visited a doctor after returning home. My sister could not move. We took her to the home just like a dead body. She had no sense all night long. She gradually healed after the treatment.

... I was young and unmarried then, I did not know the way children were born, and I still feel nervous when I reminiscence that incident. My mother was crying. I was wondering what happened to my sister. My mother scolded me saying that I would not understand all these things and sent me away. I was crying outside then.

In addition to the personal experiences that had been initiated and/or accelerated by the circumstances of the individual participants, inadequate facilities in the shelters resulted in exceptional struggles for the women and hampered their state of wellbeing in the shelters. For example, I-11 stated being in a very painful situation, because her bowel movements stopped due to the stress over poor toilet facilities in the shelters,

I never used the toilet at the shelter. I cannot use a random toilet. My bowel movement and urination were stopped because of stress.

I-6 recalled a life-threatening experience when she needed to go to the toilet, but this would have required crossing rising water carrying her toddler over her head,

It (holding urination) was very uncomfortable. But what to do? I just sat and waited. But I needed to use the toilet and I could not control myself. So, I left two elder children upstairs and took the little one with me. The toilet was downstairs, outside the cyclone shelter and it was flooded outside. So, I carried the little one over my head and went home to use the toilet.

Theme summary

This theme discusses the lived-experience of the participants during their stay in the shelters, and their reactions and responses towards the challenges and adversities they faced. The experience of the participants was in some cases functional and physical, in other cases

imaginary and emotional. Nevertheless, their experiences of sensing hostility and struggling through their time in the shelter was true in their memories, and thus carried equal significance to the women's state of wellbeing in the shelters.

The first sub-theme *Experiencing Challenges* (to the use of the shelter facilities) combines both the structural limitations of the shelters, and underlines that how being understood as a woman by the community and by the women themselves increased their sense of facing hostility. The second sub-theme highlights the anecdotes and narratives of the participants in relation to their experiences, that left a permanent mark and may have created a lifelong sense of hostility towards going to a shelter. This existing sense of hostility and their past experiences generated fear among the women which is discussed under the next theme.

Chapter 9: Being fearful

This theme describes one of the prominent emotional reflexes of the participants as soon as they find out about an imminent cyclone event. The women from the study areas explained that having to witness frequent cyclones and the consequent destruction and personal loss results in a constant fear of storms that triggers immediately after an early cyclone warning and persists throughout the cyclone emergency. The participants shared their traumatic experiences of cyclones, including near-death experiences, seeing hundreds of corpses, and starving for days, when asked about their previous experience of cyclones and/or how it felt to survive through a disaster. The interpretive analysis revealed that these experiences had a negative long-term impact on their personal lives and influenced their thought processes; therefore, the prospect of a storm initiated fear and panic among the participants. The terms fear and frightening were used by the participants when outlining both their experience of surviving through a cyclone emergency and their stay in a cyclone shelter. So, Being fearful seemed most appropriate as the title of this theme, in which the participants' fear of past experiences and imposed threats during an event, and in the post-cyclone period, were highlighted and further supported by two sub-themes – Existential fear and The what ifs – fear of the unknown.

The memories of past cyclones remained quite vivid among the participants, and the fear and anxiety emanated from their voices and facial expressions when they remembered their lived-experience of surviving a cyclone. For example, I-4 explained her reasons for her fear being the dreadful experience she had during the cyclone of 1991, and how she fears experiencing such a struggle again,

Participant: We witnessed the devastation from cyclone in 1991, so we all are afraid of storms and ran as soon as we heard about the signal.

Researcher: What was the situation in 1991?

Participant: I was frightened. We used to live nearer to the sea then. I cannot see the sea from my house now, but I could see the sea from the house I used to live in 1991. It was a horrific experience. The water was as high as the roofs of our houses. Our roofs washed away with water.

The experience during the cyclone of 1991 was elaborated upon by I-14 who clarified why she fears cyclones,

We struggled a lot. I have seen many storms since 1991. I witnessed four big cyclones.

... I was in grade 5 then (in 1991). We suffered a lot for food. Many shops were damaged. Those who had rice in their house could eat. But the day labourers suffered a lot back then. After a week or two, the government provided some food and clothes as relief, but we got nothing. I saw several corpses. I saw a lady, who lost every member of her family. I do not know what happened to her. In 1991, we ate seeds of jackfruit and dried mango, days after days. We did not have any food, what else we could do? I ate rice once a week. It was a dreadful experience.

... We did not even get rice twice a week. In 1997, the roof of our house was blown off, everything inside the house was wet, the bed was wet. Our entire house was destroyed.

I-15 recalled being in extreme fear during the cyclone of 1991; she narrated her entire story whispering and shaking her head frequently to overcome her nervousness from remembering the experience,

I still remember the flood of 1991. Two of my kids died by that time, and the other two were born. One daughter was three years old, another one was an infant. Wind started blowing at around 5:00. I started cooking; I thought I would eat before leaving the house and going to the shelter. There was no electricity then, it was very dark. We got out of the house out of fear, but we could not figure out where to go, there was a shelter then (in 1991) which was far away, there was no light. Some of us took one way, some took another. The wind was so strong, it seemed that it would blow everything away, it felt like everything would be destroyed. Everyone was screaming at each other and we all wanted to go to the shelter, it was all very confusing. There was heavy rain, the trees were falling. I thought I would eat at first, but when the wind started, I could not think of eating anymore. Someone was busy saving lives, someone was trying to remove fallen trees from the rooftops, someone's boat had been washed away in the water, that might have been his source of income. No one could help, everyone was busy with themselves. We did not get food, we starved for days, no one gave us food.

I-6 described how her father and husband's lives were changed forever from the cyclone of 1991, and how they have been carrying the physical and mental trauma respectively since then. It was also evident from the conversation that both men's fear accentuated her fear and stress as well. She explained,

My father follows the emergency updates too. My father is afraid of cyclones since 1991. A broken glass stuck into his feet and he was injured. His leg was never healed. So, he is afraid of storms. He keeps telling me to check the phone for recent news.

... Storms change people's lives forever. When my mother-in-law died in 1991, the fate of the whole family changed. My father-in-law got married and brought stepmother for my husband and his siblings. My father-in-law had five children from the first marriage, he did not need any more kids. But the new wife has her own need. She has five kids too. That is a lot of children. Because my mother-in-law died in the cyclone, everything changed in their families. The financial demand was manageable

with five children, having ten children in a family made things difficult ... He still cried for his mother. His stepmother did not treat him well ...

I-2 summarised her reasons for being fearful in her interview, keeping her eyes closed and her hands near her heart, which indicated her fear of the storms,

It (cyclone) is beyond explanation, everyone is scared, thunders are the worst. Storms destroy crops, jeopardised people's lives.

Furthermore, a majority of the participants reflected that their past experiences planted a permanent fear of cyclones into the women from the coastal communities. I-7 exclaimed,

It is very frightening. I seek help from Allah, I keep calling His name ... We weep when we hear about storms. I feel like I am having a fever.

I-16 stated,

When the volunteers warned us about cyclones, I got a shiver like feeling, I wondered what to do or not; where to take shelter and how to keep my family safe.

I-10 claimed it was not possible to get used to such storms, and people were bound to feel frightened once there was a cyclone warning,

I am still not used to it (a cyclone). If there are a storm and water surge, there is no way a person can stay calm. Our village is so close to the sea, the wind can bring water and flood our houses easily ... It is all very frightening.

I-8 concurred,

Even if I have seen many storms, I am still afraid of those rainy days.

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In addition to the fear of cyclones and the associated loss and damage they may cause, the

participants expressed their fear of staying in the shelters. Although the cyclone shelters were

built to keep the people safe, and to reduce their risk and exposure to an impending storm,

some participants claimed that being in the shelters, or the thought of going to a shelter,

evoked fear among them. I-17 recounted,

The storms remind me of what I suffered in there (the shelter) and I would have to go

to that place to suffer again.

... Nights were dark as usual, but it got even darker in those nights. There were

several men in the shelter, and I was anxious that they might harm me somehow.

When asked about the experience of staying in a shelter, I-2 confessed,

Researcher: What was it like to stay in the shelter?

Participant: Frightening.

I-5 agreed,

Staying at the shelter was very frightening, but what else could I do?

... It is terribly frightening, it still feels (frightening).

The above statements of the participants highlights their experiences of feeling fear in their

conscious mind during past cyclones that conjure fear every time there is an approaching

cyclone. Additionally, the women explained the sense of fear that crossed their minds while

staying in the shelters, which mostly fell into two categories, existential fear and fear of the

unknown; therefore, the participants' stories were discussed in the two following sub-themes

- Existential fear and The what ifs - fear of the unknown.

9.1 Existential fear

For the women living in the coastal belt of Bangladesh, remembering the image of a cyclone gives them a glimpse of an experience when their lives were threatened, and death seemed closer. The image they visualised is not necessarily a true reflection of the actual incident that took place, but instead was the women's lived-experiences, a snapshot of how they perceived the experience in their lived-time and -space. The participants who had experienced a cyclone emergency were able to share their experience only because their lived-body was positioned to survive the event, and yet, the people were in a near-death situation, and one of the possible outcomes of a cyclone or the period following a cyclone would be death – the end of their existence.

From the interviews, it was apparent that the notion of existential fear begins with, but is not confined to the fear of death; rather, it also extends to the fear of losing their children and their livestock, what mattered to the women of the study areas most, and which were pivotal factors for their existence and survival. As existential fear can be interpreted as a fear of death, and/or a fear of losing the self, their sense of who they are and the things they value about themselves, both the fear of death and the fear of losing loved ones, shared by the participants, have been framed in this sub-theme.

In describing the thoughts that came into her mind while sitting inside the shelter waiting for the cyclone to be over, I-9 stated,

... I panic and wondered what would I do? It is always frightening when it is the question of life and death.

... Dying in an accident is unfortunate. I mean Allah can take us anytime. I would have died a painful death if I died in the storm. This thought made me upset. My life is already full of struggle, when I die, I want it to be peaceful.

This statement by I-9 highlighted that in the cyclone shelter, death and dying seemed more real and expected. Although being exposed to death might not be the reality of the shelter, both the feeling of *being* exposed and the associated existential fear were the *truth* in the experience of the participants, which imperiled their psychological wellbeing.

I-7 conceded that experiencing an existential threat was the worst feeling to encounter,

There were times when things turned out to be very bad and it felt like death is near.

That feeling was the worst feeling ...

Although the sense of apprehension of the participants might not *actually* have existed in their lived-space, the cyclone shelters, deaths did occur in the shelters, and therefore, the threat the participants felt imposed on them was not entirely baseless. I-19 recollected seeing an elderly woman dying at the shelter that had a long-term effect on her, causing excessive stress and nervousness while staying in the shelter,

I have seen one to die ... That older person used to crouch and walk; and died of shortness of breath. She died through great suffering. Her children were crying, and the body was inside the shelter (with other evacuees). Later they took her body after the storm.

The horrors in her face and body language were testimony to the participant's trauma associated with the experience.

Whereas some participants spoke about the fear of losing their lives, some expressed their fear of losing what was meaningful to them and of losing part of their identity. For example, I-4 narrated how she was frightened for the lives of her children and always kept them close to her,

I stayed with my children, I preferred being with them. If we die, we should do it together.

She also added her fear of losing her ducks and cows, and how she battled with herself when feeling guilty about the livestock,

I was scared for my ducks and cow ... I could not take my ducks and my cow. I felt awful for them, but then I consoled myself if I did not stay at the shelter, they would have been gone, and I would die too.

I-19 elaborated upon her dedication to rearing the cattle, and how this gave her a livelihood and a sense of self-worth. She also added being concerned about her cattle, whom she reared with care and love. During one cyclone emergency, after reaching the shelter and saving herself from a potential threat, she kept worrying about her cattle. The participant also mentioned losing cattle in the past, and her damaged house following the storm severely affected her livelihood as well as her wellbeing,

I feel afraid and restless about how to save my life. Then I worry about my cattle, that where should I keep them.

There was a time when we had to untie their ropes and left them to save our own lives. Because if we lived, we could always get them back later. That is why we left them. We found some of them dead after returning from the shelter. We had to build our house once again; many cattle died in the storm; we raised them once again from the scratch. Our vegetable farm was damaged due to stagnant water ... We had gone through a lot of distress.

I-17 remembered how she could not take her cows to the shelter because of space limitations and untied her cattle so they could escape and save their lives. She still wonders if the cows survived the storms or died,

It was not possible to take our cattle to the shelter always; so, we untied their ropes and set them free ...

I-18 admitted that she had thoughts of staying back with her cows instead of going to the shelter,

... Many of us have cattle, some did not go because they care for them and did not want to leave them. For example, I have two cows; at times I thought I would not leave them and go to the shelters.

Even though the livestock was usually reared as the household's source of income, the women bonded with the animals, and in most households, the animals were treated like family members. Thus, the constant fear of losing them while staying in the shelter engulfed the minds of the women from the study areas. Additionally, as for many of the participants, these animals were their sole source of income. Losing the animals would put the participants in financial and mortal peril in the post-cyclone phase.

9.2 The what ifs – Fear of the unknown

The cynicism of the women while staying in a cyclone shelter, and the memory of their past experiences invoked fear of an unknown danger; women kept wondering what could happen – *The what ifs* – that made them feel exposed, at risk, and vulnerable. Imagining these unfortunate incidents were either a result of the women's previous experiences, or resulted from the stories or life events of other people they had heard about or witnessed. While the sub-theme *Existential fear* focused on women's fear of death and losing someone or

something meaningful, this sub-theme discusses women's fear and anticipation of a misfortune that would threaten their wellbeing and put them in mortal peril.

From the interviews, it was evident that losing one's home or sustaining damage to the household following a storm was one of the acute consequences that affected the participants' lives. The participants were often made homeless in these events, and repairing the house caused financial hardship, and thus, while staying in a shelter during an emergency, the participants feared losing their homes. For example, I-7 expressed her fear of losing her home, and of the uncertainties associated with being homeless,

There were lots of thoughts. I kept stressing about the future, what might happen if water washes away our house. We cannot live in the shelter forever, where would I go, what would we eat, would I even live or die, what if water comes to the shelter too?

A similar picture was provided by I-8,

I was afraid of an uncertain future. I kept thinking what Allah would have written in our fate, whether my house was still standing or washed away with water ...

I-2 also stated being fearful of losing her house,

I was stressing constantly. I kept thinking about my house and was worried that the house might wash away.

I-11 concurred,

I could not sleep because I was scared. I was worried for my household, I left everything behind ...

I-9 added,

It was an awful experience. Nothing was certain, whether my house would stand or not, how long would I have to stay at the shelter. There was a constant fear.

I-4 added how she felt bad seeing the people who came from the seaside villages completely helpless,

... Those who came from the seaside were more scared. We are a little bit far away. The sea is not visible from our houses. But those who live by the seaside could not stop thinking about their houses and stuff they had left behind. They cried because all their things might wash away, and they had to start from scratch again.

I-10 described being fearful in the shelter, while constantly stressing about her belongings back at home,

I left my house, left all my furniture and belongings. I was worried about those. I kept stressing about being theft, what if someone broke into my house and took everything I had?

Amidst the chaos of a cyclone, families drifted apart, and/or family members stayed apart both deliberately and as a result of the event. The participants spoke about being fearful for their family members' safety and wellbeing; their doubts and presumptions, the fear of *the what ifs*, hampered their psychological wellbeing in the shelters. For example, I-13 explained that her husband had decided to stay at his shop and did not accompany her and the three daughters to the shelter, and that she was frightened for her husband's safety,

I could not stop worrying about my husband's safety, whether the water was rising, what would happen if the water enters the shop ...

I-5 exclaimed,

I went to the shelter when signal 10 had been announced. I took dry foods like puffed rice and biscuits with me. I could not contact my husband, my relatives, and my parents, because the cell phone had no charge. I was worried about them and felt sick from all the stress ... Not knowing about their conditions for days was frightening.

In addition, being a woman insinuated the fear of losing one's honour, or being harassed, even though there might not have been any potential threat. As I-13 described,

... I was alone with my three daughters and there were many people in the shelter whom I did not know, which was also very stressful for me.

... Different people came from different places. I was scared that something bad would happen. It was a frightening experience.

... I had to take one of the daughters to the toilet downstairs.

Researcher: And the other two daughters were left alone upstairs.

Participant: Yes, I left them alone. My mind was engulfed with fear. Although nothing happened and maybe I had nothing to worry about. But the sense of insecurity was the reason for my fear at that moment.

I-3 remembered having a "nervous breakdown" at the shelter as a result of being frightened about being assualted or ambarrassed by male evacuees and therfore losing her honour,

Everything was frightening, dear. I was afraid and wondered could I even return home with all my honour!

Theme summary

This theme focuses on the innate human reaction of fear during catastrophic events and reveals the connection between the feeling of fear and the participants' *lifeworld* and their reality. For the participants, the term *cyclone* brought memories of destruction, loss, and

damage, and therefore, women expressed being fearful of death and losing someone or something meaningful, while revealing what they lived through in a cyclone emergency. While explaining their fear of loss and damage, the women's experience of subsequent nervousness for their precarious future, and the uncertainty associated with the cyclone emergency surfaced, resulting in the emergence of the next theme, *Being uncertain*.

Chapter 10: Being uncertain

This theme reveals the sense of uncertainty the women experienced during the cyclone emergencies and while staying in the shelter. The participants' dialogues unfolded women's mindset towards a crisis event, which they had experienced and suffered from in recent years. The lived-experience of surviving through a cyclone often included starvation, becoming homeless, injuries, and/or deaths which pieced through these women's memories and established a general perception of uncertainty, an inability to foresee what might or would happen during an approaching storm. This understanding clarified women's ideas about the uncertainties they faced during a cyclone event, but also in their pre- and post-cyclone experiences. For example, I-1 stated that her sense of uncertainty begins with the cyclone season, which continues during and after each cyclone emergency because of her past experiences of previous cyclones. The participant claimed to experience, and to be affected by, cyclone emergencies every year. The likelihood of damaged homes, destruction from the storms, and the thought of losing family members gave her a constant feeling of uncertainty, which was also recognisable from her gestures and voice during the interviews,

Oh my! My heart starts pounding as soon as the rainy season starts. We often get strong winds, water from the sea floods our village.

... Almost every year we have to move to the shelter. Sometimes water floods the area sometimes does not. But whenever there is a signal, we get strong winds. If the wind starts to blow strong, we move to the shelter to be on the safe side.

... All my relatives are here in this village. My parents' and in-law's houses are on the two sides of this village, houses were destroyed, things washed away, but my relatives survived (from previous cyclones). ... Cyclones cause a lot of damage to the households. Every time there is a strong wind, we need to repair our roof following the storm. We do it almost every year.

A similar experience was shared by I-6, where she explained her anxiety and the sense of uncertainty that has resulted from the life-changing experiences of her family members,

It is always a hard time during storms. I feel stressed and become worried about the upcoming destruction.

... Storms change people's lives forever. When my mother-in-law died from the cyclone of 1991, the fate of the whole family changed. My father-in-law got married again and brought stepmother for my husband and his siblings. My father-in-law had five children from the first marriage, he did not need any more kids. But the new wife had her own need and had five kids too. That made the family very big. Because my mother-in-law died in the cyclone, everything changed in my husband's family. The financial demand was manageable with five children, having ten children in a family made things difficult. My husband could not finish his education and it affected his whole life. Then my father has a lifelong trauma of injury from the 1991 cyclone. His leg never healed.

While I-1 and I-6 expressed being in constant uncertainty during the cyclone season, the sense of uncertainty was triggered among the women immediately after each cyclone warning had been announced. For example, I-15 expressed that, in recent years, she had felt increasingly doubtful about surviving storms when she heard the early warnings,

I wondered whether someone as old and frail as me would survive the next (upcoming) storm ...

I-18 recollected,

Everything becomes uncertain (when I hear about an upcoming cyclone), where would we go, what would happen?

I-14 added that she felt uncertain and stressed about reserving a space in the shelter, since the cyclone shelters had been overcrowded during cyclone emergencies,

If people of this whole area went to the shelter, many would not get any space. In fact, it happened to us. Once we went to the shelter, it was very crowded, and we did not get any space. So, we had to come back to our house.

In addition, *being uncertain* was more prevalent among the evacuees in the shelters, and was frequently mentioned by the participants. For example, I-11 reflected on being uncertain about her future when she stayed in the shelter because of her memory of losing her home and struggling alone with her children following a cyclone,

We need to save your lives anyway. So, we have and will have to go to the shelter. I had to go to save my children's lives. The wind could blow the roof of the house, trees could fall upon the house. So, we hurried to the shelter ... (at the shelter) I could not stop thinking of the pain I had been through before. A big tree broke down and my house was collapsed. I was standing without any roof over us with my three children. Everything inside the house got drenched with water.

I-12 remembered being uncertain about her future during her stay in the shelter,

It (the shelter) was crowded and most of us panicked about getting food, sleeping facilities, and wondered about the uncertain future after the storm.

I-4 remembered feeling extremely stressed due to overthinking her uncertain future,

I was thinking about money, I was thinking about my stuff.

... I did not eat much, drank less water. Moreover, I was in stress and overthinking about the storms and what would happen after the storm.

I-7 stated,

There were lots of thoughts. I kept stressing about the future, what might happen if water washes away our house. We cannot live in the shelter forever, where would I go, what would we eat, would I even live or die, what if water comes to the shelter too?

I-8 concurred,

I was afraid of an uncertain future. I kept thinking what Allah would have written in our fate, whether my house was still standing or washed away with water. These thoughts kept coming in my mind and I was worried.

I-9 had a similar sense of uncertainty while at the shelter,

What would I do if something happens to my kids? They were also scared because they were frightened that something bad would happen to me ...

... Nothing was certain, whether my house would stand or not, how long would I have to stay at the shelter? There was a constant fear.

The participants described other issues, including being in a dilemma about the future, not being in contact with family and kin, and the urgency of returning to their normal lives, all of which inflicted uncertainty that had a negative impact on their state of psychological wellbeing at the shelter. Therefore, the participants' experiences of uncertainty has been further discussed within the context of three sub-themes – *Being in a dilemma – despair or hope, Longing to hear from near ones,* and *The sense of anticipation of returning to one's normal lives*.

10.1 Being in a dilemma – Despair or hope

In the narratives, the participants often commented about hanging between despair generated from the discomfort and hostility they had endured, and hope that spawned from the projected protection of their lives the shelter had offered. In the shelter, the women had to adapt themselves to the different environment, including adjustments to living with other evacuees, uncertainty about fulfilling their basic needs such as food, drinking water, and toilet facilities, and the gender-specific challenges. Despite all the personal struggles, at times the participants felt hopeful about surviving the imminent cyclone emergency, although in

most cases, hope was soon replaced by despair and doubt. The contradictory feelings of the participants unearthed their experience of being in a dilemma during their stay in the shelters, which has been explored in this sub-theme *Being in a dilemma – despair or hope*.

To describe this dilemma in the shelters, I-1 stated that she had her share of both positives and negatives during her stay in the shelter. Even though she vividly remembered the struggles involved, she accepted them in the hope of surviving through the emergency,

The experience of staying at the shelter was a combination of both (good and bad). God gives us our shares of happiness and suffering. We must accept all of it. Even if I am hurt, I can do nothing to change it ... The situation at the shelter was hostile, yet we found a place there and we survived, that is a positive thing.

I-19 added,

The storms truly frighten us. (But) We do not have any options except to accept natural disasters and endure catastrophes. We save ourselves by going to the cyclone shelter.

... It (staying at the shelter) was uncomfortable, but everyone came to the shelter to survive ... So, somehow, we managed through that tough time.

A similar sense of facing a dilemma was shared by I-9,

I can save my life there. I and my kids are well protected at the shelter. I know the storm will not kill us. My kids were in good health. I could not ask for more.

Everything else could be fixed later after the storm had passed ...

It is difficult to stay there. Yet, we can survive through the storm ...

I-18 shared the experience of despair at the shelter following the storm; however, she mentioned being hopeful that the shelter would save their lives,

Once the rain did not stop after the storms and the whole area was flooded. We could not get down from the shelter because of inundation. No one could go out. We could not go or send someone to bring food or water then, the situation did not permit us to do that. We starved and we were completely lost; we did not know what to do...

... The shelter saved our lives. It was good to know the shelter would save us from the storm.

I-12 remembered the feeling of safety at the shelter and how talking and meeting with other female evacuees gave her hope for the future, yet she also mentioned being anxious about seeing many female evacuees in a state of panic,

I could talk to people, I smiled and laughed. There were many people. There were many people whom I knew, I could see some new people too ... That place was safe. We did not have to think about the risks of storms that could affect us ... Staying at the home could be troublesome. That is why I liked being in the shelter. I had no fear. I felt like since I reached the shelter, I would survive this storm ... If something happened at the shelter, we all would die together. What is the point to be scared? We will have to die someday, sooner or later.

... I was stressed. Everyone was panicked at the shelter; they were screaming and were not in their senses. I was worried that I might become one of them and if that happened, who would take care of my sons and husband? This thought made me anxious and stressed. I did not want other people's sickness to affect me.

I-17 also linked her sense of despair to the situation of her fellow evacuees. She recollected feeling hopeful when she secured a space in the shelter for herself and her family, but she was

in despair when watching some fellow evacuees having to leave the shelter because of the space limitations,

You cannot be alive if you think of dying all the time. I got scared, especially for my child and other children around.

... It was a positive side that I was able to go there (for shelter). Apart from that, there were problems everywhere. We could not eat or go to the toilet. Or could not stay in light even. It became even more challenging with children ... Some people got space to stay, but some could not stay there because it was overcrowded and there was no space left for them. They got down and stayed outside the shelter ... I felt so bad. They were also afraid as much as I was, but I could stay, they could not. It made me upset.

In contrast to this, I-3 confessed to being in extreme despair that she did not want to get involved in conversation and remained aloof at the shelter,

There were familiar faces (at the shelter) – wives, uncles, and relatives of the neighbourhood. I did not talk to anyone; people around me were talking, I was listening. I did not feel like talking to anyone ...

Feelings of despair were also mentioned by I-14. She remembered constantly reminding herself to be optimistic when she was in despair from the ongoing storm and the challenges inside the shelter,

... Fear of dying was less (at the shelter). My children would be safe, I could survive – I kept telling myself these things while staying at the shelter.

The women's contrasting reflections on their lived-experiences as evacuees mirrors the reality of the shelters, where women's minds were divided into two distinctive emotions – the

positive and the negative coexisted. The proximity of these two emotions in their memories varied from individual to individual, depending on their personal features.

10.2 Longing to hear from kin and loved ones

This sub-theme discusses the experiences that the women articulated to express their growing uncertainty while at the shelter from not being able to contact their kin and loved ones. The women of the study areas retained a mindset of prioritising their family above any personal preferences. Additionally, the married women looked to their husbands to make decisions on their behalf. During such emergencies, power supply systems were disrupted, and telecommunication networks were obstructed, so the participants could not communicate with their kin, which resulted in a sense of uncertainty among them. The women voiced their concerns for the safety and wellbeing of their near ones who were away, and expressed feeling hesitant and vulnerable about not being able to contact their husbands and sharing their situation. As I-5, a participant whose parents and other family members lived in different villages near the coastal area, and whose husband was living abroad, explained,

I could not contact my husband, my relatives, and my parents, because the cell phone had no charge. I was worried about them and felt sick from all the stress.

Researcher: How long did you not communicate with your husband?

Participant: 4/5 days. Everything was shut down I could not contact my husband, my parents, and other family members.

... Not knowing about their conditions for days was frightening. That made me feel even worse. If I could talk to him (husband), I would at least know how he was doing and would let him know about the problems I was facing. I was always worried because we were out of contact. Everything was stressful. Nothing felt right.

I-9, a mother of two children shared her experiences of uncertainty and distress due to her husband insisting that she prioritise her children's safety over her own life (he kept reminding me that I must take care of the children. He said that it is okay if I die protecting my kids).

Following this conversation, she could not contact her husband for the next few days during her stay at the shelter,

I could call and contacted him (husband) as long as my phone was working. After the phone ran out charge, I could not call him and only came in touch with him after returning home (after 4/5 days).

The husband of the participant I-13 decided to stay in his shop during a cyclone emergency instead of accompanying her and their children to the shelter, and the participant could not contact him after she reached the shelter,

I was not (okay). I was always worried about my husband's safety ...

I-10 described longing to hear from her husband because he could not get home from his work because of the emergency, and she could not contact him once the cell phone ran out of

charge,

I contacted him over the cell phone. After some time, the phone died, and then I could not call him ... He is always at home, usually. He leaves in the morning and returns by night ...

I-18 explained the exacerbated feeling of stress she felt at the shelter from being unable to share her problems with her husband,

... It was very hard to keep our mental state sound in that place. I was already worried that my home would be swept away; I would lose my cattle, I stressed about taking care of my children and their safety. On top of those, my husband was not with me and I could not share my thoughts – all these made me stressed and upset ...

I-3 recalled being concerned for her daughter's wellbeing, who lived in the adjacent city and was facing the same cyclone emergency,

... People were upset about their chickens, ducks, and domestic animals. But these were not my issues. My only concern was my daughter who was in the city at that time.

While most of the participants longed to hear from their near ones to ensure their safety and share their miseries, I-7 was longing to contact her near ones because she realised her family members would be worried for her since she was alone with her elderly mother and infant child,

... My cell phone was switched off. My niece called and warned us about the water surge, then my cell phone died. All my relatives were very worried because they could not communicate with us. There was no electricity in the shelter, could not charge my phone. There was no facility in the shelter, let alone electricity.

While staying in contact with dear ones and kin during disaster emergencies is a common expectation for people, it was apparent that for some of the participating women, this meant more than just being connected. As the husbands hold the decision-making capacity, being disconnected from them put the women in uncertain situations in the shelters. Besides, the women were longing to be reconnected with their children and husbands, who they considered to be integral parts of their *dasein* and *lifeworld*, and not knowing about their situations subsequently resulted in their existence being uncertain.

10.3 The sense of anticipation of returning to one's usual life One of the common feelings that branched out from the uncertainty of the women in the shelters was the anticipation of returning to their daily lives. While sharing their experiences and the thoughts that crossed their minds, the participants repeatedly remembered their urge

to return home. In most cases, they found their homes damaged or destroyed, and their poststorm experience included laborious and hectic rehabilitation experiences. Yet, a sense of
relief was palpable in their voices and this was reflected in their body language while the
participants described their experiences of returning to their households. As discussed in
being understood as a woman, women's movements and activities in the study areas were
mostly confined to their households; therefore, the participants' urgency to return home,
which came out in the interviews, reflected their anticipation of returning to their usual lives.
I-13 described her experience of staying overnight at the shelter; although her stay was safe,
she left the shelter for her home in the morning because of the lack of facilities,

Would you like it to stay somewhere else leaving your home? I just had to stay because of the cyclone emergency ... That night, we were sitting the whole time and we had two other women beside us. They were sitting too and could not sleep. We were talking and I did not even realise when it was morning. We had a good conversation, about our lives, our husbands, and other matters. The night passed by while we were talking. I returned home as soon as it was dusk. ... I would have thought about staying for a while if there were some facilities. But there were no arrangements for the evacuees, so I had to come back early.

I-11 admitted feeling restless at the shelter and that she returned to her home as soon as the emergency signal had been downgraded, but not completely lifted,

- ... I stayed there for a few hours and came back as soon as the weather got better.
- ... I never stayed there for days. I always returned to my home as soon as the emergency signal weakened.

I-4 also recalled not being able to settle down at the shelter and waited for the emergency to be lifted so that she could go back home with her family,

We kept our ears open to know about the signal updates. We wanted to go back to our houses once the emergency signal was lifted.

Even though the participants preferred returning to their households, in most cases, the houses were damaged and needed to be repaired. For example, I-17 stated,

... Our house was inundated because of the surge. The house was muddy, everything was wet, and some places needed repair. We could not cook for days. It was a very challenging time for us. We repaired everything on our own. ... It was damaged this time too, we repaired it recently. It took us 4/5 days to repair ...

I-18 stated.

(As soon as) the water went down, we moved from the shelter. But the clay stoves became mud, and we had no arrangements for cooking ... We struggled for a few days. We ate dry food when we were hungry. And somehow, we made the stoves again.

I-19 concurred.

We had to build our house once again; many cattle died in the storm; we raised them once again from the scratch. Our vegetable farm was damaged due to stagnant water. We had gone through a lot of distress ... The house was damaged. But some parts of the house remained unchanged; so, we lived in those parts. When the rain was stopped following the storm, we repaired everything that was damaged.

I-7 recollected.

We came back from the shelter early in the morning. We were starving. We did not eat anything after lunch yesterday. I could not think properly because of hunger. We could not find anything at our house. At that time, my father came from my sister's house (adjacent village) with some dry food. We ate that and then started cleaning our house. There was mud everywhere. We worked very hard to make the house liveable. We made a temporary stove outside and cooked there for the next 2/3 months.

Yet, these four participants looked satisfied and contented in describing their return to their homes from the shelter. Although they admitted that the labour and workload associated with

the rehabilitation were difficult, their gestures made it apparent that they preferred to leave the uncertainty of the shelter, and returning to the household gave them a sense of safety and triumph over the storms. This notion became more palpable when I-2 expressed her disappointment about staying in a shelter for a longer period,

I would not lie, (we) stayed for three days.

... There was no point going back because we could not use our kitchen because of water. Water went down after three days and we returned to our house.

... It was raining too. The soil became soft and muddy from the rainwater, there was mud water everywhere. The water was stagnant for six days. Because our clay-made houses were ruined, we stayed at the shelter for three days. People who had brick buildings did not stay for long, they left right after the emergency signal was lifted. We stayed because we had nowhere else to go.

As the participants interacted and voiced their views about their lives, their resentment of staying in the shelters, and their anticipation to return to their homes that surfaced in their narratives have been recognised as expressions of resentment about the uncertainties and the unpredictability of life in the shelters and the anticipation of going back to their usual predictable lives.

Theme summary

This theme describes how the female evacuees experienced episodes of doubt, and kept wondering about their future, their homes and family members, and everything associated with their usual lives. In the shelters, the women were consumed with thoughts of unfortunate incidents and/or accidents that might happen to them or their close ones. Yet, at the same time, some of them experienced a sense of relief because the shelters offered safety. The women's feelings about being in the shelters were often fragmented, and they remained

undecided about whether to be happy to be saved or to be restless about the unforeseeable future. However, the participants also stated their willingness to return to their households, mostly because of the inadequate facilities and challenges they faced while staying in the shelters.

Chapter 11: Being faithful

While the unpleasant lived-experience of the women was emphatic in the previous themes, women in the shelters grasped onto their faith and spirituality for resilience and composure. During the interviews, a majority of the participants demonstrated their perpetual reliance on their religion, which remained persistent throughout different phases of their lives, irrespective of the challenges and adversities they had faced and endured. A significant theme emerged from the narratives of the women's religious devotion, or in other words, women being faithful. The interviewed women frequently and strongly expressed their inherent religious faith that had a substantial impact on their everyday lives, and which consequently influenced their mindset during their time in the shelters during a cyclone emergency.

With a good rapport assisting the conversations during the interviews, the participants' responses revealed the importance of religious faith in their *lifeworld*. For them, dedicating the time to devotion and prayer seemed more meaningful, because praying could keep them safe and give them their desired lives. As I-1 mentioned,

Researcher: How does your time pass?

Participant: I pray most of the time.

Researcher: Do you visit the neighbours?

Participant: Not really. People gossip about a lot of things. All my prayers and good deeds will go in vain if I involve myself in these. I rather stay inside my home and pray to Allah. That is beneficial for me.

... Allah decided everything. We seek His mercy ... I continuously prayed to Allah to save us from this (financial) suffering ... I had my share of sufferings, and now I am happy. All praise to Allah.

I-3 explained how her supplications were answered, and that she has been rewarded with good health and responsible children,

... I pray, recite Quran, I do everything to get Allah's mercy. I want to keep doing it and die with this belief.

... Allah kept me well. My health is good for now, my son takes care of me; when I ask something from Allah and Allah give that to me, I feel happy and content. Whatever Allah gives, we must accept.

In addition, I-2 followed religious norms because she feared that her husband and her sons would face trouble in their lives if she did otherwise,

... If I do not maintain (covering body and head with Burkha) these my sons will be in trouble. They may get curses if I do not cover myself. My husband would get curses too, right?

While I-1, I-2, and I-3 were motivated to be faithful to have safety and contentment in their lives, I-4 confessed to being a strong believer in life after death and prayed for eternal peace,

If I do not pray, I will be punished in the afterlife. Life on earth is very short, we will die one day, and we must be prepared for that.

Furthermore, the conversations with the women clarified that various factors may have driven the women along the religious path, but that they have incorporated religious practice into their daily activities and strictly abide by the religious rules. For example, I-9 explained, I have many works, but I make sure I offer my prayers first. I pray five times a day and read the Quran regularly.

I-8 stated,

I pray five times a day. I read the Holy Qur'an. I also fast occasionally.

In fact, the participants who follow Islam as their religion talked about following religious rules with utmost importance, and declared themselves to be devoted and practicing Muslims.

Later, as the interviews progressed, the women's religious beliefs surfaced as a safety net in cyclone emergencies. For example, when I-1 asked about threats from future cyclones, she responded,

... Allah will protect me. I had seen worse ...

Being faithful gave I-15 the confidence to survive future storms, just as she had survived destructive storms in the past,

We had survived the cyclone of 1997. The storms after that seemed less destructive than that one. After that, our belief in Allah went even stronger, He will protect us, He will warn us if there is a danger and He will keep us safe.

I-5 recalled seeing hundreds of cattle and people die during a storm, and conceded that she was saved only because of her faith,

Many cattle washed away, many people died. Only those who were blessed by Allah were saved. We were saved somehow.

I-3 also reflected that she had been saved because of the mercy of the Almighty in the past, and she prays that she will not experience a similar situation in the future,

We do not need to worry about it now. Now there are no storms. Allah put us in danger then, but now do not have any danger. Allah helped us. All I want from Allah that such a storm never comes again. I do not even want to think about what might happen if that situation occurs. The world was dark then, but now it has light. Will see when danger comes again.

In the process of exploring and understanding the participants' perspectives, a world was revealed where being faithful is not a religious choice of the individual. Instead, it is part of their lifestyle and plays a major role in interpreting every incident they experience. The women believed in a higher power, while religious values and beliefs constructed their sense of self, their sense of obligation, and their behaviours. Being faithful affected their daily lives as well as influencing their decisions and actions during the cyclones. From the interviews, it was apparent that believing in a greater power and being spiritual helped the women to retain their sanity in the shelters and to remain optimistic. While staying in the shelters, the women prayed for safety, and their prayers helped them to maintain an optimistic attitude and peace of mind during emergencies. Additionally, the women were fearful of dying an untimely death from drowning and/or accidents associated with the cyclones, and so they prayed for a normal death that was not associated with such a catastrophic event. Therefore, the theme branched out into two sub-themes- *Optimism – Finding peace in prayer*, and *Hoping for a normal death*, through which women's faith while in the shelters will be explicitly discussed.

11.1 Optimism – Finding peace in prayer

As seen in the examples within the section on *Being faithful*, it was comprehensible that the women being interviewed invested a considerable amount of time in praying and/or asking for help from the Almighty, during their stay in the shelters. While struggling with a range of adversities inside the shelters, accommodating the needs of family members, and battling with the fear of damage and loss from cyclones, the women constantly prayed which gave them a sense of safety, security, and positivity. Although the situation in the shelters repeatedly challenged the wellbeing of the evacuees, the participants articulated their trust in the Almighty and believed that the Almighty responded to their prayers. As I-1 mentioned,

Everyone becomes restless (at the shelter). (But) I believe in Allah, He is the one who looked after me, saved me. I prayed to Allah and He never disappointed me.

I-15 concurred how praying gave her the confidence that she was safe from impending danger,

We prayed individually and called upon Allah. We read the verses of the Quran in our minds. We can do it everywhere in the world, right? We are Muslims and Allah always showers us with His mercy. Wherever we are, He would protect us from danger.

In addition, the participants' faith eased their stress levels and helped them through feelings of optimism to survive through the emergency. I-17 recollected her attempts to keep herself and other female evacuees high-spirited by participating in collective prayers,

We Kept praying to Allah and prayed for lesser damage from the storm. ... Everyone prayed for the storm to pass so that they could return to their homes.

I-4 remembered praying with other female evacuees to keep themselves optimistic about their assets, properties, and other meaningful things they had left behind,

Everyone went to the shelter for safety. We kept reciting verses and praying to Allah for their lives and livings.

I-7 also recalled praying continuously in the hope of surviving the storm,

I just kept praying to Allah to put an end to it.

I-2 remembered being worried about her child's wellbeing and nervous about the storm, and yet, she felt that she was saved by the Almighty in the end, explaining how her prayers were listened to and granted,

I struggled a lot. I was scared that my son would catch a cold; the continuous rain and wind made things worse and I was so nervous. But Allah listened to our prayers and protected us from everything.

The feeling of optimism derived from their religious faith sustained them even after the emergencies, and the women developed confidence that they would overcome future cyclone emergencies in the same manner they survived the previous ones. For example, when I-3 was asked about how she felt about a forthcoming cyclone, she replied,

... I feel scared, but then Allah is here to protect us.

Although the participant was afraid of the storms, her religious beliefs kept her optimistic.

Later, she added that she would go to the shelter in the future if she must, but she was positive that the Almighty would protect her,

I must go (to the shelter), if I need to, yes ... I will pray to Allah to reduce my sufferings; Allah will protect us.

In the interviews, the participants rarely voiced their sense of optimism or of looking on the bright side while they were staying in the shelters. Keeping faith in the Almighty, asking for protection, and believing that they would be saved by the Almighty were the only prominent acts of optimism of the participants which kept them motivated in the shelters and gave them the courage to face future cyclone emergencies.

11.2 Hoping for a normal death

Hoping for a normal death was also expressed in the narratives of the participants, which appeared as a powerful concept among the women. During the cyclone and inside the shelters, women faced life-or-death situations that led many of them to wonder about their deaths. The women from the study area witnessed many deaths and casualties from the cyclones and developed a fear of dying by drowning and suffering from injuries and trauma as a result of a cyclone event. While throughout the interview sessions, the participants appeared to be quite accepting of their life situations, some of them wished to at least die a peaceful death, and explained their fear of dying from the storms. I-9 stated,

Dying in an accident is unfortunate. I mean Allah can take us anytime. I would die a painful death if I die in the storm. This makes me upset. My life is full of struggle, I want a peaceful death.

This statement highlights the fact that being a woman is difficult in the study areas; however, they hoped and prayed for a normal death because they expected to have a peaceful death after suffering all the discrimination towards them, rather than a painful death from a cyclone event.

I-3 explained how she prayed for a decent death while living through the uncertain times in one of the shelters,

We do not know what will happen (during the cyclone). So, I pray that we all go (die) in a decent way and with faith (of Allah).

Contrary to this, I-1 described her stay in the shelter to be shameful; therefore, she might not go to the shelter in the future. She believed that the Almighty would decide whether she would survive or die and she would put her trust in Allah instead of going to the shelter,

So, I want to avoid the shelter. Allah will decide people's death. I am just going to put all my trust in Him. He knows the best.

While women's anticipation of a normal death defined the fear and trauma associated with past cyclones, it also reflected the depth of their faith and captured how their faith interacted with their self-worth, optimism, and sense of being, which consequently influenced their choices and their use of the shelters.

Theme Summary

This theme has explained how women's strong and persistent religious faith impacted their lives in the shelters and influenced every decision and choice they made while staying there. Amidst all the threats, challenges, and negative feelings, the women held onto their spiritual faith as a mode of optimism and hope for a better future. Additionally, many participants had witnessed death, faced near-death experiences, and suffered from injuries and trauma. The women developed a great fear of dying in such an unfortunate way and relied on prayer to have a natural death. Having faith in a superior power and believing that someone greater than them would provide protection gave them a sense of security and contentment that the participants experienced during their stay in the shelters.

Chapter 12: Being against the odds

While in the preceding themes, the vulnerability of *being a woman* in the cyclone shelters was unambiguous, the interviewed women correspondingly acknowledged experiencing positive emotions and found optimism during their stay in the shelters, and shared stories of personal and/or communal resilience to fight against the adversities in the shelters.

Although the women complained about the inadequate facilities in the shelters and explicitly described the hostile environment therein, the women also admitted being saved by taking refuge in the shelters. The shelters of coastal Bangladesh were constructed to withstand high-intensity cyclones. Unlike the women's own houses, the shelter structures were not susceptible to the potentially destructive storms, which developed a sense of safety and relief among the women who stayed in the shelters. For the women, the shelters were the safe house where they could go with their children and family members, after evacuating their homes. Even though a majority of the participants expressed their distaste for the idea of staying in a shelter in the future, and remembered their experiences with abhorrence, some highlighted the bright side of being in a shelter. For them, the shelters provided the women with a sense of relief, despite facing all the odds during the cyclone emergencies. As I-14 articulated,

Fear of death was less (at the shelter). My children would be safe, I could survive -I kept telling myself these things while staying at the shelter.

I-9 recounted her thoughts about going to the shelter during an emergency,

I could save my life there (at the shelter). I and my kids would be well protected at the shelter. I know the storm would not kill us. (Previously) My kids were in good health

(at the shelter). I could not ask for more. Everything else could be fixed later after the storm had passed.

When reminiscing about her feelings of going to the cyclone shelter, I-19 explained,

It is a good thing that we could save our lives (at the shelter). The cyclone shelter is there for our safety.

... We endured all these to save our lives. We consoled ourselves that it was just a temporary arrangement and we would go back home once the storm was over.

The above statement was validated by I-12 who said that she prefers staying in a shelter in an emergency, and that reaching the shelter gave her relief,

I liked being at the shelter. I had no fear. I felt like since I reached the shelter, I would survive this storm.

Additionally, a few of the participants described their experience of being in the shelters as a change in their regular lifestyles, and provided them with the opportunity to socialise with women from different neighbourhoods. For example, I-8 described spending sleepless nights in the shelter while chatting with fellow female evacuees, which she remembered as a fond memory with a constant smile on her face,

Because all the women were together, we had our occasional laughs and gossips. Sometimes we started to laugh but ended up crying. We women teased each other about the beautiful dresses we owned or nice saree we had in our collection. Everyone has some fancy stuff, you know. We talked about these things.

I-13 shared a similar view,

That night we were sitting the whole time and we had two other women beside us.

They were sitting too and could not sleep. We were talking and I did not even realise

when it was morning. We had a good conversation, about our lives, our husbands, and other matters. The night passed by while we were talking.

These women admitted being frightened, vulnerable, and threatened by the situations they faced, yet having the certainty of surviving through the cyclone, and the possibility of experiencing something new, made them appreciate or at least accept a different setting to live in.

In addition to experiencing positive emotions and accepting the odds in the shelters, some participants stood *against the odds*, describing their attempts to overcome hardships in the shelters for themselves and the community, which are discussed below under the two subthemes of *Being compassionate* and *Being outside the square*.

12.1 Being compassionate

While remembering the survival strategies and adaptive activities against adversities in the shelters, the women mentioned the acts of kindness and being compassionate towards each other, which eased the discomfort of the female evacuees and sometimes reduced their troubles. The women shared their experiences of being victims of selfish acts and the negative attitudes towards them in the earlier themes, yet inside the shelters, female evacuees became each other's support systems and became the first responders when assistance was required. For example, I-14 explained how she and her fellow female evacuees helped each other to change their wet clothes after reaching the shelter, or after coming back from the toilet in the rain, which was located outside the shelter building,

We were a group of 5/7 women, we guarded each other while changing clothes.

I-11 had a similar experience,

I was completely wet. I took my clothes and changed into dry clothes once I reached the shelter ... We made some adjustments and changed our clothes. The women helped each other by making covers for changing clothes and something like that ...

I-8 elaborated upon this process,

Some women took shawls, scarves, and towels and put those around us. We changed our clothes within that covered space and then switched our places with them.

I-13, a Hindu woman who stayed in one of the shelters with her three daughters on one occasion, remembered two of the Muslim women helping her looking after her daughters,

There were two Muslim girls next to me, one of them was pregnant. They were very kind. When I went to the toilet, they agreed to look after my daughters.

From the conversation, it was apparent that she was humbled by this unexpected, yet gratifying, act of compassion from the women of a different religion.

I-10 mentioned how the women responded to others and tried to keep each other safe,

Usually, all the women wanted to keep other women safe. I asked a woman to accompany me to the toilet, I accompanied another one ...

Apart from helping each other, the women attempted to serve the gathered community as well by offering food to the people around them. From the interviews, it was apparent that a scarcity of food and drinking water was one of the major challenges that the evacuees had to deal with while staying in the shelters. While some evacuees brought food and/or drinking water from their homes, most of the evacuees went to the shelter without such preparations. Some participants mentioned helping others by offering their food. I-19 stated,

I was able to bring some food. Many people could not bring their food though; so, we shared some from ours. People cannot live without food; if someone is hungry, we ought to give them some.

I-8 explained that sharing food among the evacuees was quite common,

Someone brought some dry food, and everyone shared it. We stayed many times and we shared food in different ways. Sometimes I gave my food to others, sometimes I got food from them. We could not eat rice though, only dry food and snacks.

I-18 remembered sharing her food and later starving with others, whereas she could have saved the food for herself rather than sharing, and yet, she chose to be compassionate,

I took enough food to eat twice a day, but it did not feel fair to keep the food for the next meal for myself when I could see many were suffering from hunger. Then, we all shared our food and later all starved together.

I-3 expressed that helping each other during times of emergencies is the right approach and stated that people were kind and cooperative towards others in the shelter,

In cyclones, I will help other people. People will help me. Everyone will come forward ... People were talking and asking things from one another. One was asking for water for their kids, some were asking for something else.

I-10 recalled being upset about not being able to help people in the shelter,

I could not give everyone food; I did not have that supply. People around me were starving. I was helpless, what could I do? There were a lot of people.

Additionally, the participants recounted helping the elderly, people with disabilities, young children, pregnant women, and vulnerable people. I-18 stated,

It was very overcrowded that if anyone wanted to sit, 5 people would stand over you and might stampede you. There are young children, pregnant women, and older people – we sometimes gave them some space to sit. The rest would stand for the whole night. This was the least we could do to serve the community people. Otherwise, those vulnerable people could not survive that place.

I-6 took on the responsibility of looking after an elderly widow in the shelter, because it was difficult for single women to be safe in this situation,

I have a neighbour who is a widow and childless. We took her with us; she sat with us ... I did it, but unfortunately, not everyone thinks this way. I helped her; someone else thought why to bother, some said why would they take responsibility for another person.

12.2 Being outside the square

The sub-theme *Being outside the square* appropriately fits within the theme of being *against the odds* to highlight women's roles in disaster response in the shelters to reduce stress and ensure wellbeing at least to some extent, for themselves and the community of evacuees.

Among the participants, a few responded to such emergencies with greater preparedness measures and proved to be more resilient in the shelters. Furthermore, these women extended their assistance to the wider group of people, instead of confining their assistance to their own families. Although the study participants who came out of their comfort zones to serve the community of evacuees in the shelters were lower in number, their unique *outside the square* thinking helped many of the people in the shelters. Their experiences suggested the practicality of standing against the odds by the women themselves, rather than being entirely dependent on external sources.

I-16 described being outside the square and how she, through the help of some other similar minded young people, helped the community in the shelter,

There was a two-storied madrasa (Islamic education institutes) next to us, which served as a cyclone shelter too during cyclone emergencies. We went there with the whole family. The situation was challenging, the place was overcrowded. The area was congested and there was hardly any room left for us; somehow, we managed. There were pregnant women, children. I started serving others overlooking my own needs. I started documenting the people's details; made a list of the sick people and made a list of necessary items such as medicine, food, and saline for the evacuees. Some organisations help the evacuees, I contacted them. I got fair responses after a while. The tube-well of the shelter had iron in the water; which made the children sick. They were suffering from diarrhea. Then, I, myself made saline for them. I made it with salt and molasses. Later, we got supplies of water, food, and other stuff; we distributed those among all the evacuees ...

... We found the place (shelter) very dirty and filthy. There was no facility for clean water and toilet. The place was overcrowded. There was only one cyclone shelter in the whole union. Even the cyclone shelter was not big, the building was two-storied, and there were three rooms in the upper portion supported by pillars. So, it was not possible to support this greater number of people. So, what I did, I distributed the people in the three rooms. I did not do these, I suggested everyone consider the problems of congestion. I proposed them to transfer the sick people into a separate room, the pregnant women, and mother with their small children. The males were separated similarly.

Whereas I-16 set an example of personal and community resilience through an effective response and efficient initiatives, I-6 mentioned her emergency management training from an NGO, which she had undertaken out of her conscience, and tried to use her knowledge during her stay in one of the shelters,

You have seen that our community is quite big. When I was leaving for the shelter, I had to pick my children, then I took clothes and food and other stuff. After that, I helped others. If all young and strong people did the same thing, it would be easier for weak people. I tried to help others. I tried to help others maintaining my self-respect.

... I was trained for emergency preparedness. Some NGO workers talked about different preparedness measures we should take in the shelter.

This participant also recognised the importance of having community volunteers to maintain a female-friendly environment in the shelter,

Our whole community goes to this shelter during emergencies. But we do not follow anyone's instructions or abide by any rules. If there were some volunteers who are trained from Red Crescent, they could help the people in the shelter. The Chairman of our village has some guards, if he sends some of them to check the overall situation of the shelter, people would be more careful. Then women like us would feel safe, people with ill intention would not dare to harm anyone. We do not have anyone like them in the village and this is a problem.

I-10 confessed being misunderstood by other evacuees when she told others to keep everyone's food in one place and share it with all the evacuees, because most of the people brought only one type of food, and according to her suggestion, everyone could have a proper meal,

I offered to share my food with another family, and I asked them to share their food as well. In that way, both families could have a good meal. But some people did not think that way. Everyone must think the same way, but some people do not understand it. 5 out of ten people understand, but the rest would not understand. This is my problem. I wanted everyone to eat together, we could drink some water. That way everyone would find peace. But some people did not understand it.

When her attempt at food sharing was not accepted, she tried to take as much food as she could during the following emergency. She even helped people to clean up to maintain hygiene inside the shelter,

Participant: I took rice with me too. I just took the whole rice pot (with me).

Researcher: That must have been a lot of trouble.

Participant: I did it anyway, to help other people. I like to help people; I like to have a good relationship with everyone. I took fish curry or whatever was available at home. I shared my biscuits and puffed rice with others. I consoled them that it would at least reduce your hunger. Even if they made the place dirty, I offered them to clean it up. I do not feel bad or disgusted. I like helping people.

Theme summary

This theme highlights the rare, yet significant, role played by the female evacuees in the shelters in being resilient and resourceful. The women set great examples of compassion towards their fellow evacuees in the shelters by sharing their food and drinking water, and assisting them to look after their children. Some of the participants remembered thinking outside the square, and taking responsibility on their shoulders instead of waiting for external help. It was apparent from their narratives that women can prove themselves to be resourceful individuals, instead of only being victims in the shelters.

Chapter 13: Making sense of women's experiences

Chapter overview

Chapter 13 is the first discussion of the findings, revealing the major insights that emerged from the participant interviews, and the understandings that have emerged from the interpretation of the narratives. As the chapter progresses, the findings from the in-depth interviews in the preceding chapters will be compared and contrasted with the literature to establish a logical explanation of the findings. Based on these discussions of the findings, the pre-understandings gained from reading the related literature, and the observations made during the interviews, the study attempts to extract the meaning of the experiences the women shared through their interviews, and aims to achieve one of the research objectives, to *Describe and understand what it is like to be a woman in a cyclone shelter in Bangladesh*.

13.1 The fusion of horizons

Gadamer first used the word *horizon* in the hermeneutic circle as a metaphor, which means the wider vision a person must acquire for a better understanding of their *reality* (Gadamer, 1989). The horizon includes the researcher's knowledge and preconceptions of culture, language, and history relevant to the research, which may shift with changes in the researcher's situation and/or perceptions. In hermeneutic research, the fusion of horizons ensues when the horizon of the researcher fuses with the horizon of another person (the research participant), to look beyond and accepting the differences to uncover *the truth* of the research topic (Phillips, 2007). In this case, the literature review process developed a preconception and knowledge on the research topic for the researcher, which merged with the narratives of the *lifeworld* and the lived-experiences of the participants, which amounted to the women's experiences as female evacuees and the underlying factors that lead to such

experiences. In addition, physically being in the study area with the women, and observing them while interviewing them as a researcher, was helpful for consolidating the research findings, and expanding the horizon of understanding from the researcher's point of view. The following sub-sections discuss and summarise the findings, based on the themes that were underpinned by the interviews with the participants and described in the previous chapters, and then fuses the discussion with the researcher's horizon.

13.1.1 Being understood as a woman

Throughout the findings, it was unequivocal that women's experiences inside the shelters were intimately connected with being understood as a woman, and therefore, this theme has been described as a *fundamental insight* which lays the basis for the subsequent themes. The participants' experiences within their *lifeworld* revealed that the women from the study areas accepted continuous discrimination from their families and communities irrespective of their age, marital status, education qualifications, and religion. While visiting the study areas, and reaching out to these women as potential participants, interviewing them, and staying within the community, it became apparent that the culture of treating women as inferior individuals has been cultivated within the socio-cultural setting and is a prominent feature of the community.

The concept of *Being understood as a woman* is consistent with the discussion in Chapter 2 (2.6 Women's Lives in Bangladesh), where it was explained that the literature shows that women from poor communities experience more discrimination because of their financial dependence, the prevalent gender-biased socio-cultural practices, and the diverse interpretations of religious messages. Even though the country's legislation supports gender

equality and women's empowerment, as discussed in Chapter 2, these policies have minimal to no impact on the lives of the participants who shared their experience of being discriminated against within their families and communities and being wrongfully treated by their male custodians, both financially and socially, throughout their lives. The participants' narratives and the interpretation of their statements reflected the literature which demonstrated that the beliefs and practices of the conservative Muslim community discourage women's movement outside of their households. In addition, participants from other religions (*Hinduism*) had similar lifestyles, and faced similar levels of discrimination and challenges as women within the Muslim community. The *Hindu* participants also covered their hair, which was, unlike Muslim women, not a requirement of their religion; yet they maintained hair covering as part of their social norms. The Hindu participants also admitted being entirely dependent on their male custodians, and not being able to work outside their homes in this socio-cultural setting. As a matter of fact, the participants' religious identities could only be distinguished when they talked about their spiritual faith, even though the core of their faith was almost identical – believing in a divine entity, devoting themselves to spiritual practice, and having full confidence in fate. Therefore, it could be argued that the prejudicial behaviour towards women in the study areas was more associated with socio-cultural bigotry than with religious requirements.

The country's increased literacy rate among women in recent years, as noted in Chapter 2, was reflected in the women who were interviewed. All the participants claimed to be literate, at least to some extent. The majority of participants passed the primary education level, and all the participants claimed to have gone to school or to have been home-schooled in their childhood. However, the scope of the participants' education was mostly confined to being

able to write, read, memorise times tables (mathematics), and read and write poetry. They could not accommodate or make use of their education in their day-to-day lives and lifestyles, and rather, continued following the *footprints* of the older women from their communities. As I-5 described, the reason behind her actions, *All the women do (this) in this village*.

Consequently, the lived-experiences of the women did not change noticeably over the years, even though the literacy rate increased.

The women's financial dependence and the pervasive social hostility towards the women who worked were among the major factors that impacted women's wellbeing and increased their vulnerability. I-2 confessed to earning money by doing odd jobs, which caused humiliation and disapproval among her in-laws. I could not go out for work if I lived there (staying with *in-laws*). As a result, she was forced to move back to her parents' house, which was interpreted as a shameful act in her community. I-14 complained about her financial hardship since her husband's death, yet she could not start working outside of the home for the sake of her family's reputation. The participants shared their dissatisfaction with their husbands' income and sitting idle at home, but from the interviews, it could be interpreted that overcoming these circumstances was beyond their capacity. Although the literature in Chapter 2 suggested that women from poor communities or rural settings are involved in RMG factories and/or small-scale businesses, the participants mentioned that they were not permitted to work in the RMG factories and/or have a regular job after they were married. Instead, they undertook casual work, including selling eggs (I-10), rearing cows (I-9, I-17, I-18, I-19), homestead vegetable gardening (I-19), tailoring dresses (I-4, I-6), working as domestic help (I-7), and tutoring children (I-8, I-16), which were neither permanent sources of income nor provided them with financial security. The participants' day-to-day experiences suggested that concepts such as economic independence and women's empowerment remained unknown or inaccessible to the women from the study areas.

Women's actions within society and the slow evolution of the social environment in the study areas resonated with the foundations of Anthony Giddens' Structuration Theory. Giddens' primary publications on the new rules of sociological method discussed the theory and introduced duality of structure, proposing a reciprocal relationship between the autonomy of the individual and the social structure (Giddens, 1984). The term suggests that individuals' decisions about their respective behaviours within a group create the structure of that group; likewise, the structure of the group encourages and limits the actions of the people who belong to the group. Alternatively, social structures can be modified through the reflexivity of individuals acting outside the structures placed upon them.. Giddens identified rules and resources as foundational aspects of his theory, where rules are learned throughout one's life and resources shift from time to time depending on the individual's position within the social structure. Although Giddens claimed that two people from the same group could behave differently in terms of accepting and utilising the rules and resources, it was apparent in the context of the study areas, that women were more inclined to follow the rules and maintain the social structures determined by the actions of their predecessors, rather than using the resources (such as education) available to them. Such actions of the women can be justified by Giddens' idea of mediation and contradiction, the two things that can happen inside a group (in this case, a community), as people choose to behave in a way that is accepted and standardised within the group, which can either support the existing structure or work against it. In this case, the women chose to behave according to the norms of the structure. As a

result, the social structure considering women's position remained principally static over the years in the study areas.

The chapter entitled *Being understood (as a woman)* outlined the background of the women from the study areas, providing an understanding of how the women living in coastal Bangladesh develop their mindset and their horizons. Knowing their horizon was necessary for the *superior breadth of vision* described by Gadamer (2004, p. 316). The findings of the chapter represent the centrality of the women's mindset, and their obligations and reservations as individuals and as part of the community they live in. The participants' horizons of knowledge and their *dasein*, paved the way for understanding values, lifestyles, and the meaningfulness of lives within their *lifeworld*.

13.1.2 Being a woman during a crisis

The theme *Being a woman during a crisis* revealed women's vulnerability in a crisis and/or when threatened. The participants generally lacked a sense of individuality, which was repeatedly reflected in their narratives. They often used *we* instead of *I* to describe their personal experiences, which can be interpreted as an indication of their lack of confidence due to their socio-cultural position in the community, and a sign that they do not consider themselves to be individuals separate from their families. This practice of using collective words such as *we*, *us*, and *our* can also be considered as a defence mechanism for the women, a technique to share their personal story under a generalised language.

This theme brought out the voices of the women and captured the essence of *living through a crisis* as a woman, but also answering the question of how it feels to be a woman in a crisis.

From the participants' narratives, it was evident that being a woman in a crisis was an

experience of suffering, and that their suffering became acute, being solely responsible for their children, elderly family members, livestock, and other valuable items. Because the male counterparts within the families worked outside of the home, and sometimes even lived in different cities and countries, the responsibilities inevitably fell upon the women who were looking after the household. One of the women remembered being instructed by her husband to save their children, even at the cost of her own life, which is consistent with the IPV experiences discussed in Chapter 3. The participants claimed that even when their partners were present during a crisis, they were compelled to bear all the responsibilities with no assistance from their partner. In contrast to this claim, a study by Ayeb-Karlsson (2020), focusing on immobilising gender attitudes during cyclone emergency evacuation in coastal Bangladesh, argues that some women followed their husband's disaster instructions, even when the instructions fundamentally differed from those of the disaster volunteers, because of their customary faith in men being smarter, and more intelligent and experienced than women. This finding is associated with women's vulnerability, lack of preparedness, and incompetence in taking action in cyclone emergencies in the study areas of this research. Irrespective of their previous experience of facing cyclone emergencies, without the presence of their male counterparts, the women found themselves in similar situations of vulnerability and exposure, due to a lack of a preparedness plan. The women who had never had to make their own decisions suddenly had to take charge during a crisis, from the beginning of the emergency to preparing themselves, taking everyone to the shelter, looking after their dependents in the shelter, and meeting the associated challenges of living in the shelters. The participants were unified in understanding that during the crisis they had to play such a role to safeguard their children, family members, and valuables. This put them in a vulnerable

situation, leaving them helpless, and overwhelming them with a sense of duty, responsibilities, and uncertainty about the future in the cyclone shelters.

This theme confirms the prior research on women in disasters around the world. Women's commitment to putting their lives and safety at risk for their children, family members, homes, and belongings was discussed in Chapter 3. According to the literature, women around the world, including in the USA, Australia, the Philippines, India, Pakistan, Myanmar, Sri Lanka, the Maldives, Fiji, Cambodia, and Haiti faced injuries, trauma, and even death during disasters while playing their respective roles as mothers and caregivers and also fulfilling their household responsibilities.

While reviewing the literature, it was unclear whether the choice of such priorities was deliberate, imposed, and/or repeated coincidence. Although it is probable that the typical instinct of a mother is to save her children and prioritise them, certain comments by the participants, such as What is the point of a mother to survive if her children are no more? and He said that it is okay if I die protecting my kids, suggested that the reason behind being protective of their children might, at least in part, be a desperate attempt to save the fundamental purpose of their lives. The life expectations among women, their families, and the community, are to get married, bear children and raise them well. To the women, losing their child/children meant losing the purpose of their lives. In the past experience of these women, women were blamed and shamed by the community whenever children died by accident, and the women feared going through the traumatic experience of being considered unsuccessful as a mother and as a woman. Women were not recognised as individuals, and were often referred to as someone's mother, daughter, or wife, and thus, being in the

household, raising their children, and looking after their families became part of their being — their *dasein*. In fact, the participants and other women from the study areas were comfortable being understood as their children's mothers and/or their husbands' wives rather than being called by their names. These practices and gestures were evidence that women themselves willingly put their children and/or families before their own identities, and this continued during the crisis period and increased women's challenges during a cyclone emergency. Moreover, their dedication to saving their livestock, and ensuring comfort for other family members suggested an inner meaning to such behaviours and the underlying truth about their lives.

While undertaking the hermeneutic circle, it could be concluded that women not only prioritised their children, but also put their belongings over their lives to sustain their own identities, and losing any of these would jeopardise their day-to-day lives and question their accountability as a caretaker of the household, which is one of their major roles as individuals within their families. Therefore, women were compelled to save their livestock, houses, and everything valuable to them and their families, to save parts of their own existence. The urgency of fulfilling all their responsibilities and the frustration of not meeting everyone's expectations left the women feeling helpless and overwhelmed. As the participants shared their experiences as anecdotes and stories, it could be comprehended that their feelings of being helpless and overwhelmed were deeply intertwined with them *Being understood as a woman*, and this made them more vulnerable and exposed to the crisis. This theme uncovers the reality behind women's actions in a crisis and reflects how womens' socio-cultural position and their *dasein* caused inconvenience and unfair situational expectations, which led

to helplessness and feelings of overwhelm, and in turn, had a negative impact on their wellbeing in the shelters.

13.1.3 Being in a hostile situation

This theme describes the experiences of struggle and hostility the women faced and/or sensed in their lived-space (shelter), lived-time (cyclone emergency), lived-body (as an evacuee), and lived-human relations (with other evacuees). Initially, when asked about their experiences in the cyclone shelters, the women's responses mostly focused on the disadvantages they faced because of inadequate facilities and the limitations of the shelters, which was more generic than personal. Soon after reaching their comfort levels in the interviews, the participants started to recall the interactional conflicts with their fellow evacuees while sharing the space and facilities of the shelters. In addition to this, the participants were asked if they could recall any experiences which left a permanent mark in their lives, either physically or mentally. A majority of the participants only revealed such experiences once they opened up and got involved in deeper conversations and talked about issues that were sensitive and, from their point of view, confidential. Even though it took time to reveal such experiences of unique struggles and challenges, the experiences were generally expressed as anecdotes and relatively straightforward to see through the women's points of view. Therefore, it seemed fitting to put the two types of incident-based experiences under the same theme of *Being in a hostile situation*.

However, some narratives under this theme also suggested that some of the lived-experiences of the participants, such as experiencing threats and/or sensing hostility, and the challenges derived from their pre-suppositions and past experiences that persisted in reality, were

actually the participants' *truth*. The women's typical negative impressions of being in the shelters can be explained using Giddens' (1984) three basic social processes - signification, legitimation, and domination to form an individual's *rules* within a group. Signification implies how an event should be interpreted, legitimation signifies what should happen in a given situation, and domination denotes to control of resources to overcome obstacles. Giddens concluded that each person in a group comes with variations of these three aspects, leading to varied understandings of what an event means to them. In the case of some participants, their past experiences of being evacuees, coming across unfortunate incidents in the shelters either involving themselves or other women, and harsh words from other evacuees, were significant for perceiving the situations in the shelters, and legitimated their feelings of being in a hostile situation, without any prominent threats or challenges.

Retrieving the real experience was also convoluted in some cases because some of the experiences were personal, sensitive, and/or disturbing to such an extent that the participants described them using collective terms, as someone else's experience and/or explained in an understated way. Therefore, underpinning the reality from the narratives required circling over the narratives repetitively, and it was crucial as a researcher to rationalise all types of experiences and understand the insights behind the narratives, or the meaning underneath. Gadamer's concept of 'horizon' proved to be particularly useful for this process – *look beyond what is close at hand, not in order to look away but to see better* (Gadamer, 2004, p. 316). The women's personalities, language, gestures, and overall impressions were considered while interpreting the key narratives relevant to the theme.

This theme features the notion that women found themselves in a disadvantaged position in using the shelter facilities, which were in most cases, inadequate. Although the limitations of the shelters had a negative impact on every evacuee, irrespective of gender, the women tended to suffer more because of being positioned as a woman. From the interviews, it was evident that the infrastructure of the shelter may or may not include essential facilities including toilets, a water supply, ventilation and light, changing rooms, and separate spaces for men and women. In any case, women frequently could not access the limited facilities that were available because of their position and the expectations associated with being a woman. These women were comfortable inside their homes with very limited communication with people outside of their immediate family members. It was difficult for these women to orient themselves to the challenging environment of the shelter, where they had to stay with many evacuees of both genders, sharing the available facilities with limited or no privacy. Most of the women were concerned about being exposed and could not get past their shyness to make use of the toilets, talk to other people, and find suitable space, water, and food. Women often got involved in heated conversations with other evacuees, but hid their anger and hostility towards others, especially the male evacuees, as a result of their past experiences and pre-conceived ideas of living in the shelters.

During the interviews, the women described various experiences that caused damage to their physical and mental health and impacted their lives. The participants described their experiences of staying in the shelters as lactating mothers, new mothers with postnatal complications, pregnant women, and women with menstruation problems; and remembered witnessing childbirth, death, and suffering from physical and verbal abuse. These personal and unique experiences of the participants highlights the diversity of experiences among the

women and provides a deeper understanding of what it is like to be a female evacuee. The theme also reflects how women's *dasein* tends to colour their *lifeworld*, and how they draw meaning from being placed in the potentially hostile and unreceptive environment of the cyclone shelters, justifying women's interpretations, and the meaning of their experiences which might or might not have imposed genuine hostility. While the literature described in Chapters 1 and 2 highlighted that women in the cyclone shelters in Bangladesh face many challenges and issues, this research extends beyond the available data and statistics and describes the underlying experiences of these difficult situations in the context of the physical and emotional journeys the women undertook as evacuees.

13.1.4 Being fearful

This theme reveals one of the prominent emotions women experienced at the shelter – fear. From a disaster perspective, people are likely to experience fear when they are exposed to a disaster, and anxiety from the phenomena associated with a disaster, such as security in the shelters, post-disaster violence, forced migration, hostility, and discrimination in the post-disaster phase (Cvetković, Öcal, & Ivanov, 2019). An event as catastrophic as a cyclone can cause fear in any individual. Yet, it was assumed that experiencing frequent cyclone emergencies in the study areas may have reduced the fear of cyclones and made the women more emotionally prepared. Contrary to this expectation, the women confessed to having an extreme fear of the prospect of more cyclones in coming years, even after surviving through several cyclones in the past. These women had witnessed the level of destruction, loss, and damage a cyclone could cause, and in some cases, had experienced personal loss, which made them fearful and threatened by cyclones. The women of the coastal region generally lived their whole lives in the area, and many participants described near-death experiences

during cyclones and storm surges in the past. Four of the elderly participants survived the cyclone of 1970, while a majority of the other participants witnessed the cyclone of 1991 in their childhood and teenage years. Surviving through the two most catastrophic cyclones in the history of Bangladesh left an imprint on their conscious mind. During the interviews, some of the participants confessed to being traumatised by particular incidents in the shelters, experiencing injuries/abuse, and/or seeing the corpses of cyclone victims. Their existing trauma and past experiences amplified their perception of risk from a cyclone and triggered increased fear during their stay in the shelters.

In the shelters, the women constantly battled with existential fear, the fear of losing their lives and/or losing someone/something valuable, and were fearful that something terrible would happen that would jeopardise their lives. The participants admitted that, in most cases, their fears were based only on speculation, and they remained unaware of the details of the forthcoming and/or ongoing storms, the wind speed, intensity, the possibility of water surge, and the damage the cyclone could do, and anticipated the worst. From the interviews, it was confirmed that on an annual basis, the study areas get three to four emergency early warnings per year, although not all of them result in destructive storms. Nonetheless, women experience mental stress and fear every time there is an alert and are required to take refuge in the shelters. Cvetković et al. (2019) also identified that the intensity of the fear of the female disaster survivors was greater than that of their male peers, and argued that women's gender discrepancies as a result of their social background, levels of social support, and exposure to stressful events are potentially the underlying reasons for women's exaggerated fear in disaster situations.

While reading and re-reading the narratives, it became apparent that the participants' fear in the shelters was primarily associated with their lack of knowledge about the *actual* situation of the cyclone emergency they were facing. Being women from the community, the participants lacked access to information and a social network that could provide updated information. The participants also lacked communication skills; for example, some of the participants were too shy to ask others about the updates, and some did not understand the recurring emergency updates that had been announced through megaphones. Thus, in several cases, the women remained uninformed about the situation for a longer period, which instigated and sustained a strong sense of fear among them with or without a valid reason, impacting their experience of wellbeing in the shelters. As discussed earlier, the women's fear was primarily driven by their past experiences of staying in a shelter and imagining *what it will be like*, the gender-based assumptions and expectations were grounded reasons for women's vulnerabilities in past events, and therefore, the feeling of fear was likely to have a close association with women's *dasein* and being a woman within the coastal community.

13.1.5 Being uncertain

This theme describes women's sense of uncertainty while staying in the shelters, which stemmed from the personal experiences they shared directly as anecdotes and assertions and/or brought up as supporting statements while describing an experience, emotion, or incident. The women of the coastal community experienced emotional breakdowns, stress, trauma, and guilt while staying in the shelters, and this was exacerbated by the limited facilities, the overwhelming responsibilities imposed upon them, the fear of dying or losing someone close or something valuable, their inability to provide for their children's and family's requirements, and the combined effect of these concerns. However, a general and

underlying feeling of uncertainty also surfaced at different points in the conversations with the different participants.

The experience of uncertainty often started with the announcement of a cyclone emergency, even though they had been instructed to rush to the nearest cyclone shelter with dry food and essential items, and had experienced previous cyclone emergencies. This sense of uncertainty was characterised by a combination of a sense of being a weak and vulnerable woman, inherited from being understood as a woman in the coastal community, and women's past experiences of being in a crisis. Although most of the women mentioned being in similar situations several times, and could comprehend the upcoming emergencies, they could not stop thinking about experiencing something unexpected and unfortunate, which triggered their sense of uncertainty. This phenomenon reflects the two types of uncertainties previously identified among people facing natural hazard emergencies (Stein & Stein, 2014). The authors, Stein and Stein, argued that a past disaster experience is often a good predictor of future events, which provides an individual with the opportunity to estimate the probabilities of outcomes from similar hazards, and thus, causes shallow uncertainties. However, sometimes the probabilities of outcomes remain unknown, or less known, because of the multiple possibilities and diversities of past experiences, which results in deeper uncertainties. Cyclone emergencies created both types of uncertainties among the women from the study areas. They experienced shallow uncertainties because they had experienced similar incidents in the past. However, given the past devastations and struggles from cyclones, the women felt the threat of facing unprecedented (even worse), and poorly understood, impacts that they had not experienced in the past during their stay in the shelters.

Feelings of uncertainty came in different forms in the shelters, where the women were skeptical about the overall condition of the shelters but could not overlook being saved from the cyclone by the facility, and at the same time, feeling overwhelmed with worry about the wellbeing of their family, and stressed about the future and any damage caused by the ongoing storm. The theme reflects the complex situation women experienced in the shelters. The women's experiences of uncertainty varied and depended on individual personalities and perspectives. Some of the participants claimed to be relaxed, if not comfortable, in the shelters because they were certain that they, along with their children, would survive the storm. Some of the women took the opportunity to socialise with other female evacuees. However, others could not ignore the limitations of the shelters or forget their prior disturbing experiences. Despite these different experiences, the women felt obliged to be grateful for being physically safe, but the limitations of the shelters, hostility from other residents, and the risks to their safety and reputations in the shelters caused despair. Additionally, the women could not stop fretting about other matters significant to them; for example, contacting their husbands, parents, and other extended family members to inform them they were safe and in the shelter. These might be considered secondary concerns from a third person's perspective, but were important to the women themselves, whose lives were focused on their families and their households.

The theme also underlines the women's tendency to dislike changes in their living circumstances, and to have difficulty adapting to new situations, which eventually had a negative impact on their overall wellness within the shelter environment. As discussed earlier, being a woman in the coastal community normally means living inside the family home with very limited access to the outside world. The women had been practicing this rule

from an early age and intended to maintain the same lifestyle all their lives. Therefore, most of the participants were uncomfortable and distressed throughout their stay in the shelters, and continued to focus on returning to their familiar surroundings. The anticipation of returning to their homes where they could resume their usual lives, and the associated concerns about their homes following the emergency, filled their minds with doubt, and made them uncertain and distressed, which encumbered their mental wellbeing in the shelters.

13.1.6 Being faithful

Shafranske (1992) described religion as an institution which directly or indirectly structures an individual's fundamental beliefs and behaviours, contributing to their sense of identity and bringing meaning to a person's life. In the wake of a disaster event, faith provides people with a framework within which to comprehend the shock, while also sustaining patience, peace, and concern for others (Abbott & White, 2019). This theme addresses the religious beliefs and spiritual faith of the participants that shaped their being and influenced the frames of reference they used to organise and understand their life experiences; specifically, their experience of living through a cyclone in a cyclone shelter.

Certain recurring phrases such as *Allah knows the best* and *By the grace of Allah* used during the rapport-building conversations with the participants demonstrated the significance of religion and spirituality in their existence. Women's lifestyles included regular religious practices to keep proximity with the Almighty, avoid unforeseeable misfortunes, and to enhance prosperity and a better future. The participants' faith was incessant and intact irrespective of their life situations, whether their challenges and struggles in life remained

unaltered, they faced a cyclone situation, suffered loss, or failed to accomplish their anticipated life goals. The participants' narratives and the simple gestures they made; for example, maintaining silence whenever there was a call to prayer at the nearby mosque, being unavailable at prayer time, rejecting snacks that were offered because of optional fasting, and reciting the name of their Almighty before sitting, starting to eat or drink, or when leaving, were an attestation that being faithful was an inextricable part of the *dasein* of the women from the study areas.

Their faith in a superior entity extended into times of emergency, and the participants described praying constantly to the Almighty, both individually and communally, which helped them to remain optimistic and gave them a sense of security. The participants frequent statements, including Allah kept me well, Allah saved us, Those who were blessed were saved, and Allah will protect me, while narrating their experiences of surviving through the cyclones and the prospect of future cyclones, confirmed that the women strongly believed they had been saved because of their prayers and the mercy that was blessed upon them. During the conversations, the participants explicitly expressed their humble devotion and faith to their Almighty, relying on His numerous mercies and/or blessings in their past, present, and future, and engaging the Almighty during emergencies to retain optimism and courage because they were certain their Almighty had power beyond their imaginations. This resonates with Ayeb-Karlsson's (2020b) articulation that the religiously devoted women believed that life and death is in God's hands only, and that if God had planned to save them, they would survive within their own households, and if they were destined to die from a cyclone, they would die whether they evacuated or not. Being religious has been identified as a factor of self-experienced immobility during cyclone emergencies; however, the strong

belief in God's will also eased their fears and the anxiety associated with cyclones. The author also identified the lack of space in the shelters for the religious privacy of the Muslim women. This is consistent with the fact that the participants regretted not being able to offer prayers in the shelters which, in some cases, discouraged them from using the cyclone shelters in the future. Some participants confessed delaying evacuation to a cyclone shelter because they did not want to miss their prayer times.

As discussed earlier in this chapter, the women from the study areas had developed a fatalistic outlook, tending to leave everything to a greater power and accepting both good and bad experiences as the will of the Almighty. Although this mindset moderated their reactions to the impediments, injustice, and/or discrimination they had suffered througout their lives, their relentless faith helped them pass through the troublesome and painful situations and challenges of the cyclone shelters. Most of the women claimed that they were not offered any external assistance during their stay in the shelters, while maintaining their roles as mothers and caregivers, and protecting their virtues. In addition, the shelters had limited to no toilet facilities, women's spaces, food, or medicines accessible to them. Yet, amidst all the negativities that the participants battled through, it was often their faith that gave them a sense of security, love, support, and temporary relief from the stress, anxiety, and all the negative emotions they had been experiencing. Through communal prayer, the women developed a bond and shared compassion which improved their experiences of the shelters. Amidst all the negative experiences, being faithful gave the women a sense of security and relief. Past experiences of surviving destructive cyclones acted as evidence of the Almighty's blessing upon them, and the thought that they had been looked after and protected by the divine superior entity was at times the only positive feeling they experienced in the shelters.

The participants found solace through prayer, and felt loved and secure by being faithful, when every other system had failed them. Having faith gave the participants hope that the storm would end perhaps with minimum collateral damage. This feeling of optimism and hope restored the participants' wellbeing to some extent, because faith-based hope is positively correlated with improved health and wellbeing outcomes in disasters (Persell, 2016). Thus, being faithful was a natural and feasible coping strategy for the women in the cyclone shelters.

The participants' philosophies about death feature women's irrevocable spiritual faith which allowed them to accept death gracefully without any deleterious impact on their religious attachment. The participants strongly believed in the *afterlife* and the anticipation of reward in that life motivated them to endure all the struggles in their earthly lives. However, being locals from the coastal areas, a majority of the participants had witnessed the deaths of people they knew, saw disfigured corpses, and even experienced injuries and/or near-death situations themselves. These experiences gave them a fear of dying in the cyclones. Although the participants were well aware that deaths are inevitable, and that they had been preparing themselves for a better afterlife by praying, reciting verses, and doing good deeds, they also hoped to avoid death from cyclones, and/or in some cases, dying in the cyclone shelters, because they thought it would be an unfortunate way to leave the earth.

Having strong religious beliefs and being faithful in the cyclone shelters acted as a mode of resistance for the female evacuees and helped to maintain their emotional wellbeing, at least to some extent. Yet, it also highlighted the crucial fact that women from the study areas were

mostly reliant on their faith as a defence mechanism for the cyclone events that might jeopardise their lives and threaten their existence.

13.1.7 Being against the odds

It was established in the previous themes that the women perceived themselves, and were understood, as vulnerable and inferior individuals in the socio-cultural landscape of coastal Bangladesh. The pervasive concept of being a woman had a negative impact on their experiences, and the women consequently experienced poor physical and mental wellbeing while staying in the shelters. However, some of the women mentioned feeling relaxed and relieved after reaching the shelter because of the durable structure in place, and their past experiences of surviving through the cyclones by staying in one of the shelters. Although the female evacuees' wellbeing was affected by the limitations of the shelters, the imposed expectations on them, the choices they made, and/or their understandings of the overall situation, the shelters offered relative safety and assurance to some of the women, which helped to preserve their mental wellbeing.

Whereas a majority of the participants held onto *prayers and patience* (a commonly used Islamic idea to face hardles of lives) while waiting for the end of the emergency that brought them to the shelters, a few of the participants showed resilience and attempted to improve the situation within the shelters. Some women arrived at the shelter more prepared with adequate food supplies, drinking water, medicines, and other necessities, because they acted promptly after the emergency announcements instead of delaying or becoming confused and/or frightened. Some of the participants shared their food with their fellow evacuees, offered help in cleaning the shelter on behalf of other female evacuees who had younger children, and

looked out for the safety of others in the shelters. These compassionate behaviours were a powerful and effective coping strategy for the evacuees since the female evacuees were mostly on their own or without any male guardians in the shelters for as long as the cyclone lasted. As Aldrich and Meyer (2015) described, assisting others to ensure their wellbeing and providing immediate assistance, these participants unknowingly became the first responders and established a bonding form of social capital within their community of evacuees. Yet, such perceptions sometimes worsened the experience of the women who rendered selfless assistance. These women were often misunderstood and received harsh rejection and rude comments, which discouraged them from continuing their responsive activities in the shelters. The dismay and disappointment about the negative attitudes were voiced in the participants' narratives; as I-6 stated, *Still, I try to help others maintaining my self-respect*, and explained how she was humiliated in the shelters while offering help to others and decided to reduce these activities after this experience.

One of the participants mentioned an exceptional experience while staying in one of the shelters, where she voluntarily took a leadership role, gathered similar-minded people from the community, and worked for the evacuees at the shelter by arranging basic requirements including food, drinking water, medicines, and sanitary supplies, managing evacuees by separating males and females, listing sick and disabled people, identifying the immediate needs of the evacuees, and communicating with local NGO authorities and government entities. The participant's understandings of the emergency, her sense of obligation towards her community, and her capabilities in serving the community successfully could be an example and a lesson for the coastal Bangladesh community. Although leadership quality, courage, and the capacity to influence proceedings varies from one individual to the next,

only 1 out of 19 women had the calibre to respond in an emergency without prior training, skills, and experience, despite living in a gender-biased socio-cultural environment.

Therefore, it can be projected that other females from the study areas could also help themselves and their communities if they had proper access to knowledge and information on disasters, and were able to communicate and interact within their social settings to make people aware of their disaster roles and their insights into their lived-experiences in the shelters.

13.2 Making sense of women's experiences

This study has explored what it is like to be a woman in a cyclone shelter in Bangladesh and discusses their experiences of wellbeing as evacuees. The primary motivation for the research was to fill the existing gap in the scientific literature, and the need for appropriate practical and sustainable interventions to improve women's experiences in the cyclone shelters, and ultimately, to promote women's wellbeing as evacuees. As a foundational activity of the researcher, pre-understanding of the project, attained prior to the fieldwork, provided an insight into women's lifestyles and the challenges that could potentially affect their wellbeing in the cyclone shelters. Yet, engaging with the participants and understanding their experiences through the phenomenological lens opened new horizons of knowledge, which eventually expanded the researcher's horizon of knowledge. The next step of the study required an explanation of the findings, to provide an argument that was contextual, accountable, and to some extent, generalisable.

From the interviews, it was recognised that women's roles and the expectations of women within the family and the community have remained unchanged, and can be extrapolated to their experiences during cyclone emergencies and in the cyclone shelters. The themes

uncovered the sets of emotions and issues the women experienced as evacuees in the shelters as well as revealing how they remained hopeful and optimistic amidst the fear and uncertainty of the shelter. The fundamental insight of *Being understood as a woman* displayed women's existence within their *lifeworld*, which laid the foundation for understanding the participants' perspectives, their actions, and their emotions in crisis periods.

The next theme Being a woman during a crisis explained women's roles as mothers, caregivers, and caretakers of the household which then extended into the cyclone shelters as the women aimed to safeguard their valuables and ensure everyone's wellbeing during a cyclone emergency. Protecting children, providing everyone with food, and looking after the elderly were the driving force for the women to carry out their disaster roles through their mindset of being a woman. The women's mindset during crisis was informed by their background of being understood as a woman, and their many roles in the shelters were not only driven by a sense of responsibility, and the expectation that they would fulfill these responsibilities, but were also influenced by their sense of self and identity. This intrinsically increased women's workloads and mental stress in the shelters, which has been reflected in the next theme, Being in a hostile situation in which women recollected their experience of the shelter facilities and shared stories of unique and challenging experiences during their stay in the shelters. These personal experiences and the sense of being in a hostile situation were based on the women's presuppositions of staying in a shelter as well as the experiences that happened to them in their lives which left a perpetual streak of fear and anxiety. Either way, their experiences have been closely associated with Being understood as a woman, as being a woman discouraged them from using the facilities in the shelters, burdened them with overwhelming responsibilities, and put them in a position for physical and emotional mistreatment by fellow evacuees.

The next theme, *Being fearful*, was strongly entwined with the previous themes as women's experiences of challenges and struggles and the sense of being in a hostile situation triggered fear among the female evacuees while staying in the cyclone shelters. Being a woman, being in a crisis, and having preunderstandings and past experiences made the participants vulnerable, and this was exposed in their reality, irrespective of the potential of the threat in their lived-space and lived-time. This resulted in fear among the participants, fear of death, fear of losing someone and/or something meaningful to them or significant to their existence, and fear of whatever damage and loss the imminent storm might cause.

The following theme *Being uncertain* explained how women's previous experiences of such storms engulfed their minds and triggered feelings of uncertainty. The women struggled in the shelters, yet they could not overlook being alive and physically unharmed in the shelters, whereas they had witnessed death and casualties from cyclones in the past. The women wondered about the whereabouts and safety of their husbands, parents, and close relatives and wished to return to their normal lives, which made them feel melancholy. Nevertheless, they could not stop hoping to hear from their kin and returning to their normal lives, and their thoughts circulated around these doubts and uncertainties. The women's experiences of uncertainty were also underpinned by the central theme *Being understood as women* and further supported by the next two themes *Being a woman during a crisis* and *Being in a hostile situation*. Since the women from the study areas had very few expectations and tended to show gratitude towards life, some part of their thought processes felt content just being

saved from being injured and dying from the cyclone. However, the cyclone shelter was an unfavourable place for them as they struggled through the crisis as women and endured hostility, which resulted in despair. The inability to communicate with their kin not only reflected the difficult situation of the cyclone emergencies, but also mirrored women's lack of resourcefulness and their dependence on their male counterparts. The participants' anticipation to return to their normal lives could be understood as an urge to go back to their homes, the only place they had an identity and where they could maintain their privacy without revealing their selves to others (non-family).

Being entangled in several negative experiences in the shelters, the women searched for optimism and peace through prayer. Abiding by religious rules and keeping faith in divine power were of the utmost importance to the women from the study areas. Naturally, during emergencies, the women looked to their faith to overcome the difficulties that had been imposed upon them. The belief that their supplications would be answered and devoting their lives to a superior power gave them a sense of safety and security and a glimpse of optimism. For most women, coming from either of the predominant faiths (*Islam* and *Hinduism*) in the study areas, their spiritual faith was the only resource they could effectively use against all the stressful life events they had been experiencing or were afraid to experience. *Being understood as a woman* influenced some participants to be compassionate towards their fellow female evacuees, since only they could understand each other's weaknesses and struggles. It was also perceived that women's religious principles to help people, to feed the starving and look after the fragile, inspired women to act with compassion in the shelters, which provided support to others, and gave the women a sense of contentment and wellness during their stay in the shelters. This shows that women's capacities of being first responders

for their fellow evacuees develops social capital, which could potentially assist in building community resilience. Because the study was about the individual's lived-experiences in the cyclone shelters, a few of the participants stood out from the others by pushing themselves beyond their conventional roles as *women*, and displayed resilience through spontaneous management skills and innate leadership qualities. The participants who thought outside the square also mentioned experiencing fear, uncertainty, and hostility, and yet they rose above the limitations and attempted to change their situation in the shelters. Although such examples were rare, it shows that the women could work for their wellbeing and improve the situation of their community even with limited or no outside assistance.

The phenomenon under investigation — what it is like to be an evacuee in the shelters — may have appeared to be different for individuals over time, as they interpreted their lived-experiences differently and stored it in their memory through focusing on those aspects that had the most impact on them. The women's experiences made sense over time and this was reflected in their experiences of wellbeing in the cyclone shelters. However, the hermeneutic circle suggested otherwise and aimed to consider women's phenomenological existence in its totality within the space, time, body, and human relationship to describe women's experiences of wellbeing in the shelters. The experience of wellbeing in the shelters could not be classified as good or poor wellbeing. The initial reaction from being in the space (a cyclone shelter) and in time (the cyclone emergency) threatened the women's existence, and the women experienced hostility, fear, and uncertainty in the spatial and temporal spheres. Their lived-relationship with their children, family members, kin, and people around them, and their lived-bodies which were exposed and often needed special requirements, imperiled

their wellbeing in the shelters. However, the solid structure of the shelters gave them the confidence to survive the forthcoming storm.

In addition, the women tried to achieve and sustain at least some level of wellness during their stay in the shelters through prayer and faith, particularly when they were engulfed by different negative experiences; their faith gave them a sense of optimism and courage, and many of the women eventually experienced good wellbeing, to some extent. The totality of an experience is formed within a temporal context in which experiences are oriented towards time and things keep changing over time. This is why most of the memories of the participants captured the struggles, challenges, and unique incidents of their lived-experiences in the shelters, whereas other participants stored the essence of hope and optimism they experienced during their stay, and some could understand both their good and poor experiences.

The study revealed that women's *dasein* and their perceptions of their *lifeworld* subsequently exposed them in cyclone emergencies and put them in vulnerable situations in the shelters. Being a woman during such a crisis comprised, at least in part, of being helpless and overwhelmed, which became more apparent because of their position within their culture and community. Women experienced unique incidents that remained prominent in their memories, struggled to use the shelter facilities, faced hostile situations, and/or sensed hostility while staying in the shelters because of being women. Some of the participants described the horrible experiences they lived through in the shelters, whereas others admitted feeling threatened, even though they later realised that they were not exposed to any actual threat.

Irrespective of the existence of challenges and hostility, or the sense of being at risk based on presuppositions, this resulted in fear and uncertainty among the women. The women sought refuge in their Almighty, a belief which has been deeply embedded in their dasein and which remains a significant part of their *lifeworld*. The most dependable resource for the women was to keep their faith and to develop a mindset of accepting the unknown future as the Almighty's wish. The women's dedication to their religious practice enabled their compassion towards other evacuees, which also became an effective act of resilience on their side. It was evident that the women's experience of the phenomenological existentials of spatiality, temporality, corporeality, and communality, was greatly influenced by both their dasein and their lifeworld. Yet, a few of the women could alter their reality by responding to the situation differently and perceiving the phenomenon of being an evacuee from a different angle.. The actions of these women have been the fundamental source of the recommendations and the potential future research areas outlined in this thesis. Finally, in exploring the experience of wellbeing of women in these shelters, it could be perceived that as evacuees, their experiences of wellbeing changed with the flow of time. Yet, the extent of their experiences of poor wellbeing was more palpable than their experiences of good wellbeing.

Chapter summary

This chapter has brought all the themes that emerged from the data together, and discussed them through a phenomenological lens considering the background that has been revealed through a combination of reviewing the relevant literature, the hermeneutic readings, and the researcher's lived-experience. Some aspects of the themes uncovered in this research have been discussed in relation to social science theory, anthropological studies, and disaster

articles and reports in order to establish a logic pathway to the development of knowledge, or to strengthen an argument. The chapter concluded with the notion of female evacuees' experiences of poor wellbeing in the shelters, which has developed the foundation of the next chapter, *The wellbeing of female evacuees and provisions for improvement*.

Chapter 14: The wellbeing of female evacuees and provisions for improvement

Chapter overview

This chapter is a continuation of the last chapter, emphasising the female participants' perspectives on their experiences of wellbeing in the shelters in consideration of the research question: How do women in the coastal areas of Bangladesh experience wellbeing during their stay in cyclone shelters as evacuees? This chapter describes women's horizons on the perceptions of their wellbeing while staying in the cyclone shelters. The latter part of the chapter addresses the last objective of the study, Identifying recommendations for the provision of safe cyclone shelters for women that promote their wellbeing. The section suggests provisions for the improvement of cyclone shelters to ensure a better experience for female evacuees, based on the women's narratives and the findings of the study.

14.1 Women's wellbeing as evacuees

Throughout the conversations with the participants, wellbeing remained a central concern, sometimes addressed directly, and in some cases, remaining submerged within the narratives. Women's understandings of their own wellbeing were established in the ice-breaker queries when they were asked: What is your understanding of the idea of wellbeing? Each participants' idea of wellbeing was distinctive, pragmatic, and as anticipated, based on their life situation, yet some common understandings were evident in most of the responses. The participants frequently mentioned financial solvency as one of the foundations of their wellbeing, echoing the role of financial stability in the wellbeing of people from poor settings, as discussed in the Wellbeing chapter. In addition, the women referred to the importance of being both physically and mentally healthy for their wellbeing, which are recognised as two fundamental supports for individual wellbeing (Ryan & Sapp, 2007). Even

though the women from the study areas did not have formal knowledge of mental health, their understanding of wellbeing included the idea of emotional contentment, peace, and sanity being given much importance as physical health and fitness. For example, I-12 stated her definition of wellbeing as: ... when my mind is free from any stress. Is there not a thing we call peace of mind? This is what I am talking about. I-16 described her wellbeing as: ... comprises with health and mind.

The women also shared how their relationship with their husbands, children, and the behaviour of other significant people towards them impacted their mental wellbeing. As I-13 suggested: For me, wellbeing is being happy with my husband. If my husband does not assault me, does not humiliate me, and works hard to fulfill the family's needs, then I would be well. These statements reflect how the prevalent culture of dependence was associated with women's wellbeing, echoing the role of cultural values in individual wellbeing, as discussed in the Wellbeing chapter (Chirkov et al., 2003). Most of the women understood that their physical and mental health were symbiotic in nature, one cannot be achieved without the other, and the absence of one can hamper the other. It was also noticeable that most of the women relied solely on their spiritual faith to attain and sustain good wellbeing in their lives, instead of taking any other practical measures. This connection to wellbeing was apparent in the responses of I-3, who said: If my health is good and I feel happy, that is my wellbeing. For that, I have to pray to Allah, I have to ask for good health and peace of mind, otherwise who else will give it! The participants' understanding of wellbeing mirrors the ideas found in the academic literature concerning wellbeing, and resonated with the women's socio-cultural context – how being understood as a woman limits their aspirations for good wellbeing, and

is associated with a relative dependence on prayer, faith, and the hope of being treated well by people around them.

The interviews revealed the women's disturbing experiences, challenges, and struggles while staying in the cyclone shelters, and it emerged that their ideas of wellbeing were often defied and disrupted. Open-ended, semi-structured interview questions, such as Describe your positive and negative experiences regarding wellbeing while staying in the cyclone shelters and Describe any particular incident or experience and how it affected your sense of wellbeing, were asked at different points in the interviews, to explore women's experiences of wellbeing. Some of the research themes, including being in a hostile situation, being fearful, being uncertain, and being faithful, emerged from the women's responses to such questions. For example, the participants experienced several obstacles to maintaining hygiene, using the toilets, and changing clothes, and suffered distress as pregnant women, lactating mothers, and through menstruation, which affected them physically, and eventually hampered their mental health. Some of the participants experienced fear, uncertainty, helplessness, and overwhelm, which challenged their psychological health and led to anxiety, stress, and depression with either temporary or permanent trauma. From the narratives of the participants, it was determined that panic attacks and stress-related physical issues were common in the shelters and many women experienced physical issues associated with, and initiated by, mental issues. For example, I-18 stated, My mental condition was not good at all, and I-19 remembered that *I could never stop stressing*, reflecting her disturbed mental health in the shelter, whereas other participants mentioned heart palpitations, feeling feverish, and experiencing dizziness and light-headedness at different times during their stay in the shelters. These symptoms were apparently triggered by anxiety, panic, and stress.

While sharing their experiences of wellbeing, the participants frequently mentioned their *suffering* to describe the physical challenges and health issues they experienced as a result of inadequate or absent toilet facilities and hygiene products, the lack of dedicated women's spaces, and the overwhelming physical labour associated with their responsibilities as women. However, some of the participants claimed that the shelters saved their lives, and the sense of being safe from the cyclone led to an experience of improved wellbeing. For example, I-4 and I-9 explained that being alive and knowing that their children would survive the storm in the shelter gave them a sense of relief, even though they talked about different struggles in the shelter in their stories; I-8, I-11, and I-14 recollected experiencing *mixed feelings* as they attempted to stay focused on the good experiences, rather than being overwhelmed by the bad experiences in the shelters. The women also described finding mental peace and an improved emotional state through prayer and by offering help to others.

Galappatti and Richardson (2016) stated that the ability of individuals or communities to access and utilise different cultural, economic, social, emotional, material, and spiritual resources to respond to the adversities of a disaster, can be referred to as wellbeing in the face of a disaster. According to this definition, women's wellbeing was disrupted to a greater extent as evacuees, since they could not access and/or utilise material resources, including shelter space and the facilities in the shelters. In addition, most of the participants were found to be socially pressured, discriminated against because of culture, and emotionally troubled, and thus, could not utilise resources to support their wellbeing. In contrast, the women could access the strength of their spiritual beliefs to keep themselves motivated and optimistic about their situation. Some of the participants could also channel their socio-cultural inequity in a positive way by showing a compassionate and cooperative attitude towards the other

women in the shelters, which reflects the findings of Joseph, Murphy, and Regel (2012), who found that positive behaviourial change among people acted as a retort to alter or respond to the negative consequences of adversity.

These women's experiences of wellbeing in the cyclone shelters can be explained, in part, by the *wellbeing conceptual framework*, described by Galappatti and Richardson (2016), who designed a map describing how disasters affect wellbeing within a community. According to the framework, the overlapping relationships of three major domains, human capacity, social ecology, and material environment, within a set cultural context, and in an identified event and circumstance, regulates the extent of access to, and utilisation of, resources that are needed to experience wellbeing. The wellbeing conceptual framework has been illustrated as follows:

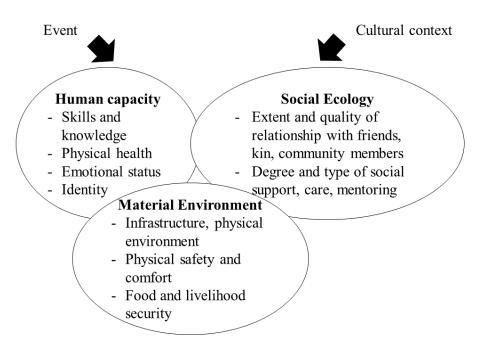


Fig 14.1 Wellbeing conceptual framework (Galappatti & Richardson, 2016, p. 227).

The narratives of the participants and the findings of the research profoundly highlight certain factors as the underlying reasons for women's experiences of wellbeing which fit into the domains of the wellbeing conceptual framework. Human capacity structures skills and knowledge, while physical and emotional capacity, which were challenged during the women's experiences of cyclones, preserved their wellbeing while staying in the cyclone shelters. Social ecology comprises the social context of the women which imposed burdens of responsibility and overwhelmed them to the extent that they could not access or utilise the resources to restore their physical and mental wellbeing. The feeling of disconnection with kin, including their husbands, and other family members while staying in the shelters often caused stress and anxiety among the participants, which had a major impact on their mental wellbeing. However, the women were able to access some resources and use these for their wellbeing through social bonding and connecting with the women within the shelters, thus supporting each other. The last domain, the material environment corresponds to the structure, settings, and environment of the cyclone shelters, which resulted in many negative experiences among the evacuees, greatly affecting their sense of wellness, and yet in some cases, the safety that the shelters offered also helped the participants to feel relaxed and safe, which lead to them experiencing a good level of wellbeing, at least to some extent. Additionally, being understood as a woman and being in the middle of a cyclone emergency exemplified the cultural context and the events or circumstances mentioned in the framework, which fundamentally framed the women's overall experience of wellbeing. The application of the framework to this study demonstrates that the women's capacities as individuals, their position within their families and communities, and the environment of the cyclone shelters

played major roles in women's experiences and moulded their understandings of wellbeing in the cyclone shelters.

The questions on wellbeing in the shelters were asked at the conclusion of the interviews, expecting brief and summary remarks from the participants. Some of the participants discussed their experiences of wellbeing by summarising all the issues they had faced, whereas others highlighted particular incidents that affected their experiences of wellbeing, describing the inevitable impact of certain experiences in relation to their lived time, space, and bodies. Their issue-centred responses highlighted that they prioritised certain experiences in their memories, those experiences that were meaningful to them, and memorable in their lived-experience of the shelters. In contrast to experiencing poor wellbeing, some of the participants claimed to experience good wellbeing, especially good mental health, because of the safety and assurance the shelters offered. Some of the participants' mindsets prioritised being alive and safe in the shelters over other challenges, and concluded that they had experienced good wellbeing in the shelters. The wellbeing experiences of the participants were their lived-experiences, which were distinguishable in the flow of time and their reality. Although all the participants described their lived-experience of a singular phenomenon, which was therefore similar in space and time, they recollected facing common, and at other times, distinctly different challenges as female evacuees. When asked about their experiences of wellbeing, some recalled the challenges that highlighted poor wellbeing, while others emphasised the safety they had been provided with. This difference is reflected in the concept of memory discussed in Chapter 4 (Memory): memory is unique and varies from one individual to another, since the experience of witnessing the same event may differ based on individuals' personalities, perceptions, and contexts.

14.2 The need for improvement

The physical and emotional challenges and struggles among the women as evacuees remained prominent throughout the interview sessions, and guided the interpretation process. The extracts from the narratives articulated the profound need for change to improve women's experiences as evacuees in the shelters of coastal Bangladesh.

The participants were asked about their opinions on provisions to improve the current situation in the cyclone shelters as a closing question: *Given your experiences, how could wellbeing be improved for women in cyclone shelters?* Two significant provisions emerged from the participants' reflections on this question. Firstly, adequate and feasible infrastructure changes and effective and efficient management of the cyclone shelters; and secondly, community engagement in cyclone emergencies and community awareness on cyclone shelter behaviours, roles, and responsibilities as evacuees.

14.2.1 Infrastructure management and improvement

Throughout the interviews with the participants, it was apparent that the participants' experiences and challenges connected to being in the *space* (shelter), and having to deal with different challenges and struggles because of the failings associated with the shelters. In Chapter 2, it was explained that the government emphasised increasing the number and status of durable and safe structures in the coastal areas, and determined that all multi-storey buildings that met the required building codes must function as cyclone shelters in times of a cyclone emergency, to ensure accessibility to cyclone shelters for people living in the remotest regions to accommodate them throughout the emergency period. However, it was also discussed in Chapter 2 that even after the number of structures had increased over the years, the number of shelters is not yet sufficient to meet the needs of the vulnerable

population of the coastal area to provide safe accommodation in cyclone emergencies. This fact was reflected in the narratives of the women as well. For example, in an attempt to explain the severity of the space limitation issues in the shelters, I-19 stated *This place can hardly accommodate 500 people, but almost 3,000 people come here.* One of the prominent reasons for women's disinclination to go to a shelter, was the excessive crowding, which severely affected their wellbeing in a range of ways; some women could not find a space to sit and so remained standing for whole nights sometimes carrying their infants and/or young children, some were hurt because of the shoving and elbowing, some claimed to be physically harassed by men who took advantage of being in the crowd, and some could not use the toilet facilities because it was very difficult to move through the crowd and reach the toilets.

The women's distress about their experiences as evacuees was reflected in the following comment by I-5: *In the shelter, we could not sleep, could not use the toilet, could not maintain hygiene, and ate less* ... Some of the participants declared that the shelters were not a place for pregnant women and/or the physically weak, whereas others remembered being in fear for their lives while doubting whether the shelter would have the capacity to accommodate them and their families. Farmer (2020) stated that evacuation shelters should be understood as places that are safer for people than any other place in times of emergency. Therefore, to encourage timely evacuation and ensure the safety of the at-risk population, it is important to change the current system of management for the shelters, and this change could support a shift in women's mindsets, from thinking about the shelter as a *last resort* to considering it to be a form of *safe accommodation*. There is no alternative to establishing more cyclone shelters in the coastal areas, which has also been recognised by the government (Disaster Management Bureau, 2010a). However, given the growing population of the

country, and the large number of new shelters that would be required to house all of the vulnerable population, this would be a difficult goal to achieve.

Additionally, building more structures is not likely to solve all of the infrastructure-related issues affecting women evacuees. Many cyclone shelters in the study areas lacked proper maintenance and needed repairing (Personal observation, 21st January-31st January, 5th February-8th February, 20th February-24th February). In some cases, the structures built in recent years were in better condition, and most local people went to these specific buildings for shelter. Only the most vulnerable people had to stay in the old buildings, with poor facilities and an unhygienic environment, because they were often the last ones to be informed and evacuate, and the comparatively better shelters filled up early. This eventually led them to experience substantially more undesirable outcomes, such as struggling with toilet facilities, being in darkness, not being able to rest, sit, and change their wet and dirty clothes, and being unable to access drinking water, medicine, or other improtant requirements. To curtail these recurring issues, cyclone shelters could be allocated to the people from the local neighbourhood, and evacuees advised to use the shelters allotted to them, irrespective of their preferences. There should also be provision for proper management of the buildings to avoid untimely damage and decay.

Even though the National Plan for Disaster Management of Bangladesh provided separate latrines for women (Disaster Management Bureau, 2010a), this requirement was not met in most of the shelters in the study areas, and poor toilet facilities remained one of the most common concerns of the participating women. Some of the participants shared their experiences of living in shelters with toilets adjacent to the floors they were staying on, while

the majority of the participants recollected their painful experiences of using the toilets some distance from the shelters, and/or being unable to use the toilets at all because they were out of order due to flooding. Access to toilets was difficult amidst heavy rainfall and storm conditions, and the women feared being harassed by male evacuees in the darkness on their way to and from the toilets.

I-1 recollected not being able to use the toilet as a *very uncomfortable* experience, and this was also echoed in the narratives of other participants. However, the participants staying in the shelters with adjacent toilets mentioned that having toilets close to the living space did not completely solve their problems, as other related issues including unhygienic conditions, long lines for the toilets, and being embarrassed to use the toilets in front of unknown men, were prominent concerns in the shelters. Being unable to use the toilets appeared to be a constant issue for women which caused shame, embarrassment, discomfort, and in some cases, resulted in physical complications and subsequently affected their wellbeing in the shelters. The toilet facilities in all the shelters should be moved from outside to within the main buildings to ensure convenient access to such an important facility. Although installing more than one toilet would not be possible for all the shelters because of space and other building constraints, there should be proper guidelines on using the toilets to guarantee women's easy access to the toilets, and safety while waiting in line and/or using the toilet facilities.

All the cyclone shelters should include separate women's spaces to guarantee female evacuees' privacy to reduce the chance of sexual assaults and harassment, which is the greatest concern of female evacuees; and to provide women with a suitable environment

where they can breastfeed, eat, talk, and move freely. The need for separate space for women was reflected in the participants' narratives as well. For example, I-19 stated the need for a women's space at the shelter to restore their wellbeing; We feel suffocated with stress and nervousness. But we could not uncover our faces or relax in front of the men. That is why it would be good to have separate arrangements (for men and women), while I-2, who had to stay in one of the shelters as a new mother, suggested a safe space for mothers and children: Can you make a separate place for mothers and babies? Some of the participants described their experiences of living in shelters with a separate space for women, or making a separate space for themselves within the cyclone shelters, which gave them at least some sense of relief and safety. From their experiences, it was evident that having space away from the male evacuees could make a noticeable difference. Therefore, separate spaces for men and women should be allocated as soon as evacuees start arriving at the shelter, and these spaces should be maintained throughout their stay. Elderly women, lactating mothers, pregnant women, and women with young children should be prioritised and offered space to ensure their safety and comfort.

The participants described their *lived-space* (the shelter), indicating that the shelters lacked the capacity to satisfy the basic requirements of the evacuees. During the early warning stage, the women were asked to take drinking water, dry food items, and other necessary supplies to the shelter. However, some women failed to follow these instructions because of time limitations and other overwhelming responsibilities; some did not have enough food at home because of financial constraints, while for others, it was not possible to carry these items along with their children. The participants recalled sharing their water and food with other evacuees and were soon out of supplies.

Sitting in the darkness was another frequently mentioned issue that was seen as a nuisance and hampered women's wellbeing in the shelters. Therefore, reliable measures should be adopted to provide uninterrupted water and power supply; for example, the installation of roof-harvested rainwater and solar panels should be considered for each cyclone shelter. I-6 had a similar suggestion: *Our chairman has installed some solar lights on the roads of our village. They do not need electricity. If we could install these lights at the shelter, there would be light even when we are out of electricity in emergencies.* Because the majority of the cyclone shelters are multi-purpose, and function as schools, education institutes, and/or local government/NGO offices, installing sustainable systems would reduce their utility expenditure and would be beneficial from an economic and climate perspective as well, which are also pressing concerns for Bangladesh.

From the discussion of the theme of *Being faithful* in Chapter 11, women's profound faith and belief in religion greatly supported their confidence inside the cyclone shelters, but the participants regretted not being able to offer prayer in a conventional way because of the filth and grime around them in the shelters. One of the participants believed she was being punished for not offering prayers in time, whereas a few participants were considering staying at home during the cyclone emergency because of the lack of availability of prayer space in the shelters. From the comments by I-3, it was evident that having a prayer space, even with minimum facilities, could play a significant role in restoring their wellbeing: (We need) A place inside the centre so that we can pray there without interruption. We do not need water for wudu¹⁶, we can do it with soil, but it would be great if we could have a

¹⁶ A purification process prior to entering Salah (Prayer) preferably with water, but can be done with soil in exceptional circumstances.

separate place for praying. It could help us during times of danger too. We would pray together to stop the danger upon us. A space in a corner of the women's area could be separated and marked as a prayer room, where the women could go and pray by turns. Having a formal prayer space would influence the women who were unwilling to to go the shelters because of insufficient prayer facilities, and would boost female evacuees' confidence and improve their experiences of wellbeing in the shelters.

14.2.2 Community engagement

The provisions for improvement of the cyclone shelters demonstrate the need for a designated group of people who would be held responsible for managing the shelter facilities and resources. I-6 mentioned the need for community volunteers: *If some people are recruited from here (the community), if the government tries (to involve them), everything would be organised. People can stay at the shelter peacefully.* Participant I-6 also remarked that choosing volunteers within the community for shelter management roles would be the best option since they have easy access to the shelters and households of their fellow community members:

People smoke cigarettes inside the shelter, some maybe urinate too.

Especially kids. If the evacuees know someone (from the crowd) is watching over them, they will stop doing the annoying things. If my little daughter needs to urinate, but I have two more kids to look after, so I would rather tell her to urinate inside the shelter. But if there were community volunteers (whom I could trust because I know them), they could look after my kids for

a while, and I could take the little one to the toilet. They can also identify and help the elderlies, pregnant women, and disabled people.

Because of the cultural norms of the study areas, women feel most comfortable interacting with other women, thus female community volunteers would have the capacity to effectively reach the women of the community, provide guidance, and encourage them to use their allotted shelters. Women can also play an important role in maintaining discipline and ensuring fairness within the cyclone shelters, as suggested by I-6. Community volunteers can be trained to ensure that evacuees go to the shelters allocated for their neighbourhoods, and supervise the use of toilet facilities, female spaces, and reserved spaces for women with special needs in the shelters. They can be designated as being 'in charge' of women's affairs in the cyclone shelters during cyclone emergencies, and could distribute essential items among evacuees in need and ensure a balanced distribution of available items during emergencies, in an effort to benefit the maximum number of evacuees, until the emergency subsides. This would provide an opportunity to the individual volunteers to fulfill their responsibilities as citizens by contributing to their communities in preparing for, and responding to, cyclone emergencies. Additionally, involving more women from the community in cyclone shelter management would potentially create positive social awareness of cyclone preparedness and resilience.

Women's narratives on *being compassionate* and the motivation for thinking *outside the square* highlighted the positive influence of social capital during the evacuation period and while staying in the cyclone shelters. Social capital refers to the resources embedded in an individual's social networks and can be accessed within their social networks (Lin, 1999),

which is often separated into three categories, bonding, bridging, and linking forms of social capital. Bonding social capital implies the connection among friends or family, and emotionally close individuals sharing similar beliefs and philosophies; bridging social capital exists among loosely connected individuals living in the same neighbourhood and acquaintances who share common interests; and linking social capital involves the connections of regular citizens with influential people or organisations (Adler & Kwon, 2002; Aldrich & Meyer, 2015).

Bonding social capital occupies an important place in the social lives of the women from the study areas. For example, the participants were often informed of the early warning signals by their family members and kin. Single women or women without men in the home are assisted by their relatives and friends to reach the cyclone shelters. However, the bridging relationship appears to be more functional and effective in the cyclone shelters and offers support, comfort, and ease to the women of the community. As described in the sub-themes being compassionate and being outside the square, the women were willing to help their fellow female evacuees who were only acquaintances, or got to know them from being evacuees in the same shelter. Sharing similar situations and having the conscience to help women going through hardships caused by the same event was the women's motivation to help the other female evacuees.

Although the theme *Being against the odds* highlighted that bridging social capital was not always adequate, and attempts to help often caused unanticipated challenges and embarrassing experiences for the women who provided help, the significance of such gestures and the potential of these activities was important. Islam and Walkerden (2014)

made a similar argument stating that bonding, and especially bridging, become less active after the initial emergency phase, because of poverty, conflicts, and competition among individuals, and this helps to explain some of the evacuees' lack of willingness to connect with, and receive help from, other evacuees. Engaging the community and systematically introducing awareness measures would allow the female population of the community to use their social ties and strengths productively.

The women repeatedly complained that they were neglected by government officials and deprived of relief and rehabilitation facilities offered by the government, NGOs, and other organisations. For example, I-2 expressed her disappointment about this, stating We have seen a lot of storms. The chairman here never helps us, never even offers a fist-full of rice and You know what, the chairman and members did nothing for us. I-7 recollected No one came with any relief, the chairman or members of the village did not think of us. Such experiences demonstrate a lack of coordination between the community and the concerned organisations, which needs to be improved to enhance women's experiences of the shelters. A comparative study among different communities showed that disaster recovery was more expeditious in communities with structured social capital than in communities with inconsistent social capital, even after having equivalent financial resources (Nakagawa & Shaw, 2004). Therefore, it is crucial in the study areas to raise awareness within the communities, and strengthen the already existing social capital to an extent that it would gradually lead to higher levels of community resilience, refering to the collective ability of a community to deal with catastrophic events and efficiently resume their day-to-day lives through cooperation (Aldrich, 2012).

The above discussion suggests that developing preparedness programmes to educate women by promoting existing bonding and bridging social capital, and facilitating linking social capital would be a more achievable, practical, and sustainable approach. Ensuring well-maintained cyclone shelters with the capacity to serve all the requirements of each evacuee would be unattainable in the context of the present economic and social situation in Bangladesh. Besides, with the growing population of the country, more frequent climate change-induced tropical storms, refugee populations in the coastal region, and the preexisting socio-political constraints of the country, building more infrastructure for shelters to accommodate all members of the vulnerable coastal communities and establishing sustainable facilities would be exceptionally difficult. Therefore, the women of the community should receive education and training to become accustomed to the environment of the cyclone shelters.

The women's evacuation knowledge indicated that the oft-repeated campaigns about early warning systems and evacuation, and women's lived-experiences of previous destructive cyclones had already emphasised the significance of taking refuge in cyclone emergencies. In addition, women should be educated to develop resilience by adopting mitigation measures within their communities, instead of waiting for, and relying on, outside assistance. During the interviews, the participants described experiences that demonstrated their leadership qualities and resilience. Their experiences of standing *against the odds* could inform a plan to educate the women of the community through formal training, open discussions, demonstrative sessions, and by sharing real-life experiences. While visiting the study areas, and communicating with the key informants, participants, and potential participants, it was apparent that a considerable number of local and international NGOs have been working in

the villages, and trying to bring positive change to the social and economic lives of the women by providing knowledge relevant to their lives, including cyclone preparedness and awareness. Yet, women's involvement remained very low in these activities because of the exisiting social stigma and cultural expectations of women's roles. The local authorities and/or NGOs working in the areas should find a practical way to collaborate with female volunteers to run the recommended educational programmes within the communities. The volunteers should be trained by the local experts (local authorities and NGO personnel) who would later conduct different sessions with local women. This would allow the local women to absorb information, without being intimidated by outsiders. Additionally, working together will be an opportunity for the women to form social bridging connections across communities, and effectively use these relationships while staying in the shelters.

Although a cyclone may impose threats to the entire nation, and sometimes the impact may spread beyond geographic borders, resilience towards cyclones can start from person-centered preparedness strategies. The coastal community needs to realise that they are not always in need of assistance, and have the resources to preserve their wellbeing in the shelters. Cooperation, compassion, and proper planning of shelter management can bring remarkable changes to the way women experience being an evacuee, which is possible through a well-coordinated networking system among people in the community and with local government authorities. From the interviews, it was apparent that women lacked unity as a community, and that the relationship between local government and the community was minimal to non-existent. This practice needs to be changed and continuous transparent communication needs to be established between these two groups. For this, the government should take the first initiative, as I-6 claimed: *To improve the shelter we need people from the*

government... If the government tries, everything would be organised. Finally, women should be inspired to build community resilience by solving their issues and overcoming the challenges that hampered their experiences of wellbeing in the shelters.

Chapter summary

This chapter has discussed women's conceptions of wellbeing, and their experiences of wellbeing in the cyclone shelters, both through participants' narratives and hermeneutic interpretations. The latter part of the chapter considers all the information from the research findings to suggest provisions for improvements to the cyclone shelter experiences of the female evacuees in the coastal areas of Bangladesh. The chapter connects all the themes and aspects of the research into a single thread, and attempts to draw a significant conclusion to the research.

Chapter 15: Conclusion

Chapter overview

This phenomenological study provided insights and new knowledge about women's experiences of wellbeing as they stayed in the cyclone shelters of the coastal areas of Bangladesh, and generated context-based advice that could improve women's situations in the cyclone shelters. The findings of the study will be useful for improving preparedness and understanding of the shelter situation, before the women are subjected to these difficult experiences, and to ameliorate their mental and physical health issues, and the overall conditions for them while staying in, and after leaving, the cyclone shelters. This concluding chapter summarises the key findings from this study, discusses recommendations, and proposes new and emerging questions that require further investigation and direction for future research and interventions. The findings of the research demonstrate the significance of the study in generating new and practically useful knowledge, and the recommendations and directions for future development and new interventions will inform policy-makers, planners, humanitarian personnel, and researchers. The latter section of the chapter addresses the limitations of the study, acknowledging the constraints associated with the research methods and tools adopted in this research to ensure the rigour of the study. Finally, the chapter ends with the concluding remarks of the researcher.

15.1 Key findings

In seeking to answer the primary research question and address the objectives of the study, certain discoveries were made (Fig 15.1).



Fig 25.1 The three key discoveries of the research

The following section discusses the discoveries of the research.

The existing literature concerning women and disaster, both in a global context or focusing on Bangladesh, fundamentally highlights women's vulnerability and exposure, the disproportionate effects on women from disasters, as well as highlighting interventions that might reduce the extent of their suffering. However, women's voices have remained unheard in most of the past research. Contrary to this trend, the present study has been designed with women's experiences as the foundation, with the findings being mapped depending on the women's narratives, and the lessons learnt from their experiences being reflected in the recommendations, which will inform policy-makers and influence effective decision-making to build and strengthen resilience. Recognising the significance of women's voices through

demonstrating how women's lack of voice causes them to have insubstantial links with the outside world, which consequently impacts their disaster preparedness strategies, is the most insightful discovery of this research. Since there is a global knowledge gap in understanding what women experience in disasters, this discovery not only informs disaster planning and response in Bangladesh, but is also relevant to other countries around the world.

The study identifies and describes how women's societal position, and *being* in the community, act as contributing factors in reducing their capabilities as an individual, and impact their wellbeing in the cyclone shelters. *Being understood as a woman* in this cultural context as it does in others, imposed several restrictions and responsibilities upon them, which were directly and indirectly associated with their challenges, misfortunes, and negative emotions, including during their experiences in the shelters. However, the women's positions within their community were willingly accepted, practiced, and promoted by women themselves, and the underlying traditions and religious views were deeply embedded in the community, demonstrating the need for provisions to improve women's situations in the shelters that did not contradict their beliefs, and which would harmonise with their cultural and spiritual mindset. This discovery acknowledges women's reality within their *lifeworld* and frames the necessity of suggesting provisions for improving their experiences in the shelters without contravening their socio-cultural norms and religious ideology.

- The study also uncovers the potential of community leadership and mentorship among women, to educate the women of the coastal community and build community resilience. This discovery is crucial since it generates the possibility of building community resilience by raising women's awareness, and preparing them to support wellbeing through communication and cooperation in the cyclone shelters in times of emergencies. While the greater part of the participants' narratives consisted of their negative experiences, experiences of reconciliation, mutual cooperation, taking up responsibilities and tasks voluntarily, and selfless acts, gave the study a different angle, and underpinned the idea of *pain into power and wounds into wisdom*.

These discoveries reflect the need for more disaster research that focuses on women's experiences, both in Bangladesh and globally. The findings of the study can act as a reference point for similar research in other geographical settings, and assist in navigating through, and selecting, particular experiences and issues as the research focus for new disaster management strategies and interventions in coastal Bangladesh. Several recommendations derived from the findings and suggestions for future research are described in the following sections.

15.2 Recommendations

This phenomenological research has provided new knowledge and insights into women's lived-experiences while staying in the cyclone shelters. As Rokkas (2016) remarked in her doctoral research regarding the lived-experience of public health nurses during disasters, it is important to engage with individuals who have had an *actual* experience, along with the policy-makers and associated agencies, when developing policy for the betterment of a group

of affected people. Only those who have experienced the phenomenon can articulate the personal meanings they find in the experience. These meanings, drawn into themes that emerge from the experiences of the affected population, can be used to inform and improve potential preparedness plans and practices. The importance of Rokkas's statement for this study, is that while there have been prior cyclone-related studies in the context of coastal Bangladesh, few have highlighted women's situations in the cyclone shelters. The existing literature does discuss women's vulnerability, statistics of women's mortality rates, illness, assault, and violence, and predicted or identified the reasons behind women's increased vulnerability and exposure in the cyclone shelters; yet, women's understandings and perspectives of the real-life shelter experiences remained unexplored. Therefore, addressing this knowledge gap seemed to be a necessary requirement to effectively, and in a nuanced way, improve women's overall experiences in the cyclone shelters.

The phenomenological insights and existential reflections of the participants, combined with the researcher's insights and understandings, lead to several contextualised, comprehensive, and sustainable recommendations to improve women's situation in the cyclone shelters, which are discussed in the following sub-sections.

15.2.1 Reviewing policies and plans and establishing a *community-centred* resilience plan As highlighted in Chapter 2, while the enacted disaster management policies in Bangladesh have many positive factors considering disaster preparedness, mitigation, and resilience strategies, the existing research suggested that the bureaucratic system, coordination gaps among administrative units, and rules favouring government personnel over the common people, result in mismanagement, and loopholes in the system which disable the

effectiveness of the existing policies (R. Islam & Walkerden, 2017; A. Parvin & Johnson, 2015; Raihan et al., 2010). The community-focused adaptation programme introduced by BCCSAP did not progress in disaster-prone areas as anticipated because the government did not consider forms of social capital, including religious values and cultural norms, in mandating the policies (R. Islam & Walkerden, 2017; Raihan et al., 2010). This also explains the reason behind several participants' claims of being unaware of the existence of ongoing community-based preparedness programmes. The effectiveness and success of the government-introduced programmes for DRR would remain uncertain if the mass population of the targeted community was not being reached, and therefore, necessary changes should be made in the existing system to ensure better outcomes. Since the 19 participating women had little to no understanding of the central policies and plans that have been in effect as part of national disaster management strategies, which are expected to build resilience in the coastal region of the country, it is assumed that the policies are not working well enough to achieve the expected outcomes. Therefore, the inclusion of the community to inform policy would make them more effective in achieving disaster preparedness and resilience goals in the coastal areas of Bangladesh.

The existing policies and plans are principally top-down approaches, where government develops policies and plans based on empirical or statistical information and may not be adequately customised to suit the needs of local communities. As a result, practical and effective provisions in DRR plans, such as community-focused adaptation, could not make the expected progress because the plans were not comprehensible by the local authorities in the villages (Parvin & Johnson, 2015) who were expected to mobilise and supervise the campaigns within their respective administrative areas (Disaster Management Bureau,

2010a). To mitigate this problem, cyclone-related policies and plans should also be developed through bottom-up processes that complement the existing top-down approaches and take account of local literacy, needs, and preferences.

At present, the National Plan for Disaster Management of Bangladesh comprises separate disaster management plans for different administrative levels, including at the union level. However, the plans are primarily focused on the objectives, aims, and roles of the concerned personnel, whereas insights into local government roles and provisions for community involvement are seen as insignificant (Disaster Management Bureau, 2010a; R. Islam & Walkerden, 2017). Evidently, the top-down policies have not gained traction locally, hence bottom-up approaches may overcome problems in the application of these central policies and inform new policies and approaches. Because coastal communities have been experiencing cyclones and will be the ones to face more cyclone emergencies in the future, their experience and knowledge of surviving these emergencies should be recorded, understood, and evaluated before introducing a policy.

In the narratives, I-4 and I-7 stated that the experience of staying in the cyclone shelters was *beyond description*, while I-2 remembered the emotions she felt in the shelter as *beyond explanation*, which highlights the necessity of acknowledging their experiences since only they could comprehend the actual situation they endured in the shelters. Therefore, the existing plans and policies can be improved by incorporating bottom-up consultation and taking women's experiences into account.

Over the years, the casualty rate of women has remained higher than that of men, primarily because women did not always follow disaster evacuation plans and go to the cyclone shelters during cyclone emergencies. Women suffered disproportionately, experienced traumatic incidents, and faced discrimination, which also affected their evacuation decisions and their experience of wellbeing in the shelters. If the women from the coastal areas are discouraged from using the cyclone shelters, achieving and maintaining lower death and casualty rates for women will not be possible. Moreover, from the interviews, it was apparent that the women assisted their children and elderly family members to reach the cyclone shelters; thus, bolstering women's interest in going to the shelter in emergencies would also help to ensure the safety of children and the elderly of the communities. Therefore, women's roles within the community should be acknowledged, and the significance of their identified needs and strategies to ensure their physical, cultural, and spiritual safety as evacuees, should be reflected in policies and plans. New learnings can be attained from their experiences through a bottom-up approach to improve the situation for women as well as for children and the elderly who depend on the women of their households.

To include the community's voice in disaster management policy, the roles and responsibilities of local government should be reviewed and modified in the existing policy guidelines. Since the local government personnel of the *unions* are generally local inhabitants who speak the local dialects, they could play a major role in linking cyclone-related information to the community and incorporating community perceptions, their expectations in cyclone emergencies, and in translating the learnings from their lived-experience into existing policies and plans. The roles and responsibilities of other government and administrative bodies, including at the sub-district and district levels, should also be reviewed to ensure their effective involvement in delivering union-level information to their administrative systems.

15.2.2 Fulfiling women's requirements within the shelter environment

While describing women's experiences as evacuees in the shelters, the women mentioned several shortcomings they faced because of *being* a woman in the shelters. For example, the women described being fearful and experiencing hostility in the shelters because of their social and cultural standing and the prevailing environment of the shelters, feeling threatened by unknown male evacuees, and because they were unable to obtain information about the ongoing situation outside of the shelters. To minimise these struggles, the shelter environment should be improved to offer safe accommodation for female evacuees. Although experiencing emotions such as fear in the shelters is a rational reflex during a cyclone emergency, action should be taken so that women do not feel unsafe, threatened, and experience adverse incidents that make them uncomfortable and hamper their sense of wellbeing. Supervision of the shelters to ensure security, safety, and privacy for women should be practiced to avoid undesirable incidents such as sexual assaults, harrassment, and arguments.

The participants recollected facing embarrassing situations because they could not get sanitary napkins in the shelters while menstruating; others were overwhelmed by not being able to provide food for their hungry children; and some remembered suffering from fever, cold, and/or diarrhea and surviving through their sickness without any medications. To mitigate these issues, the availability of items such as non-perishable snacks for children, sanitary napkins, basic medicines, first aid, and other hygiene requirements should be organised and stored in a safe place within all the buildings that are designated as cyclone shelters in the coastal areas. Having these items would lessen the struggles of the evacuees until relief and recovery supplies arrive. There should also be a post-event evaluation to

survey evacuees to identify any remaining shortfalls or needs for a further review of policies and plans.

However, the availability of the needed facilities, and effectively meeting women's needs would not necessarily guarantee women's wellbeing in the shelters if they fail to access the provided amenities and resources. Therefore, women should be educated on how to be efficient in the shelters to look after themselves, their families, and other female evacuees, by strengthening communication and building bonding among the women of the coastal community. This requires a wholistic community strategy and the involvement of a broad range of community stakeholders, including local government leaders, faith leaders, NGOs, and the women themselves. Community-centred plans and programmes should be adopted, an approach that is discussed in the next sub-section.

15.2.3 Educating women to build community resilience

From the narratives, it was evident that the women's focus on preparedness measures remained confined to the interpretation of early warning signs and evacuation during cyclone emergencies. However, when the women finally reached the shelters after battling with the subsequent indecision, fears, responsibilities, and other challenges, they felt unwelcome and incompetent inside the overcrowded and chaotic shelters, without any coping strategies to deal with the adversities associated with being a female evacuee.

It is crucial for the women of coastal Bangladesh to receive appropriate education regarding their roles, rights, strengths, and vulnerabilities during a cyclone emergency. The study demonstrated that the women from the study areas evidently mastered how to endure, but not to adapt easily in, a changing situation. Consequently, the women found it difficult to adjust

to the challenging and unusual environment in the shelters. The poor conditions in the shelters and women's social and cultural limitations put them into disadvantaged positions as evacuees. The women faced hostility because of a lack of knowledge of cohabitating with unknown people, juggling several challenges, and being afraid due to a lack of information about the ongoing situation. Therefore, the women should be educated and trained to learn about evacuation behaviours and coping strategies to improve their experiences in the shelters. Common information such as the importance of personal health and hygiene, mental health, children's health, caregiving, communication norms, and attitudes should be addressed in the training sessions, and women should be encouraged to practice the learnings while staying in the shelters. Additionally, women should be allowed to discuss their lived-experiences in the shelters in an attempt to find solutions to the challenges they faced in the past.

The suggested provisions in Chapter 14, *The wellbeing of female evacuees and provisions for improvement* of forming women's groups where women would be involved in different activities including discussion sessions, formal training, demonstration sessions, and provided with a platform to build a network with the other women from the communities, could prove to be effective in enhancing women's capacities and improving their situation as female evacuees.

The theme *Being against the odds* demonstrated how women stand up for each other on compassionate grounds during emergencies and under stress, and even undertake a leadership role in a few cases. The women who are willing to volunteer should be motivated and trained for mentorship roles to influence and guide other women in their community. Different

women's groups can be formed without conflicting with their household responsibilities and with the support of their male custodians, since many participants stated not being able to participate in different activities within the community, such as small business initiatives and microfinance projects, because of unsupportive family members and household chores. Patalagsa, Schreinemachers, Begum, and Begum (2015) demonstrated how a homestead gardening project successfully conducted a training programme by prioritising the cultural settings and social constructions of rural Bangladesh, and recognising the different roles of men and women within the community. Such programmes can be taken as a model to design and introduce training sessions and develop women's groups, without unsettling women's perceptions of their *lifeworld*.

These groups can be an ideal platform for women to share their experiences as evacuees, including the insecurities and challenges they faced, and to synthesise viable solutions for these issues in their coastal communities. Additionally, such groups would give women an opportunity to increase their communication and connections within their communities and to build social bonding, which could be a useful resource in a cyclone emergency. In terms of improving women's experiences of wellbeing in the cyclone shelters, identifying solutions for their issues by themselves seems to be more effective, since many women's experiences are driven by their assumptions and past experiences, so only women with similar experiences would be able to relate. Additionally, having good communication among the women of the community could provide a sense of unity and belongingness which would potentially boost women's confidence and improve their state of wellbeing inside the shelters. While conducting the education and training sessions, women with leadership potential should be identified and offered integrated training to enhance their personal

qualities and prepare them for leadership positions in community-centred disaster resilience strategies.

The previously discussed research on home gardening suggests that once women started growing vegetables, women gradually learned to make decisions on crop selection, planting, and harvesting times. In the home gardening training sessions, women were also being taught about the nutritional value of different vegetables, which they successfully applied in their daily lives and which brought positive change to their food habits and eventually their lifestyles. Among the trained women, some were more confident and showed leadership qualities. They formed small groups with people of the village community who could not participate in the training programme, and so volunteered to train them in homestead gardening (Patalagsa et al., 2015). The success of the home gardening project validates the recommendation to educate women to build resilience, and indicates that the suggested measures of forming small discussion groups, training, and learning sessions would potentially train women effectively and develop leadership skills among some women within the coastal communities.

In this socio-cultural setting, women's commitment to their households might discourage them from participating in such activities. Therefore, practical action should be taken to ensure the maximum participation of women. Religion and the role of faith in women's lives can play a significant role in shifting women's perceptions of participating in cyclone preparedness activities and influencing them to participate in, and lead, such initiatives. The religious leaders of the communities can deliver religious messages, such as *Life is a gift from the Creator that we are obliged to care for* and *Someone who will help his/her peers and*

defends their honour, will be rewarded to inspire women to evacuate in cyclone emergencies, get involved in women's groups, receive proper education and training to help others, and build community resilience. Yet, more research is required to identify effective measures to include women in community-centred disaster preparedness plans and to utilise the women of the community as human resources in the cyclone shelters during cyclone emergencies.

15.3 Further research implications

The main findings from the narratives highlight how being understood as a woman influences being a woman during a crisis, and also underpins women's increased vulnerability and subsequent exposure to risk, which is often directly or indirectly triggered by the genderbiased mindset that has been deeply embedded within the community. This study has identified that women's lived-worlds have been fundamentally informed by their understanding of being a woman, which in turn has influenced their experiences in a crisis, and of being helpless and overwhelmed, sensing hostility, experiencing struggles and challenges, and being fearful, uncertain, faithful, compassionate, and going outside the square. Women's lived-worlds are greatly influenced by their commitment towards their households and family members, or as discussed in the previous chapter, their efforts to fulfil their responsibilities as women, as well as to protect their own identities within the community.

Future research should develop deeper understandings of women's experiences considering their ages, education qualifications, marital status, levels of financial independence, and other variables to distinguish patterns of women's changing perceptions of their life situations, and how their philosophies of life have an impact on their experiences as evacuees in the cyclone shelters. This may serve to develop an enhanced understanding of women's roles and

potential in community-centred disaster preparedness plans and in building community resilience. Similar research should also be undertaken to investigate whether these philosophies of life exist among other groups of women from different parts of the coastal community, including indigenous communities and *Rohingya* refugees, and to design practical adaptation approaches which synchronise with the community context.

As highlighted in the *Key findings* section, women's acceptance of their socio-cultural conditions and lifestyles should be acknowledged and incorporated in planning and policies to ensure maximum inclusion of women from the coastal communities in building community resilience. To develop a community-centred preparedness approach and empower women as human resources in cyclone emergencies without challenging women's *dasein* and *lifeworlds*, further research with a focus on sociological characteristics, behaviourial patterns, and religious practices needs to be undertaken. The findings of this research may pave the way for future research to develop practical and sustainable implementation by studying the main findings individually, or in clusters. For example, the concept of *Being in hostile situations*, *Experiencing challenges*, *Being fearful*, and *Being uncertain* may assist policy-makers to consider women's difficulties as evacuees, and to incorporate adaptive and mitigative strategies within disaster planning and policies, which would benefit the female population of coastal Bangladesh.

Research on how *Being faithful* helped women to restore their mental wellbeing, remain optimistic, and motivate them to show acts of compassion, may provide a greater understanding of the values women preserve in their conscious and sub-conscious mind. Women's relationship with their religion may establish an operational path to use their

spiritual beliefs as a tool to inspire them to come forward and get involved with a community resilience strategy. Future research should also explore how women's faith can be used to raise awareness, build communication and bonding among community members, and practice their rights and responsibilities as evacuees, and in a broader sense, as members of their communities. Despite being faithful, women described being *uncertain* while staying in the shelters as evacuees, and wondered about their unpredictable futures, while others claimed to keep their faith firm and accept their fate. The relationship between being faithful and accepting fate following a cyclone, and women's feelings of *Being uncertain* should also be investigated to explore the complex meanings and understandings that underpin women's actions, behaviours, and wellness as evacuees. This understanding may unearth new ideas to educate and counsel women to understand and respond to their situations as evacuees and to improve their shelter experiences.

The finding of *Being against the odds* was intriguing and could be investigated further to ascertain the capacity of local women in community leadership and volunteer roles. Women's spontaneous responses as individuals and as part of a community in the shelters could be evaluated as case studies, and their ideas could be applied in founding new disaster mitigation activities and resilience strategies. Such examples could be further investigated to identify potential community-centred approaches that would offer maximum involvement and effective learning among women. More research should be initiated combining *Being understood as a woman* within the community and women's capabilities to stand against the odds to develop mentorship programmes and a leadership training curriculum that would complement the socio-cultural setting and potentially strengthen community resilience in coastal Bangladesh.

As discussed in the *Key findings* section, the women's voice has been noticeably absent in global disaster research, and since the literature in Chapter 3 prominently exhibited the disadvantaged position of women in disasters from different ethnicities, socio-cultural settings, and financial situations, more experience-focused research is called for to understand women's realities in disasters and to identify the underlying reasons for their negative experiences in disasters.

Finally, as the world has been experiencing a global pandemic since 2019, it can be assumed that the whole world has realised the necessity of having contingency plans in place that consider a range of likely and unlikely risk assumptions. Tropical cyclone *Amphan* struck the southwestern coastal region of Bangladesh amidst the global pandemic, highlighting the importance of developing preparedness plans for events that might occur simultaneously with cyclone emergencies. Nanthini and Nair (2020) stated that crisis shelters have been facing capacity-related issues with social distancing in place, which indicates the pressing challenge Bangladesh faces to accommodate a large population in the shelters, which were already described as overcrowded by the participants.

Additionally, women have been identified as disproportionately vulnerable from the secondary effects of the pandemic, by being exposed to domestic violence, unemployment, and burdened with unpaid domestic work and care responsibilities, which are all likely to be amplified in emergency situations (de Paz, Muller, Munoz Boudet, & Gaddis, 2020; Nanthini & Nair, 2020; World Health Organisation, 2005). This suggests that female evacuees are likely to be exposed to greater risks in the cyclone shelters, and therefore, developing gender-sensitive contingency plans for unforeseeable events is essential to ensure women's safety

and wellbeing in cyclone emergencies. It may seem unreasonable to think ahead and take preparedness measures for an occasional extraordinary global phenomenon, when the existing disaster policies and plans need improvement to restore coastal people's experiences of wellbeing in cyclone emergencies. Nevertheless, the country needs to be proactive given the fact that emergency events may occur at any time and often without warning.

15.4 Limitations

This section describes the limitations of the research regarding the methodological constraints of interpretive research and the limitations of the researcher in relation to subjective bias that may have impacted the research findings and analysis to some extent.

15.4.1 Limitations of the study

The study interviewed 19 women living in the coastal areas of Bangladesh, who participated in two in-depth interviews and shared their lived-experiences during evacuation to a cyclone shelter during a cyclone emergency. The number of participants was small compared to the total female population of coastal Bangladesh. Investigations of lived-experiences typically employ small groups of participants to analyse and understand the more generalisable themes that characterise the experience. Consequently, the lived-experiences uncovered in this research may not reflect the experience of any other particular woman and is, in any case, specific to the experience of this phenomenon in this context. However, it is likely that the themes identified are common and shared across many women who have been evacuated to cyclone shelters in Bangladesh.

15.4.2 Limitations of the researcher

Being a Bangladeshi woman myself, and being acquainted with the socio-cultural background of the women can be regarded as a limitation of this research. My innate passion and feeling towards the women may have contributed to the questions that were asked. My emotions could also have influenced my observations and interpretations, as I may have focused on the experiences that felt more significant to my own conscience, and my ideas may have graduated to those particular experiences rather than to others. Nevertheless, I pursued the research through a phenomenological philosophy that required my cognisance, preconceptions, and vigilance to remain mindful while interpreting the participants' narratives, and in this way, to stay *true* to their meanings during the hermeneutic engagement.

Prior to starting the data collection with the participants, I interviewed two of my associate supervisors with a similar set of questions, to practice the skill of being mindful. These sessions were helpful in providing an understanding of how to be mindful and maintain mindfulness while in conversation with research participants. Several discussion sessions with my supervisors on phenomenological philosophy, and the phenomenological approach to research, time, memory, and truth, as well as my personal experience of interpretive research, assisted me to strengthen my phenomenological knowledge as a researcher to apply to this study. A comprehensive literature review was undertaken in preparation for the collection and analysis of the data. The literature was reviewed to provide a robust background to addressing the research question, but not to lead the research process. In addition, all aspects of the research, including data collection, data analysis, and the writing of the thesis were reviewed and discussed with the supervisory team regularly throughout the

candidature, which effectively helped to attain and maintain the perspective required for the project..

15.5 Final comments

In conclusion, the women of coastal Bangladesh follow distinctive socio-cultural norms and traditions that have been sown in their minds by the community they live in. Women's disadvantaged position within their communities, and acceptance of the discrimination they experienced contributed to women's dasein and their lifeworld, which was predominantly occupied with their household roles and responsibilities, motherhood, caregiving, obedience towards their male custodians, and religious practices. The same factors of women's dasein played significant roles in women's wellbeing in the cyclone shelters. Women instinctively felt exposed and vulnerable in the absence of a male family member during an emergency. Women's struggles continued when they were forced to stay in the cyclone shelters without their male guardians. As they are generally dependent on their male guardians in their day-to-day lives, the women found themselves in more challenging situations to make prompt decisions or carry out a task without the direction of their male guardian.

While staying in the shelters, the conventional high expectations of looking after their children, taking care of the elderly, providing food, and abiding by socio-cultural norms made women relatively helpless and overwhelmed. Verbal and sexual harassment, fear of being harmed by strangers, disputes with other evacuees, and discrimination in receiving relief and accessing toilet facilities were frequent incidents, which had a significant impact on women's wellbeing in the shelters, and often were the causal factors for women's delayed evacuation and reluctance to use the shelters in cyclone emergencies. Women constantly dealt with a number of negative emotions including a fear of dying, the fear of facing an unforeseeable

future, uncertainty, and despair, which were sometimes triggered by real threats, but also by their past experiences or their assumptions. Nevertheless, these negative emotions negatively affected their sense of wellbeing as evacuees in the cyclone shelters.

Spirituality, another important element of women's *dasein*, successfully contributed to restoring peace and potentially fabricating a sense of relief among the female evacuees. Apart from prayer, the religious beliefs of the women influenced them in showing compassion towards other evacuees, enkindling the idea of community resilience through social bonding and connection with the evacuees. A few of the participants remembered their lived-experiences from a rather positive viewpoint, and mentioned their selfless contributions towards their community and their fellow evacuees. Their stand against the odds demonstrates the possibilities of improving women's experiences of wellbeing in the cyclone shelters through introducing community-centred disaster preparedness strategies, educating women through mentorship, and training local women to undertake leadership positions in times of cyclone emergencies. Although the greater part of this study comprises the struggles and challenges the women of coastal Bangladesh have experienced over the years, the latter sections suggest potential opportunities for women to improve their situation as evacuees by themselves, and to turn their pain into power, and their wounds into wisdom.

Appendix 1- Ethics approval

21/05/2021

Mail - Tazrina Chowdhury - Outlook

8197 ETHICS final approval notice (19 December 2018)

Human Research Ethics <human.researchethics@flinders.edu.au>

Wed 19/12/2018 2:51 PM

To: Tazrina Chowdhury <tazrina.chowdhury@flinders.edu.au>; Paul Arbon <paul.arbon@flinders.edu.au>; Malinda Steenkamp <malinda.steenkamp@flinders.edu.au>; Mayumi Kako <mayumi.kako@flinders.edu.au>; Kristine Gebbie <kristine.gebbie@flinders.edu.au>

Dear Tazrina Jahan,

The Deputy Chair of the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University considered your response to conditional approval out of session and your project has now been granted final ethics approval. Your ethics approval notice can be found below.

APPROVAL NOTICE

Project No.:	8197		
Project Title:	Exploring Women's E Bangladesh	experience of Wellbeing in the Cy	clone Shelters of
Principal Resear	cher: Ms Tazrina Ja	han Chowdhury	
Email:	chow0137@fl	inders.edu.au	
Approval Date:	19 December 2018	Ethics Approval Expiry Date:	26 June 2023

The above proposed project has been approved on the basis of the information contained in the application, its attachments and the information subsequently provided.

RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

1. Participant Documentation

Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:

- all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.
- the Flinders University logo is included on all participant documentation (e.g., letters of Introduction, information Sheets, consent forms, debriefing information and questionnaires with the exception of purchased research tools) and the current Flinders University letterhead is included in the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialling codes for all telephone and fax numbers listed for all research to be conducted
- the SBREC contact details, listed below, are included in the footer of all letters of introduction

Appendix 2- Letter of introduction (Key informants)



Torrens
Resilience Institute

Box 15, Mark Oliphant Building Laffer Drive, Bedford Park South Australia 5042 +61 8 8201 8788 tri@flinders.edu.au www.torrensresilience.org

Date:

LETTER OF INTRODUCTION

(For the key informants that may include government officials, employees and/or representatives of international/ local NGOs and voluntary organizations)

Dear

This letter is to introduce Tazrina Jahan Chowdhury, who is a PhD student of Torrens Resilience Institute at Flinders University. She will produce her student card, which carries a photograph, as proof of identity.

She is undertaking research leading to the production of a thesis or other publications on the subject of Exploring Women's Experience of Wellbeing in the Cyclone Shelters of Bangladesh.

She would like to invite you to assist with this project by agreeing to be involved and suggesting individuals who may agree to participate in the research interviews. You will play the role of key informant, having good knowledge on the study area and local population and your identity will remain confidential. You do, of course, have the freedom to refuse to provide any assistance without any further explanations.

Please note that the researcher is only seeking suggested contacts and will choose the participants on her own conscience. She will not disclose the identities of selected participants. Be assured that the participants will be informed clearly about the purpose and aim of the research and each participant will give verbal consent after the researcher reads out the terms and conditions of participation including confidentiality and discontinuation of participation.

Any enquiries you may have concerning this project should be directed to me at the address given above or by telephone on <u>+ 61 418 856 560</u> or e-mail: <u>paul.arbon@flinders.edu.au</u>.

Thank you for your attention and assistance.

Yours sincerely

Professor Paul Arbon AM, FACN, FAAN Matthew Flinders Distinguished Professor Director, Torrens Resilience Institute Flinders University Sturt Road Bedford Park South Australia 5042 GPO Box 2100 Adelaide SA 5001 This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +618201 3116 or by email human.researchethics@flinders.edu.a

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Appendix 3- Information sheet





Box 15, Mark Oliphant Building Laffer Drive, Bedford Park South Australia 5042 +61 8 8201 8788 tri@flinders.edu.au www.torrensresilience.org

Information Sheet

Description of the Study

I am Tazrina Jahan Chowdhury. I am a doctoral student at Flinders University in Australia. I am here to talk to you about your experiences while you were staying in a cyclone shelter. I will use the information you give me to write about your experiences. This will help to improve for the experience of women in evacuation shelters in future.

This study is the data collection part of my PhD Thesis research focused on "Women's Experience of Wellbeing in the Cyclone Shelters of Bangladesh". Tropical cyclones are very common in Bangladesh. Several cyclones struck causing casualties, loss and damage of properties in the past years and cyclones will continue to impact on coastal Bangladesh. The cyclone shelters have play an important role in saving lives during these emergencies. Generally, women are more vulnerable in the face of any disaster and there is evidence that women are a more vulnerable group in the environment of the cyclone shelters. It is important to understand, from the women's perspective, what it is like to be an evacuee in a shelter and therefore in what ways this experience can be improved.

Purpose of the study

The objectives of the research are to:

- Understand what it is like to be a woman evacuated from home and accommodated in a Cyclone Shelter in Bangladesh.
- Identify recommendations for the provision of safe Cyclone Shelters for women which promote their wellbeing.

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Appendix 4- Letter of introduction (Participants)



Torrens

Box 15, Mark Oliphant Building Laffer Drive, Bedford Park South Australia 5042 +61 8 8201 8788 tri@ffinders.edu.au www.torrensresilience.org

Date:

LETTER OF INTRODUCTION

(For women of the study area who are adults and have experience staying in the cyclone shelters during emergencies)

Dear.....

This letter is to introduce Tazrina Jahan Chowdhury, who is a PhD student of Torrens Resilience Institute at Flinders University. She will produce her student card, which carries a photograph, as proof of identity.

She is undertaking research leading to the production of a thesis or other publications on the subject of Exploring Women's Experience of Wellbeing in the Cyclone Shelters of Bangladesh.

She would like to invite you to assist with this project by agreeing to be involved in two interviews which cover certain aspects of this topic. No more than 50 minutes on two occasion(s) would be required. Be assured that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis, report or other publications. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

Since she intends to make an audio recording of the interview, she will seek your consent, on the attached form, to record the interview, to use the recording or a transcription in preparing the thesis, report or other publications, on condition that your name or identity is not revealed, and to make the recording available to other researchers on the same conditions.

Any enquiries you may have concerning this project should be directed to me at the address given above or by telephone on + 61 418 856 560 or e-mail: paul.arbon@flinders.edu.au.

Thank you for your attention and assistance.

Yours sincerely

Professor Paul Arbon AM, FACN, FAAN Matthew Flinders Distinguished Professor Director, Torrens Resilience Institute Flinders University Sturt Road Bedford Park South Australia 5042 GPO Box 2100 Adelaide SA 5001

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +618201 3116 or by email human.researchethics@flinders.edu.a

Appendix 5- Interview schedule





Box 15, Mark Oliphant Building Laffer Drive, Bedford Park South Australia 5042 +61 8 8201 8788 tri@ffinders.edu.au www.torrensresilience.org

Interview Schedules

Interview One: Semi-structured

This interview will build rapport between participants and the researcher and obtain initial information about women's experience in the cyclone shelters.

A. Ice breaker questions/ queries:

- Tell me about yourself and your family.
- How long have you been living in this area? What is it like?
- Involvement with social and community organizations, family and household duties or other activities.
- What kind of work does your family do and how do you sustain yourselves?
- What is your understanding of the idea of "wellbeing"
- B. Prompting questions/ queries regarding wellbeing and experiences in cyclone shelters:
- What is it like to experience a cyclone?
- What is your experience of the cyclone shelters?
- Describe your positive and negative experiences regarding wellbeing while staying in the cyclone shelters.
- C. Concluding the first session and reminding about the second interview.

Interview Two: Semi-structured

This interview will focus on exploring in more detail the personal experiences of women while staying in the shelters and discuss their idea of "wellbeing" while staying in the shelters.

- Please share anything about your cyclone experience that crossed your mind when you reflected on our first conversation.
- What were the most meaningful experiences during your stay in the shelters and how did they affect you?
- Describe any particular incident or experience and how it affected your sense of wellbeing?
- In the first interview you discussed (to be identified during first interview). Can you tell me more about that experience and why it was meaningful or important?

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +618201 3116 or by email human.researchethics@flinders.edu.au

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Appendix 6- Consent form for 1st interview





Box 15, Mark Oliphant Building Laffer Drive, Bedford Park South Australia 5042 +61 8 8201 8788 tri@flinders.edu.au www.torrensresilience.org

Verbal Consent Form for Interview 1

I am Tazrina Jahan Chowdhury, PhD Student of Flinders University. I am conducting a research study on Women's Experiences of Wellbeing in the Cyclone Shelters of Bangladesh. You are being requested to participate in this research project.

- 1. You are over the age of 18 years and have understood the purpose of the study.
- 2. You have listened and understood all the information provided in the information sheet.
- 3. Details of procedures and any risks have been explained to your satisfaction.
- 4. You agree to audio recording of your information and participation.
- You were given the opportunity to discuss participation with a friend or family member (if needed).
- 6. You understand that:
- You may not directly benefit from taking part in this research.
- You are free to withdraw from the project at any time and free to decline to answer particular questions.
- While the information gained in this study will be published, you will not be identified, and individual information will remain confidential.
- You may ask that the recording be stopped at any time, and you may withdraw at any time from the session or the research without disadvantage.
- 7. You agree to the audio record and/or transcript being made available to other researchers who are not members of this research team, but who are judged by the research team to be doing related research, on condition that your identity is not revealed.

Consent Section

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +618201 3116 or by email human.researchethics@flinders.edu.au

Appendix 7- Consent form for 2nd interview





Box 15, Mark Oliphant Building Laffer Drive, Bedford Park South Australia 5042 +61 8 8201 8788 tri@flinders.edu.au www.torrensresilience.org

Verbal Consent for Interview 2

I am Tazrina Jahan Chowdhury, PhD Student of Flinders University. I am conducting a research study on Women's Experiences of Wellbeing in the Cyclone Shelters of Bangladesh. You already attended the 1st interview session and today you are being invited for the 2nd session.

- 1. You are over the age of 18 years and have understood the purpose of the study.
- 2. You have listened and understood all the information provided in the information sheet.
- 3. Details of procedures and any risks have been explained to your satisfaction.
- 4. You agree to audio recording of your information and participation.
- You were given the opportunity to discuss participation with a friend or family member (if needed).
- 6. You understand that:
- > You may not directly benefit from taking part in this research.
- You are free to withdraw from the project at any time and free to decline to answer particular questions.
- While the information gained in this study will be published, you will not be identified, and individual information will remain confidential.
- You may ask that the recording be stopped at any time, and you may withdraw at any time from the session or the research without disadvantage.
- 7. You agree to the audio record and/or transcript being made available to other researchers who are not members of this research team, but who are judged by the research team to be doing related research, on condition that your identity is not revealed.

Consent Section

Do you wish to participate? Record Subject's response:	Yes	No
Time and date of recording: .		
Researcher's name Researcher's signature		

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +618201 3116 or by email human.researchethics@flinders.edu.au

Appendix 8- Confidentiality agreement





Box 15, Mark Oliphant Building Laffer Drive, Bedford Park South Australia 5042 +61 8 8201 8788 tri@flinders.edu.au www.torrensresilience.org

Confidentiality Agreement

I, ______, voluntarily agreeing to act as a local contact for the women participating in the research project "Exploring Women's Experience of Wellbeing in the Cyclone Shelters of Bangladesh", conducted by Tazrina Jahan Chowdhury, a PhD student at Flinders University. Furthermore, I agree,

- 1. To respond to the participants immediately after they reach to me for assistance.
- To transcribe the conversation with a participant in brief and/ or summarize a written document (text message) from a participant for future actions.
- To hold in strictest confidence the identification of any participant that may be revealed during their conversation or written communication with me.
- To send the complaints or comments to the researcher and request to take necessary measures
- To delete all electronic files containing study-related documents from my computer hard drive and any backup devices.

I am aware that I can be held legally liable for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information which I learned while acting as a local contact.

Local Contact's name:	
ocal Contact's signature:	
Date:	

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on +618201 3116 or by email human.researchethics@flinders.edu.au

Appendix 9- Ethics modification approval

21/05/2021

Mail - Tazrina Chowdhury - Outlook

8197 ETHICS modification No.1 approval notice (18 March 2020)

Human Research Ethics <human.researchethics@flinders.edu.au>

Wed 18/03/2020 6:54 PM

To: Tazrina Chowdhury <tazrina.chowdhury@flinders.edu.au>; Paul Arbon <paularbon@flinders.edu.au>; malinda.steenkamp@protonmail.com <malinda.steenkamp@protonmail.com>; Mayumi Kako <mayumi.kako@flinders.edu.au>; Kristine Gebbie <kristine.gebbie@flinders.edu.au>; Kristine Gebbie <Gebb0001@flinders.edu.au>

2 attachments (185 KB)

8197 modification request No.1 (28 February 2020); 8197 modification request No.1 - Additional Info PROVIDED (10 March 2020);

Dear Tazrina Jahan,

The Chairperson of the <u>Social and Behavioural Research Ethics Committee (SBREC)</u> at Flinders University has reviewed and approved the modification request that was submitted for project 8197. A modification ethics approval notice can be found below.

MODIFICATION	(No.1) APPROVAL NOTICE
Project No.:	8197
Project Title:	Exploring Women's Experience of Wellbeing in the Cyclone Shelters of Bangladesh
Principal Researche	Ms Tazrina Jahan Chowdhury
Email:	chow0137@flinders.edu.au
Modification Approval Date:	18 March 2020 Ethics Approval Expiry Date: 26 June 2023

I am pleased to inform you that the modification request submitted for project 8197 on the <u>28 February 2020</u> has been reviewed and approved by the Chairperson of the Committee. A summary of the approved modifications are listed below. Any additional information that may be required from you will be listed in the second table shown below called 'Additional Information Required'.

Approved Modifications		
Extension of ethics approval expiry date		
Project title change		
Personnel change		
Research objectives change		
Research method change		
Participants – addition +/- change		

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