PREVALENCE OF DISABILITY AMONG THE ROHINGYA REFUGEES IN BANGLADESH

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This work has not previously been accepted in substance for any degree and isn't concurrently submitted in candidature for any degree. This dissertation is being submitted in partial fulfillment of the requirements for the degree of B.Sc. in Physiotherapy.

I confirm that if anything identified in my work that I have done plagiarism or any form of cheating that will directly awarded me fail and I am subject to disciplinary actions of authority. I confirm that the electronic copy is identical to the bound copy of the Thesis.

In case of dissemination the finding of this project for future publication, research supervisor will highly concern, it will be duly acknowledged as graduate thesis and consent will be taken from the physiotherapy department of SAIC College of Medical Science and Technology.

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Acronyms

BRAC	Bangladesh Rural Advancement Committee.
CFM	Child Functioning Module.
CMR	Crude Mortality Rate
CRPD	Convention on the Rights of Persons with Disabilities.
DALYs	Disability Adjusted Life Years.
DRR	Disaster Risk Reduction.
DSM – 5	Diagnostic and Statistical Manual of Mental Disorders – 5.
GBV	Gender-Based Violence
GOB	Government of Bangladesh.
GS	Gaza Strip
ICF	International Classification of Functioning, Disability and Health.
IOM	International Organization for Migration
IPV	Intimate Partner Violence
K 10	Kessler psychological distress scale - 10
MSF	Médecins Sans Frontières
NPV	Non-Partner Violence
NSSO	National Sample Survey Office
PTSD	Post-Traumatic Stress Disorder
QOL	Quality of Life.
RRRC	Office of the Refugee Relief and Repatriation Commissioner.
SCMST	Saic College of Medical Science and Technology.
SFDRR	The Sendai Framework for Disaster Risk Reduction.
SPSS	Statistical package for the social science.
UNHCR	United Nations High Commissioner for Refugees.
UNICEF	United Nations International Children's Emergency Fund.
WASH	Water, Sanitation and Hygiene.
WB	West Bank
WHO	World Health Organization.
WHODAS 2.0	World Health Organization Disability Assessment Schedule 2.0
YLDs	Years Lived with Disability

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Abstract

Background: The World Health Organization estimates that approximately 1 billion individuals (15%) worldwide are disabled, with the majority living in resource-limited circumstances. This number is rising because to an aging population, advancements in medical treatment, and global population increase. However, the matter is regarded a human rights and global health issue, as well as a development agenda. Disability is described as difficulty performing activities of daily living (ADL), and the phenomenon is expressed as an interplay between an individual's health and the environment in which he or she lives. The Washington group defined disability as at least a significant problem or impairment in completing core ADLs such as sight, hearing, walking or climbing steps, remembering or concentrating. **Objective:** To Calculate the prevalence of disability among rohingya refigees living in Bangladesh. **Method:** A cross-sectional study design was conducted to accomplish the study. Data were collected from 129 Rohingya refugees of Ukiah, Cox's Bazar in Bangladesh using convenience sampling. WHODAS 2.0 questionnaire was used to collect data from Rohingya refugees. The data was collected through face-to-face interview. Data were analyzed by using SPSS program (25 version), and used both descriptive (mean, standard deviation, frequency, percentage) and inferential statistics (eg: Pearson Chi – Square test). **Results:** The study showed that, 63 (48.8%%) was None; 31 (24.0%) were Mild disability; and 23 (17.8%) were Moderate disability; and 8 (6.2%%) were Severe disability; 4 (3.1%) were Extreme disability or cannot do. Association between Age of the participant and level of Disability was revealed (x^2) = 35.863 and (p) = 0.00*. Association between taking rehabilitation and level of disability was revealed (x^2) = 12.106 and (p) = 0.017*. another association between torture and violence experience and level of disability was found (x^2) = 4.720 and (p) = 0.317. **Conclusion:** The study reveals that Rohingya refugees in Bangladesh have a higher prevalence of mild and moderate disabilities, with most aged 42 and above. The researcher discovered that Rohingya refugees experience various disabilities, ranging from mild to extreme, impacting their cognitive, self-care, life activities, and societal participation.

Keywords: *Disability, Rohingya, Refugees.*

CHAPTER – I INTRODUCTION

1.1 Background:

Disability is a widespread and acknowledged global public health issue. Access to social services, such as housing and transportation, as well as healthcare, education, and job services is significantly hampered for people with disabilities. Along with many other difficulties, they are likely to encounter social stigma, prejudice, unfairness, and disrespect every day. Their worse health outcomes, lower educational success, lower economic involvement, and higher rates of poverty than people without disabilities are mostly caused by these factors (Abdulkerim et al., 2021). According to the World Health Organization, 1 billion individuals (15%) worldwide are estimated to have a disability (Hosseinpoor et al., 2013). Most people reside in areas with minimal resources. This number is rising as the world's population grows, the aging population increases, and medical technology improves. However, the topic is regarded as a human right, a problem of global health, and a development agenda (Chala et al., 2017).

People with disabilities include those who have ongoing physical, mental, intellectual, or sensory impairments that, when combined with other factors, may prevent them from fully and equally participating in society (Polack et al., 2021).

Health and life quality suffer as a result of disability. Since the majority of senior people have many comorbidities that have a significant influence on everyday activities, health, and wellbeing, studying disability is crucial to understanding and managing the health of the aged. In fact, it has been demonstrated that physical handicap brought on by a variety of diseases is a reliable indicator of mortality in the elderly. In addition, having a disability decreases a person's chances of getting a good education, a job, and a good income, increasing their risk of poverty, having a low socioeconomic status, living in substandard housing, having limited access to healthy food and medical care, and ultimately having worse health and becoming more dependent on others (Adams et al., 2014).

The prevalence of disabilities is determined by global trends in health conditions, environmental factors, and other elements like traffic accidents, natural disasters, conflict, diet, and substance addiction. For instance, it is estimated that every year, 20 to 50 million individuals are hurt in automobile accidents. Road traffic injuries are thought to account for 1.7% of all years lived with disability, though the number of

people rendered incapacitated as a result of these collisions is not extensively documented. People who are unemployed, earn little money, or have only a low level of education been more likely to become disabled. Children from lower-income families are known to have a much higher risk of impairment compared to other kids. It has been demonstrated that regional and national disability prevalence rates differ greatly. Geographical traits and policies both have an impact on disability (Thompson, 2017). Globally, women have a higher prevalence of disability than men (Mitra & Sambamoorthi, 2014). In fact, a World Health Survey on 53,447 adults aged 50 and older done in 43 low- and middle-income countries found that the prevalence of disabilities was 33.3% globally (Hosseinpoor et al., 2016).

In many industrialized nations, there are considerable educational, occupational, and health inequities for people with disabilities (Amilon et al., 2017).

Determining and measuring who has a handicap is challenging, though, because a disability emerges in the interplay between a person with a health issue and his or her surroundings (Myers et al., 2020). According to a recent meta-analysis of research using data from 4500 women from six different countries (Afghanistan, Bangladesh, Ghana, Nepal, South Africa, and Tajikistan), a woman's disability may increase her risk of experiencing non-partner sexual violence. Women who have severe disabilities are also more likely to experience both IPV and non-partner sexual violence. Additionally, the heightened stigma and discrimination that women with disabilities face may make it harder for them to receive assistance (Dunkle et al., 2018).

Due to their marginalized status in society, which might include the need for ongoing help, prejudice, and physical and communicative problems, people with disabilities may be more susceptible to violence. This might then affect their capacity to report abuse and obtain assistance (Scolese et al., 2020). For some disabilities, such as dementia, the gender specific prevalence is not expected to vary over time, with population ageing driving projected increases (Prince et al., 2015).

Women are known to have a higher prevalence for other types of disability, such as blindness, (56%) severe visual impairment (55%) and mild visual impairment (54%) (Bourne et al., 2017). Because of population aging, the promotion of health services, and an increase in the incidence of chronic health conditions like diabetes, cardiovascular disease, and mental illness, prevalence and disability trends are on the rise globally. Furthermore, trends in health and trends in environmental and other

factors such as road traffic accidents, food, natural disasters, substance addiction, and conflict can all influence disability patterns. (Soltani et al., 2015).

The disparity in disability prevalence between countries can be explained by a variety of variables, including various definitions of disability, different methodologies, and differences in study design (Chala et al., 2017). One of the most oppressed populations in the world is the Rohingya of Rakhine, Myanmar (Mahmood et al., 2017).

The Rohingyas are a Muslim minority in Myanmar that fled their home country after suffering a horrific military assault and sought asylum in many Asian nations, mostly Bangladesh. They made their home in Bangladesh's Cox's Bazar, the world's largest refugee camp, which is located in the country's southern region (Bleijenberg et al., 2017). About the functional status of the elderly residents of the Rohingya refugee camp in Bangladesh, little is known. In a study, the World Health Organization Disability Assessment Schedule (WHO-DAS) was used to compare the functional impairment of adult Rohingya living in Malaysian and Bangladeshi camps (Khan & Haque, 2021). A western coastal state of Myanmar with a population of roughly 3.2 million, Rakhine state (formerly known as Arakan) is home to about a third (now a quarter) of the Rohingya ethnic group. The majority of Rohingyas are concentrated in Maungdaw out of Rakhine's five districts. Due to their lack of citizenship in Myanmar, they are subject to discrimination, which includes being refused access to healthcare and education. Additionally, Rohingyas lack access to legal documents like birth certificates and necessary childhood immunizations, with 62% of children under two receiving no parenteral vaccinations (Bhatia et al., 2018).

The 1982 Citizenship Law stripped the Muslim Rohingya group of its Myanmar citizenship, leaving them in the midst of a dire humanitarian crisis. As a result, the Rohingya are now officially stateless and are shunned by the government of Myanmar. They are distinct from Myanmar's predominately Buddhist people in terms of language, look, and religion (Ahmed et al., 2019). Due to the torture inflicted on the Rohingya minority in Bangladesh, forced migration occurred there as early as 1978 and again in 1991–1992. Security forces in Myanmar have been involved in rape, arrests, and executions. During these two times, this forced movement results in a total displacement of over 250,000 people (Goodman & Mahmood, 2019).

Periodic military crackdowns on Rohingyas have also taken place; these incidents include those in 1978, 1991–1992, and most recently in 2017–2018, when more than 200,000 Rohingyas already living in Bangladesh were joined by 700,000 more as a

result of rising violence in Rakhine state. The majority of them now reside in refugee camps in Bangladesh's Cox's Bazar, a coastal region (White, 2017). Furthermore, Rohingya refugees are afflicted with a variety of acute and chronic health ailments, including musculoskeletal and mental health issues, which can be difficult to diagnose, assess, and manage in this vulnerable community (Tay et al., 2019).

Some study has been conducted to try to comprehend the degree of violence and mortality among Rohingyas. According to a study of over 600 village leaders, the top cause for leaving Myanmar was violence in their area or in an adjacent community, which was mostly perpetrated by border police and the Myanmar military. Another cluster of surveys led by MSF determined that the crude mortality rate (CMR) among those aged 50 years during the 2017 violence period was as high as 17.3 per 10,000 per day, nearly 15-fold higher than in the same population before the period of violence and 9-fold higher than after (Hasn et al., 2019). This is supported by an in-depth interview with 22 survivors of the 'Chut Pyin' village, where an estimated 400 people, including 99 children, were massacred in one day (Karo et al., 2019).

However, there is no comprehensive picture of Rohingya refugees' health status and health literacy (i.e., the personal characteristics and social resources required for individuals and communities to access, understand, and use information and services to make health decisions) or other health care-related experiences in relation to the most recent mass migration into Bangladesh. In order to inform plans for providing adequate health care and resource mobilization, a fast needs assessment survey was undertaken among Rohingya refugees in Cox's Bazar in late 2017 and create additional action strategies for this vulnerable population (Rahman et al., 2020).

International humanitarian organizations such as the International Federation of Red Cross and Red Crescent Societies, Médecins Sans Frontières (MSF), CARE International, Save the Children Fund, and Orbis Eye Care; local non-governmental organizations such as BRAC, Mukti, and HOPE Foundation for Women; Bangladesh's Ministry of Health and Family Welfare monitors and streamlines medical activity. Within the camps, there are medical clinics and dispensaries with minor surgery facilities, and some over-the-counter drugs are available from shops and groceries accessible to both local people and refugees. Patients requiring secondary and tertiary care are referred to Cox's Bazar or Chittagong government medical college hospitals. The refugees are entitled to free treatment, drugs, and diagnostic tests. Traditional healers and birth attendants may be present in the camps, but they are difficult to

identify or recognize outside of the small communities where they practice. Previous research has discovered high rates of malnutrition and low immunization coverage among Rohingya refugees in Cox's Bazar, making them vulnerable to illnesses such as gastroenteritis, acute respiratory infections, and acute jaundice syndromes (Rahman et al., 2020). People with disabilities frequently experience disproportionate effects when it comes to ensuring good QOL as a result of ongoing inequality. For marginalized persons with disabilities, the situation is becoming worse due to a lack of suitable and need-based treatments. In essence, the study seeks to examine the types of humanitarian actions made to enhance the QOL of people with disabilities living in camps. To live with dignity and independence, this group of people also needs specific need-based interventions in addition to their fundamental requirements. On the other hand, service accessibility can ensure that humanitarian actors achieve their ultimate goal of providing help to refugees. To ensure QOL in camp locations, participation from every component of a forcibly displaced population is necessary. Refugees with disabilities can live a quality life if they have the freedom to choose their needs, wants, and opportunities. Thus, acceptance eliminating societal obstacles can promote inclusion of people with impairments (Chowdhury & Nasreen, 2020).

The older individuals living in the Rohingya camp were at risk for physical and mental health problems due to their unsanitary living arrangements, restricted access to WASH services, and difficulties obtaining health and welfare services (Anwar et al., 2023). People with disabilities are often referred to as those who have long-term physical, mental, intellectual, or sensory impairments that prevent them from fully and effectively participating in society. These impairments might be congenital, the result of illness or accident, or both. Incorporating disabled people into disaster risk reduction (DRR) plans, designs, and implementation is a relatively recent phenomenon worldwide. The Sendai Framework for Disaster Risk Reduction (SFDRR) 2015– 2030, which was strengthened by the UN Convention on the Rights of Persons with Disabilities (CRPD) rights framework, offers incentives for further advancement in this area (Stough & Kang, 2015).

Natural disasters, war, epidemics, and other severe catastrophes can result in refugee crises as well as humanitarian crises. The most vulnerable group of refugees who face the greatest risks during times of disaster or conflict are those with impairments. IOM estimates that 10 million of all refugees worldwide are people with disabilities (International Organization for Migration [IOM], 2016). Meanwhile, (Andrew &

colleagues, 2017) discovered that 57% of adult Rohingya people between the ages of 18 and 59 reported having moderate to severe difficulties carrying out daily activities (Riley et al., 2017).

The term "Rohingya" refers to all Muslims who live in Arakan, a border area on Myanmar's western coast that was formally recognized as the Rakhine state in 1989. The people from Rakhine State's three northern regions are currently the subject of the most concern: Maungdaw, Rathendaung and Buthidaung, which are at war right now. As a result, about 400,000 people Up to 500,000 Rohingyas have fled Myanmar for Bangladesh as refugee. In order to house the Rohingya refugees, GOB built 20 camps in 1992. There are now just two camps for officially recognized Rohingya refugees from the Cox's Bazar region on the coast of Bangladesh, "Kutupalong" in Ukhia (sub-district) and "Nayapara" in Teknaf (sub-district). Unregistered Rohingya refugees are housed in a number of impromptu camps in the neighborhood, including Leda Camp. However, these camps do not receive legal protection without registration. Refugees there are consequently more likely to experience assault, physical and sexual abuse, arrest, and incarceration. Additionally, registered refugees receive assistance from the GOB, UNHCR, international NGOs, and local NGOs in the areas of shelter, food assistance, education, water, sanitation, health, and nutrition, whereas unregistered refugees living in improvised camps have limited access to shelter, water, sanitation, and health services and are not eligible for food assistance under the GOB's mandate. Over the past century, Bangladesh has seen a steady influx of Rohingya migrants due to harsh persecution by Myanmar's security forces, Buddhist fanaticism, and prejudice against minority ethnic groups. As a stopgap measure before their eventual return to Myanmar or relocation to a third country (such as Australia, Canada, New Zealand, Sweden, or the United Kingdom), the government grants the majority of Rohingyas entering Bangladesh temporary legal refugee status (Milton et al., 2017).

1.2 Rationale:

One of the most oppressed minority groups in the world was the Rohingya. They were currently compelled to live in isolated camps or on the periphery of society. They frequently endure sexual assault, recurrent infectious diseases, child labor or being forced to work as slaves, arbitrary arrest, incarceration, or even forced deportation.

Around 770,000 Rohingya fled to Cox's Bazar, Bangladesh, after the Myanmar government launched a coordinated campaign of horrific brutality and killings against them in August 2017 in Myanmar's Rakhine state. In Cox's Bazar, one million Rohingya people today endure appalling living conditions in camps.

Currently, they were living in the camp of Cox's Bazar with various difficulties. Many countries and organization of the world including Bangladesh government were taking various effective steps. Among this necessary initiative was medical treatment, which was a moral right of every human being, which was often not achieved as refugees were plagued with various problems and confined within a particular set of facilities. Due to the barbaric torture of Rohingya refugees, they were more likely to have both physical and mental problems, which can be cause of disability.

The researcher wanted to know their prevalence of disability and whether they were getting rehabilitation opportunities or if they are taking or willing to take those opportunities. Author thought it was important to know, so that they can be more aware of their medical issues. As all efforts were being made to provide adequate Facilities for the Rohingya refugees, The researcher thought it was necessary to work with awareness on the issue of disability and bring the issue of the fore, thereby benefitting the Rohingya refugees. Author intended to work on this title, because in the current context, Rohingya refugees are debated and critical issue around the world.

So, the researcher thought that, this research was very useful for the refugees in the future, through this research, the disability rate of Rohingya refugees and the availability of rehabilitation will be known. As a result, they were able to take the necessary steps if they come to the attention of the health workers employed by various organization.

1.3 Research Question:

What is the prevalence of disability among Rohingya refugee living in Bangladesh?

1.4 Objectives of the study

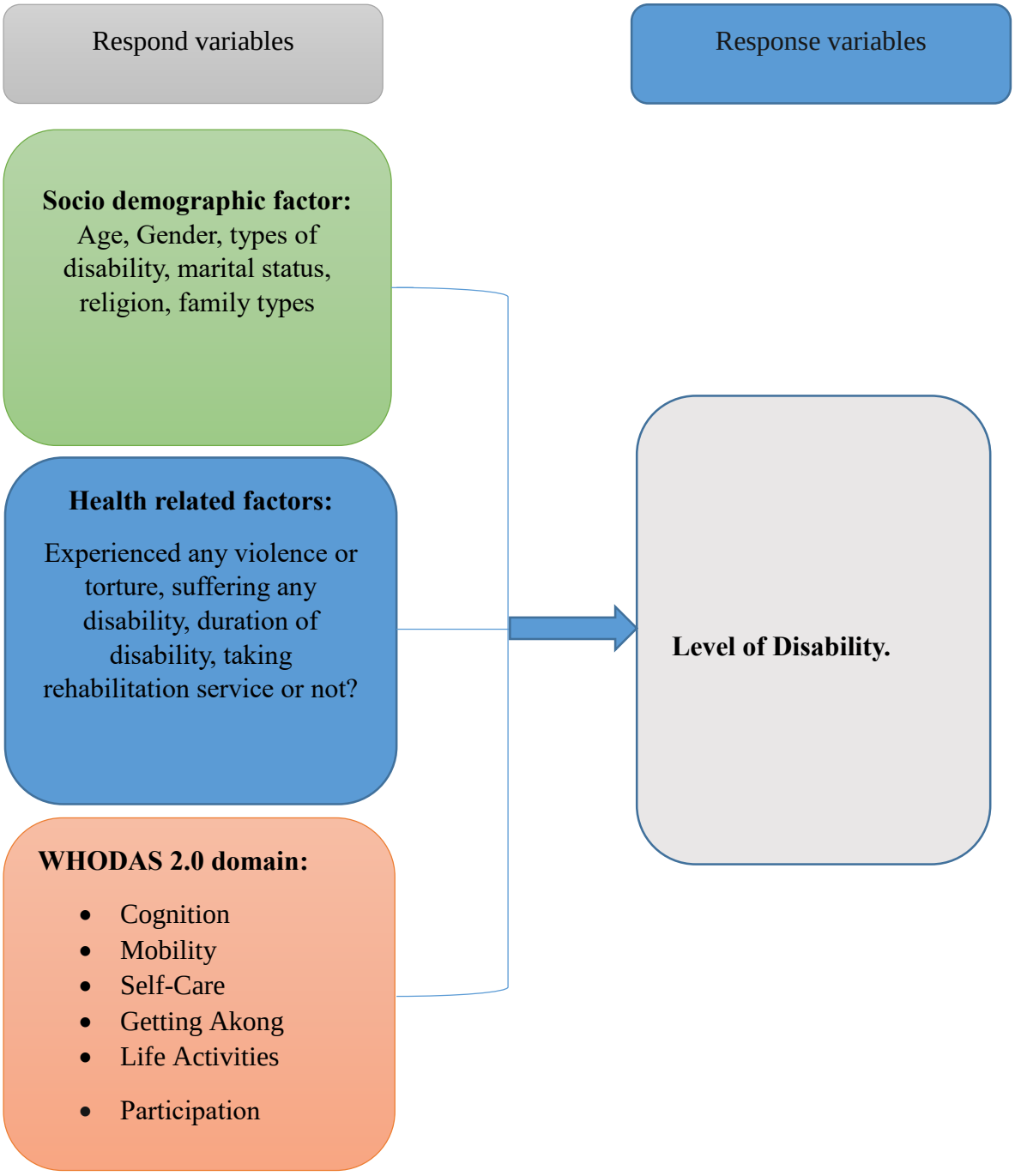
1.4.1 General objective:

To Calculate the prevalence of disability among rohingya refigees living in Bangladesh.

1.4.2 Specific objectives:

- To measure their level of difficulties in cognition, mobility, self-care, getting along, life activities and participation in society.
- To examine the association between taking rehabilitation and level of disability.
- To determine the relationship between experienced any violence or torture and level of disability.
- To evaluate the association between age of the participants and level of disability.
- To explore the socio demographic information among the Rohingya population in Ukiah.

1.5 List of variables of the study



1.6 Operational definitions of the variables

Disability: A disability is any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions).

Rohingya: The Rohingya people are a stateless Indo-Aryan ethnic group who predominantly follow Islam and reside in Rakhine State, Myanmar.

Refugees: Refugees are people who have fled war, violence, conflict or persecution and have crossed an international border to find safety in another country. They often have had to flee with little more than the clothes on their back, leaving behind homes, possessions, jobs and loved ones.

Rehabilitation: The action of restoring someone to health or normal life through training or therapy after imprisonment, addition, or illness.

WHODAS 2.0: The adult self-administered version of the World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0) is a 36-item measure that assesses disability in adults age 18 years and older.

Prevalence: Prevalence refers to the total number of individuals in a population who have a disease or health condition at a specific period of time, usually expressed as a percentage of the population.

Cognition: The mental action or process of acquiring knowledge and understanding through thought, experience, and the senses.

Mobility: Mobility is defined as the potential for movement and the ability to get from one place to another using one or more modes of transport to meet daily needs.

Self-Care: Self-Care is the ability of individuals, families and communities to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a health worker.

Getting along: Communication skills and a willingness to interact with different people in a number of different ways.

Life activities: Life activities are those functions that are important to most people's daily lives.

Participation in society: Person's involvement in activities that provide interaction with others in society or the community.

CHAPTER – II LITERATURE REVIEW

The World Health Organization estimates that approximately 1 billion individuals (15%) worldwide are disabled, with the majority living in resource-limited circumstances. This number is rising because to an aging population, advancements in medical treatment, and global population increase. However, the matter is regarded a human rights and global health issue, as well as a development agenda (Hosseinpoor et al., 2015). Disability is described as difficulty performing activities of daily living (ADL), and the phenomenon is expressed as an interplay between an individual's health and the environment in which he or she lives. The Washington group defined disability as at least a significant problem or impairment in completing core ADLs such as sight, hearing, walking or climbing steps, remembering or concentrating (Chala et al., 2017). Despite widespread agreement that both medical and social aspects of disability should be considered, disability measurements remain primarily medical (Aslam, 2013). Consider the relationship between a person's handicap and their environment (Ju'beh, 2015). Factors impacting the prevalence of disability include the definition of disability, the quality and methods of data collecting, the rigor of sources, and varying disclosure rates (Ju'beh, 2015). Low disclosure may stem from inadequate service provision and stigma. National statistics can be deceptive, incomparable, and incorrect. Because of these constraints, wealthy countries may have a higher prevalence of disability than developing countries (Ju'beh, 2015).

According to research, the prevalence of specific disabilities, such as hearing loss, reduces exponentially with income (WHO & CBM, 2013). The majority of blind and visually impaired persons live in Asia, and the age-standardized prevalence of blindness is highest in Africa and Asia (Bourne et al., 2017). Evidence from Vietnam reveals that bombing had a positive and statistically significant impact on disability rates 30 years after the war ended. The greatest benefit was identified for people born before 1976, although people born after the war also had a significant favorable influence (Groce et al., 2015). Despite a decline in high-risk lifestyle choices in high-income environments, obesity and diabetes prevalence have been increasing, potentially increasing the disability load, including the incidence of dementia. Obesity, stroke, and heart problems are on the rise in poor and middle-income countries, potentially leading to an increase

in the incidence and prevalence of dementia (Prince et al., 2015). Diabetes affects 422 million people worldwide and has quadrupled since the 1980s (WHO, 2016).

Diabetes is becoming more common in low and middle-income countries than in high-income countries. Diabetic retinopathy is the leading cause of blindness. Diabetic retinopathy affects 93 million individuals worldwide, with 17 million suffering from proliferative diabetic retinopathy (Yau et al., 2012).

Diabetes can potentially result in limb amputations and other long-term effects. There are no global figures of lower-extremity amputations due to diabetes (WHO, 2016). Data that is available indicates a decrease in diabetes-related amputations in high-income settings (Moxey et al., 2011). There are no estimates for poor and middle-income nations. Cerebral palsy is a prevalent cause of physical impairment in children. The current rate is 2.11 per 1000 live births, which has remained stable in recent years despite increased survival of at-risk preterm newborns. The majority of data on the prevalence of cerebral palsy comes from high-income settings (Oskoui et al., 2013).

Dementia affects 46.8 million individuals worldwide. This figure is predicted to rise to 131.5 million by 2050. Much of the rise will disproportionately affect lower and middle-income countries, where 58% of all dementia patients currently resided in 2015. This proportion is expected to rise to 63% in 2030 and 68% in 2050 as life expectancy rises, which is related with an increase in dementia prevalence. Aside from the effects of an aging population, poorer countries may have fewer resources to manage dementia (Prince et al., 2015). Mental and drug use disorders accounted for 74% of all disability-adjusted life years (DALYs) and 22.9% of all YLDs in 2010, making them the major cause of YLDs worldwide. Mental and substance use problems increased by 37.6% between 1990 and 2010, owing primarily to population growth and aging (Whiteford et al., 2013). A quarter of the world's population will suffer from a mental illness during their lifetime. People afflicted by conflict are likely to suffer enormous emotional and psychosocial distress and to be among the most vulnerable (Tsutsumi et al., 2015).

In Japan, a cross-sectional survey of 1550 people aged 65 and over revealed that the percentage of functional disability, defined as restrictions that arise over time owing to an illness, condition, or injury, was 20.1% (Harsan et al., 2019).

Another study published in 2015 in Malaysia to determine the prevalence and determinants of disability among adults using a nationwide health and mobility survey found that 41.0% of people aged 61 and up had one or more categories of disability (Ahmad et al., 2017). According to a study conducted in rural Haryana, India, to assess

functional disability among 836 senior people aged 60 and up, the prevalence of functional disability was 37.4% (Gupta et al., 2014). It has been found that disability in later life increases geriatric social alienation and despair (Tobias & Mukhopadhyay, 2017). Several factors are expected to influence the prevalence of impairment. The key determinants discovered in the literature were demographic and socioeconomic characteristics such as age, gender, race, education, and marital status (Hosseinpoor et al., 2016), income and occupation (Mahmud et al., 2017), as well as living alone (Rahman et al., 2018). The presence of other comorbidities was found to increase disability prevalence in a study conducted in Thailand to assess factors associated with the six types of disability (seeing, hearing, mobility, remembering and concentrating, communication, and personal care) for people 60 years old and above (Khongboon et al., 2011). A study done in Bangladesh in 2014 to investigate the relationship between disability and wealth revealed that increasing affluence resulted in a linear decrease in the risk of having a disability (Tareque et al., 2014).

Furthermore, disability prevalence varied by location of residence (urban or rural) as well as geographical area or region (Ma et al., 2017). Because disability affects both morbidity and mortality in the population, and because understanding and managing population aging is critical, studying disability in the essential, especially given the particular difficult political conditions in which Palestinians live and the rising average life expectancy. Disability in the Palestinian setting has received little attention, particularly among the elderly. This is why the current study focuses on disability among older Palestinians in both the West Bank (WB) and the Gaza Strip (GS). The purpose of this study is to assess the prevalence of handicap among Palestinian senior people aged 60 and up, as well as to identify some of the factors that contribute to it. We hypothesize that the prevalence of disability among Palestinians aged 60 and up is significant and equivalent to that of other developing countries (Harsha et al., 2019). Because of increased life expectancy and low birth rates, the world's population and share of elderly individuals are rapidly increasing (Brown, 2015). According to the World Health Organization (WHO), the number of older individuals worldwide will rise from 1 billion in 2020 to 1.4 billion and 2.1 billion by 2030 and 2050, respectively (WHO, 2021). This aging population has been linked to an increase in the prevalence of chronic diseases and functional inabilities (Bleijenberg et al., 2017).

The Rohingyas are Muslim minorities from Myanmar who fled to neighboring Bangladesh after being subjected to a harsh military attack in their home country. They

settled in Cox's Bazar, Bangladesh, a southern area with the world's largest refugee camp (Rohingya, 2018). Disability is complicated and difficult to identify and quantify (Mactaggart et al., 2016). It emphasizes that personal (e.g., assistive technology, education) and environmental factors (e.g., accessible infrastructure, policies) influence the extent to which people with impairments/health conditions experience activity and participation restrictions. Various measuring methodologies capture various ICF components. Objective clinical examinations, for example, evaluate the presence, severity, and type of impairment. This method is useful for planning health/rehabilitation services, but it does not account for the impact of an impairment on a person's activities/participation and necessitates data collectors with clinical understanding. Another strategy is self-reported functioning, which involves questioning people about their level of difficulty with various functional domain activities. This method can be used more swiftly and without the need for clinical experience. In this study, we used the Washington Group Short Set Enhanced Set of questions (WG-SS-Enhanced; adults 18+ years) and the Washington Group/UNICEF Child Functioning Module (CFM; children 2-17 years) to collect data on self-reported functioning (Zia et al., 2020).

Disability is a broad term that encompasses impairments, activity limitations, and participation constraints. According to 2010 worldwide population projections, approximately 15% of the world's population is expected to be disabled. According to the Global Burden of Disease Report, around 975 million (19.4%) people over the age of 15 have some form of disability, with nearly 190 million (3.8%) having ‘severe disability' such as quadriplegia, severe depression, or blindness. In India, information on physical and mental impairment is gathered once every ten years during the census and on a regular basis by the National Sample Survey Office (NSSO). According to the Constitution, each state in India is responsible, within the limits of its economic capabilities and development, for ensuring the right to work, education, and public assistance in cases of unemployment, old age, disease, and disablement. Furthermore, persons with disabilities continue to be neglected, discriminated against, and abused. It is critical that people with disabilities have access to inexpensive healthcare and rehabilitation. Tamil Nadu has a better healthcare system, as evidenced by higher performance in key health metrics when compared to other states. The burden of disability must be quantified since this information is required for the government to establish policies, provide suitable resources, and execute appropriate intervention

programs for people with disabilities. According to the 2011 Indian Census, one in every fifty Indian citizens (2.2%) is physically or intellectually impaired. The term Rohingya refers to the Sunni Muslim residents of Arakan, the historical name for a Myanmar border region that has a long history of isolation from the rest of the country. This region has been formally classified as Rakhine State since 1989. The majority of those of concern, however, come from the northern part of Rakhine State, specifically the three townships of Maungdaw, Buthidaung, and Rathedaung. The Rohingya are said to be of mixed lineage, descended from both outsiders (Arabs, Moors, Turks, Persians, Moguls, and Pathans) and local Bengali and Rakhine. They speak a form of Chittagonian, a regional dialect of Bengali that is widely spoken in south-eastern Bangladesh. The Rohingya have few friends among Myanmar's other ethnic, linguistic, and religious groups. thus, were not formally recognized as one of the country's official national groups when the country obtained independence in 1947, and thus were barred from both full and associate citizenship when the 1982 Citizenship Act established these categories (UNHCR's, 2011).

The Rohingya crisis is currently one of Bangladesh's top issues, however the country has been dealing with refugee issues since 1978. The predicament began when over one million Myanmar migrants sought safety in Bangladesh. These Muslim refugees are referred to as "Rohingya." This historic event occurred again in 2017-2018, when about 400,000 Rohingya refugees fled Myanmar's Rakhine state and sought safety in Bangladesh's Cox's Bazar area (Khatun, 2017).

This religious minority lacks fundamental human and civil rights. As migrants continue to enter Bangladesh for sanctuary, the Rohingya issue has become a pressing concern for Bangladesh, which is already a highly populated country. As a result, Bangladesh is experiencing a number of social, political, and budgetary obstacles while attempting to supply basic essentials to the refugees. Legally, Bangladesh is not the final safe haven or destination for refugees because it is not a signatory to the 1951 Refugee Convention or its 1967 Protocol, nor to the 1954 and 1961 Statelessness Conventions. (Adnan, 2014). However, Bangladesh could not refuse shelters to Rohingya refugees on humanitarian grounds. Despite its decision to aid the refugees, Bangladesh is not wealthy enough to house the Rohingya. In Bangladesh, which is fighting to overcome the "Rohingya Crisis" in order to save its image in the international arena, there is also a lack of rigorous domestic law governing refugees or political asylum. The Rohingya were compelled to flee Myanmar and settle in Bangladesh. The Bangladesh government

has attempted to solve the multifaceted "Rohingya Crisis," which is also being taken seriously by various international agencies and non-governmental organizations in Bangladesh. The atrocities committed by the Myanmar government on Rohingya refugees in Bangladesh have sparked widespread outrage (Lewa, 2011).

The majority of male refugees are minors (under the age of 18). Women head 14% of homes, while children head 5%. The Rohingyas have a high fertility rate and family size. Women make up 52% of refugees. The majority of female refugees are adults over the age of 18, with many of them being of childbearing age. It is estimated that over 80,000 female refugees are pregnant. 31% of refugees are extremely vulnerable. According to a survey performed by Bangladesh's Ministry of Social Welfare, 36,373 orphaned children are living in and around camps, with many of them at risk of abuse and trafficking. The majority of the Rohingya refugees are housed in Cox's Bazar district, which covers an area of 2491.86 square kilometers. Almost all of the refugees are concentrated in two Cox's Bazar Upazilas (Ukhia and Teknaf). They are held in 12 camps, seven of which are in Ukhia and the other five in Teknaf. Ukhia and Teknaf have a combined population of 4, 27,913, and they are home to over 10,000 Rohingya refugees, both old and new. As a result, the host community is vastly outnumbered by the refugees. Cross-border criminal activity has been a major issue in Cox's Bazar's border districts. Bangladesh and Myanmar's porous border has historically been utilized for illegal drug and gun trafficking, as well as human trafficking. According to a Daily Star investigation, 150,000 people have been trafficked over the Bay of Bengal route in the last four years. All of the Ya ba (one type of narcotic, the illicit use of which has produced difficulties in Bangladesh) in Bangladesh is from Myanmar. These unlawful activities have become a source of income for many border dwellers (Babu, 2020).

According to (Rohwerder, 2015), one billion individuals, or 15% of the global population, live with a disability, and the prevalence is significantly higher in humanitarian circumstances (International Centre for Evidence in Disability, 2019). There is mounting evidence that women and girls with disabilities are more likely to be victims of abuse throughout their lives (Devries et al., 2018). Violence against women is widespread in humanitarian circumstances and has been proven to rise during and after periods of war (Murphy et al., 2019). There is, however, little research on the occurrence or predictors of gender-based violence (GBV) among refugees with disabilities (Marshall and Barrett, 2018). GBV is defined by the humanitarian community as any harmful act committed against a person's will that is based on

socially ascribed (i.e. gender) disparities between males and females (UNFPA, 2015). GBV comprises acts of physical, sexual, or emotional injury or suffering, threats, coercion, and other deprivations of liberty committed by either an intimate partner or a non-partner. Violence has well-documented health repercussions; GBV can result in physical impairment or injury, as well as short- and long-term effects on an individual's psychological well-being (Satyanarayana et al., 2015).

A study on Somali refugees were revealed that, the women in the sample ranged in age from 18 to 69 years old. The majority of women (94%) and Muslim (99%) identified as Somali, and the median age when they first lived with a male partner was 16 years old. The encampment lasted an average of 9 years, and 18 ladies (9%) were born there. The majority of the ladies (86%), were born in South Central Somalia. At the initial partnership, there was little variation in the country of birth, nationality, religion, years in the camp, and age between women with and without disabilities. In the baseline cohort survey, 44% of women seeking GBV services claimed a disability. Women with disabilities were slightly older on average than those without disabilities. Furthermore, they were more likely to have no present male partner (60% among women with disabilities vs. 51% without) and to have cared for four or more children (45% vs. 37%). Women with disabilities had higher reported income across all income categories than women without disabilities. The functional disability domains most frequently reported by all women reporting a disability were issues with memory and/or concentration (75%), and difficulties walking (44%). Women reported less sensory impairments, such as vision (9%), hearing (2%), self-care (7%), and communication difficulties (1%), than men (Table 2). The internal dependability of the WG-SS was average (Cronbach's = 0.53). Among all participants, 23% reported non-partner physical or sexual violence before to coming in Dadaab, and 73% reported physical and/or sexual IPV or NPV in the previous year. Women with disabilities had a higher prevalence of suffering violence before coming in Dadaab and within the previous year than women without disabilities. For example, a larger number of women with disabilities (32%) reported physical or sexual NPV than women without disabilities (16%). Furthermore, 69% of women with disabilities reported physical IPV and/or physical or sexual NPV in the previous year, compared to 54% of women without a handicap (Hossain et al., 2020).

Another in United States was stated that, Overall, 22.2% of adults in the United States (53,316,677 people) reported having a disability. Mobility disability was the most commonly reported category (13.0%), followed by cognition disability (10.6%),

independent living (6.5%), eyesight (4.6%), and selfcare (3.6%). The prevalence of any impairment varied by state, ranging from 16.4% in Minnesota to 31.5% in Alabama. The prevalence of each handicap kind differed among states as well. The prevalence of each handicap kind differed among states as well. Disabilities in vision ranged from 2.7% in Idaho and New Hampshire to 8.1% in Mississippi; in cognition, from 6.9% in North Dakota and South Dakota to 16.8% in Arkansas; in mobility, from 8.5% in Minnesota to 20.7% in Mississippi; in self-care, from 1.9% in Hawaii to 6.2% in Mississippi; and in independent living, from 4.2% in Nebraska and Utah to 10.8% in Mississippi. States with greater disability prevalence's were generally found in the South, whereas those with lower prevalence were found in the Midwest or West. Women reported a greater prevalence of any impairment (24.4%) than men (19.8%), as well as higher prevalence of each type of disability. With the exception of cognition, where the reported prevalence was highest among persons aged 45-64 years (12.0% versus 10.1% [18-44 years] and 9.9% [65 years]), prevalence of any disability and of each type were highest in either the oldest age group (65 years) or both the middle (45-64 years) and oldest age groups. The highest prevalence of any disability and of each disability category was reported by black, non-Hispanic adults; the highest prevalence of disability in eyesight (7.4%) was recorded by black, non-Hispanic adults and Hispanic adults. Non-veterans reported a greater prevalence of handicap in eyesight (4.7% against 3.9%) and independent living (6.7% versus 5.9%) than veterans. Respondents with higher levels of household income and education showed lower prevalence of any impairment and of each disability type. Nearly half of people with a household income of $15,000 and 40% of adults who did not complete high school had some form of handicap, compared to 10.8% of adults with a household income of $50,000 and 11.8% of college graduates, respectively. The prevalence of any handicap was more than twice as high among unemployed individuals as it was among working persons. (33.5 % vs. 12.6%) (Long et al., 2013).

Disability is a common part of all human lives; we may all have to live with a disability at some point, either momentarily (as in depression) or permanently. The World Health Organization (WHO) defines disability as having three central and permanent characteristics: 1. it is a global public health issue, affecting one in every seven people worldwide; 2. it is a human rights issue, as people with disabilities are among the most discriminated people in the world, 'often experiencing violence, prejudice, and denial of autonomy, as well as facing barriers to care'; 3. it is a development priority, due to

its prevalence in low-income countries, where disability and poverty ‘mutually reinforce each other' (WHO, 2020).

The researchers discovered an overall prevalence of impairment of 24.3%, with 52% having a mobility limitation. Sixty percent of the homes in the research had at least one disabled member. Forty-two percent of those with self-reported functional limitations said the cause was the Syrian war. Concerning mental health difficulties, 73% blamed increased symptoms on violence, injury, or trauma in Syria (40%) or Turkey (33%). Illness/disease was the most commonly reported cause of vision (49%), hearing (38%), and mobility (52%). Children aged 7 to 17 years old met the criterion for high anxiety symptoms (8.9%), sadness (12.4%), and/or PTSD (11.5%) in Syria refugees living in Turkey (Abdulkerim et al., 2021).

World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0) is a World Health Organization assessment instrument used to assess health and disability in the general population and in clinical practice. This test assesses how difficult it is for an individual to do six fundamental behaviors shared by many cultures: (1) cognition, (2) mobility, (3) self-care, (4) getting along, (5) life activities, and (6) participation (Ulu et al. 2001). Each item assessing the individual's difficulty in carrying out a specific task in the previous 30 days is rated on a 5-point scale of 0 (none), 1 (mild), 2 (moderate), 3 (severe), and 4 (extreme or cannot perform). The 36-item complete version and the 12-item short version of the test are both accessible in interviewer-proxy- and self-administered formats. There is also a 12+24-item variant that can only be administered by an interviewer. If the patient is unable or unsuitable to self-rate, the proxy form was created to be rated by a relative. A general disability score can be acquired by administering either the full or short version of the instrument, whereas domain disability scores can only be obtained by delivering the full form. WHODAS 2.0 items were initially intended to be coded and scored using either simple or complicated systems. Between categorizing item ratings between 0 and 4 (as currently recommended by the WHO website) and the DSM-5 average item scoring approach in computing general and domain disability scores (APA, 2013). When computing a disability score, this method involves taking the average of the relevant item evaluations, yielding a value ranging from 0 to 4 regardless of the number of items included. Clearly, it provides a realistic method of understanding and comparing disability ratings acquired from several WHODAS 2.0 scales and subscales with varying number of components (Kunt & Dereboy, 2018).

Another study revealed that, as part of the bigger RCT, 650 people were screened. 446 (69%) of those tested were female, 596 (92%) were married, and the average age was 40.4 years (SD = 7.1). The majority of participants had no prior formal education (n = 146, 22%) or were enrolled in a basic education certificate program (n = 381, 59%) that less than half (n = 179) completed. Few respondents (n = 16, 2%) acknowledged having previously attended post-secondary education. The average WHODAS 2.0 score was 20.5 (standard deviation = 7.6), with a lowest and maximum score of 0 and 44, respectively. There was no missing information for any of the WHODAS 2.0 components. The measure's overall internal consistency was acceptable, with a Cronbach's alpha of 0.74. With Cronbach's alpha scores ranging from 0.71 to 0.75, the 'item-deleted' analysis revealed that all items were interdependent and connected to one another. When investigating construct validity, the individual item scores were significant and strongly linked with the WHODAS 2.0 overall score. Items 10 (0.39) and 11 (0.36) had relatively weak correlations (Pearson's R 0.40), while the other ten items had moderate to significant correlations ranging from 0.40 to 0.62. When investigating the convergence of the WHODAS 2.0 and K10, correlation coefficients ranged from 0.18 to 0.35, with the overall scores having a correlation coefficient of 0.57 (P 0.001) (Akhter et al., 2021).

A study in Poland were found that, The WHODAS 2.0 (scale 0-100) calculated mean disability level was 14.44 (SD - 17.17). The domain connected to life activities had the highest prevalence of disability (mean - 20.77; SD - 21.03). Activity in the local community, overcoming external barriers and obstacles, and other issues were assessed in relation to a sense of self-dignity. The second area with the highest mean disability level was issues with completing everyday activities (mean - 17.42; SD - 26.36). In this field, the difficulty was graded in conducting daily activities linked with household maintenance, such as cooking, cleaning, shopping, caring for others, and caring for personal items. Mobility was the third most common domain in terms of disability occurrence (mean - 17.23; SD - 24.68). Standing, moving around the house, going out, and walking for greater distances were all assessed in this part. Personal cleanliness, dressing, eating, and staying alone were the least common problems in the study group (mean - 5.37; SD - 14.79). In the investigated population, no link between disability and gender, place of residence, education, or income was found. There was a significant association (p 0.001) between disability and marital status, age, and the number of diseases in the population. When compared to persons in a relationship, single people

had much greater levels of disability. A higher level of disability was also noticed in older persons and people with a greater variety of disorders. There was also a link between physical activity and the prevalence of impairment. People who engaged in physical activity in the form of a leisure sport at least four times per week had a considerably lower level of disability than those who were less physically active. Only 33.00% of the population tested were fully fit, with no functional limits. The majority of the people investigated (46.20%) had mild disability, 14.50% had moderate disability, and 6.20% had severe disability. Only one person was discovered to have a severe level of impairment (Sożanska & Pietruszyńska, 2018).

Several research conducted throughout the world found that older people' functional capacity as judged by ADL was limited. According to a Malaysian study, 24.7% of older persons in rural regions experienced functional limits in fundamental ADL measures. In Nigeria, 28.3% of older individuals living in rural regions were dependent on others to perform at least one ADL task. While ADL indicates an individual's functional condition, its measurement and interpretation are contextual and heavily influenced by the social milieu in which the person lives. Evidence suggests that supervised exercise or being physically active in old age (>60 years) is safe and helpful in avoiding or slowing functional and cognitive deterioration. Table 1 shows the socio-demographic characteristics of the participants in this study. The majority of participants (72.3%) were between the ages of 60 and 69, male (56.3%), married (79.1%), had a household size of four or more individuals (56.9%), and were living solely on help (67.1%) Polack et al., 2021). Another study on the Rohingya found that, the majority of participants (90.5%) lived alone, had no formal education (89%) and were unemployed or retired (89.1%). Approximately half of the participants (58%) reported poor memory or focus and 50.1% had non-communicable chronic illnesses. Furthermore, the majority of participants (65.9%) were sedentary and lonely (81.1%). In all, approximately one-quarter (26.5%) of the participants reported having limited self-assessed functional capacity. Grooming had the highest rate of incapacity to execute (33.2%), followed by bathing (31.8%), stair use (13.2%), and mobility (10.7%). The distribution of responses to each item on the Barthel index. Participants who were female, over the age of 80, living on their own, had memory or concentration impairments, and were lonely showed significantly lower functional abilities ($p=0.005$). There is little information available about the functional status of older adults living in the Rohingya refugee camp in Bangladesh. Research using the World Health Organization Disability Assessment

Schedule (WHO-DAS) discovered that adult Rohingya people residing in Bangladeshi Rohingya camps had more functional impairment than those staying in Malaysian camps. Meanwhile, (Andrew & colleagues, 2017) discovered that 57% of adult Rohingyas aged 18-59 years had mild to severe difficulties with everyday tasks. However, these investigations did not focus on the elderly population and did not thoroughly investigate functional limits. As a result, the current study seeks to investigate the prevalence of self-reported functional status and its predictors among older persons living in a Rohingya camp in Bangladesh. The current study is the first to look at the functional state of older persons living in a Rohingya refugee camp in Bangladesh. According to the study, 26.5% of the older persons had low functional capacity. While no previous research has looked into functional limitations in older adults living in the Rohingya refugee camp, one study found that adults in the Rohingya refugee camp in Bangladesh had more restricted functional impairment than those in Malaysia (Khan et al., 2021).

Meanwhile, similar to the current study's findings, a study conducted among elderly Syrian and Palestinian refugees living in Lebanon found that 10% had moderately reduced functional level and 18% had severely impaired functional status (Strong et al., 2015).

CHAPTER – III METHODOLOGY

3.1 Study design:

It was a cross sectional type of descriptive study.

3.2 Study place:

Data collected was done from "Camp 8E, Camp 8W, and Camp 17" located in Ukiah Upazila of Cox's Bazar district in Bangladesh.

3.3: Study area:

Ukiah Upazila of Cox's Bazar district in Bangladesh.

3.4 Study period:

The duration of the study was 12 months from 1st July 2022 to 30th June 2023.

3.5 Study population:

The study population was Rohingya refugees living Ukiah Upazila of Cox's Bazar district in Bangladesh.

3.6 Sample size:

We know that;

$$n = \frac{z^2 p(1-p)}{d^2}$$

Here,

n= required sample size.

z =confidence level at 95% (Standard value of 1.96).

P = P is the expected rate of prevalence, here researcher taken the prevalence rate of 24.7% from the previous published literature by Polack et al., 2021.

d = margin of error at 5% (Standard value of 0.05).

$$n = \frac{z^2 p(1-p)}{d^2}$$

$$n = \frac{z^2 (1-p) p}{d^2}$$

$$= \frac{(1.96)^2 \times 0.24(1-0.24)}{(0.05)^2}$$

$$= 280$$

3.7 Sampling technique:

Convenience sampling technique was applied for this study. Convenience sampling was a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate study.

3.8 Eligibility criteria

3.8.1 Inclusion criteria:

- Those staying in Camp "8E, 8W, 17".
- Mental stable.
- Above 18 years.
- Those who participate voluntarily.

3.8.2 Exclusion criteria:

- Those who stayed before 2017.
- Those who are under treatment for various disease.
- Block refugees identified as red zone by camp in- charge were not included in this study.

3.9 Procedure of data collection:

The data was collected through face-to-face interview. Data were collected after receiving permission from the ethical review board. A participant required around 15-20 minutes to gather responses to questions. The researcher also explained to all participants the goal of the study. Participants were guaranteed that their private information would never be disclosed. The questions were formulated in English. Both open and close ended questions were included in this questionnaire. The researcher collected the data with the helped of interpreters, because the participants were happy to speak in their mother tongue and answered the questionnaires, as a result the interpreters translated the participants answer to the researcher in English.

3.9.1 Tools of data collection;

► WHODAS 2.0 Scale for identifying disability level.

► Self-Structured questionnaire for socio-demographic-informations.

3.9.2 Data analysis:

Data were analyzed by using statistical package for the social science (SPSS) program (25 version), and used both descriptive (mean, standard deviation, frequency, percentage) and inferential statistics (eg: Pearson Chi – Square test).

3.10 Ethical consideration:

- Bangladesh Medical Research Council (BMRC) and World Health Organization (WHO) guideline also were followed to conduct the study.
- The research proposal was submitted to the ethical committee that ethical review board of Saic College of Medical Science and Technology (SCMST) approval was obtained from the Board.
- The research proposal also submitted to the ethical committee of Office of the Refugee Relief and Repatriation Commissioner (RRRC) and they approved the proposal and gave permission.
- Written informed consent was taken at the time of enrolling the respondents.
- All respondents were informed that they were free to leave or to refuge to take part in this study at any time.
- The proposal information of the respondents was kept totally confidential.

CHAPTER – IV RESULTS

The study aimed to prevalence of Disability among Rohingya refugees living in Bangladesh. WHODAS 2.0 36 item version and used with self-administrated questionnaire. The data were analyzed with the Microsoft Office Excel 2019 with SPSS 25 version software program. In this study researcher use bar, graph, pie chart to show the result of the study. Because it was easier to make sense of a set of data.

4.1 Socio-demographic condition:

4.1.1: Age of Participants:

This study showed that, the mean age of the participants were 42.79 $\pm$ 17.63. Among them, 51.9% (67) participants were below 42 years old whether 48.1% (62) participants were above 42 years age.

Table 1: Age of the participants:

Age group	Frequency (n)	Percentage (%)	Mean $\pm$ SD
Less than 42 years	67	51.9%	42.79 ± 17.629
42 years and above	62	48.1%	
Total	129	100.0%	

4.1.2: Gender of the participants:

In this study, 129 peoples were involved, there 71% (92) were male and 29% (37) were female.

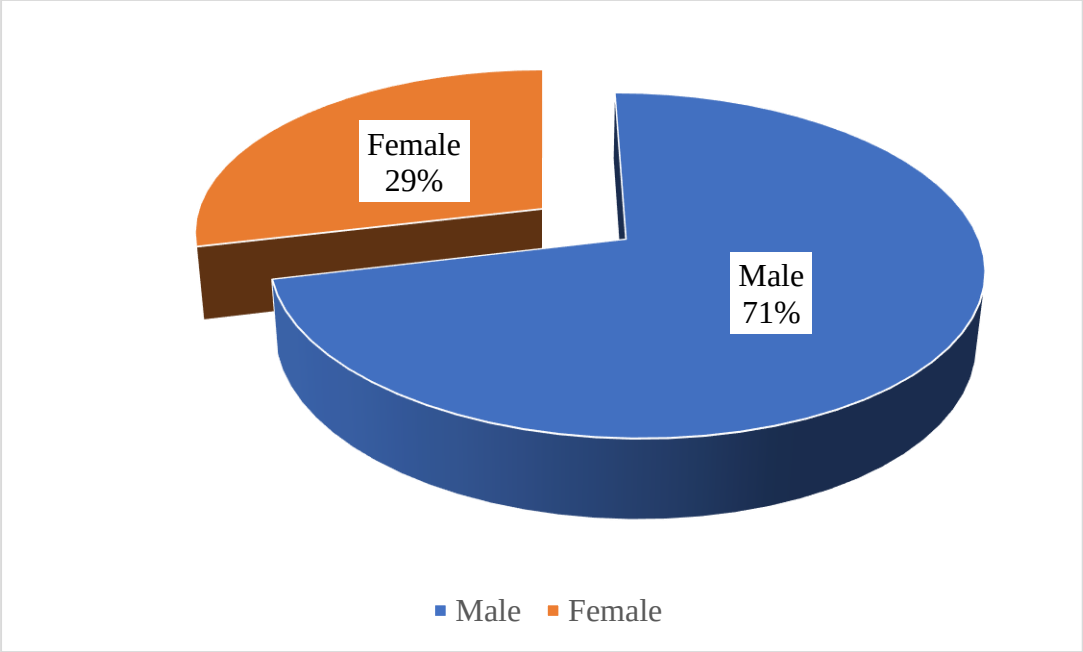


Figure-1: Gender of the participants:

4.1.4: Education level of participants:

In this study 80.6% (104) were Illiterate; 6.2% (8) were primary level; 9.3% (12) were SSC level; 3.9% (5) were HSC level.

Table-2: Education Level:

Level of education	Frequency (n)	Percentage (%)
Illiterate	104	80.6%
Primary	8	6.2%
SSC	12	9.3%
HSC	5	3.9%
Total	129	100.0%

4.1.5: Martial status of participants:

The majority of them were 93.8% (121) were Married and 6.2% (8) were Unmarried

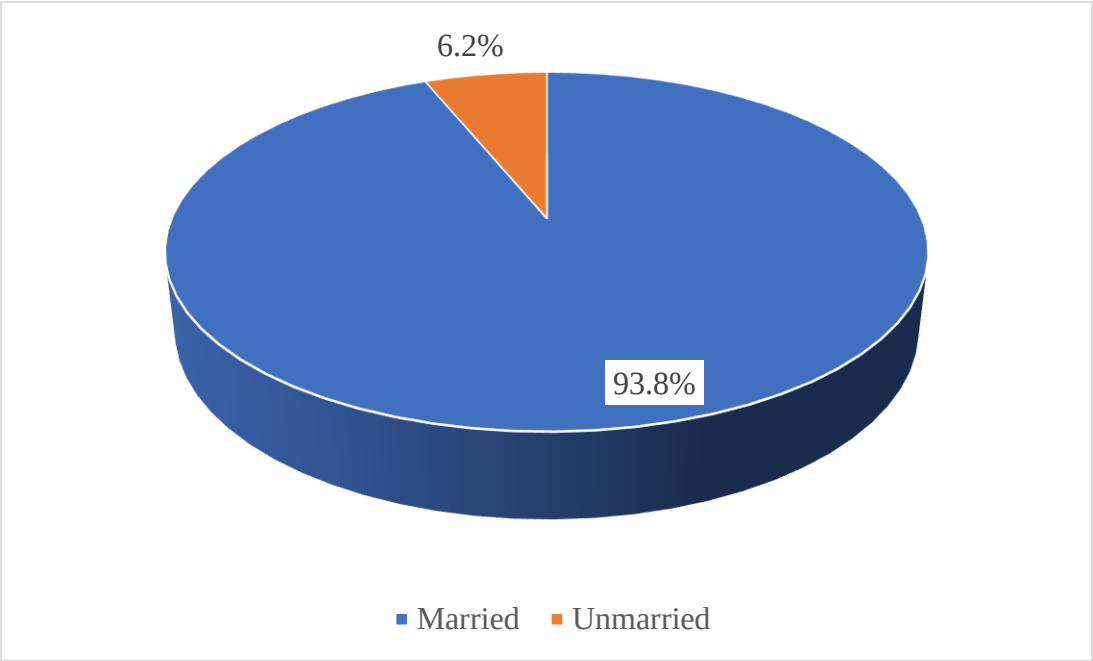


Figure-2: Martial status of participants

4.1.6: Family type of participants:

The majority 87.6% (113) were Extended family; and 12.4% (16) were belong nuclear family.

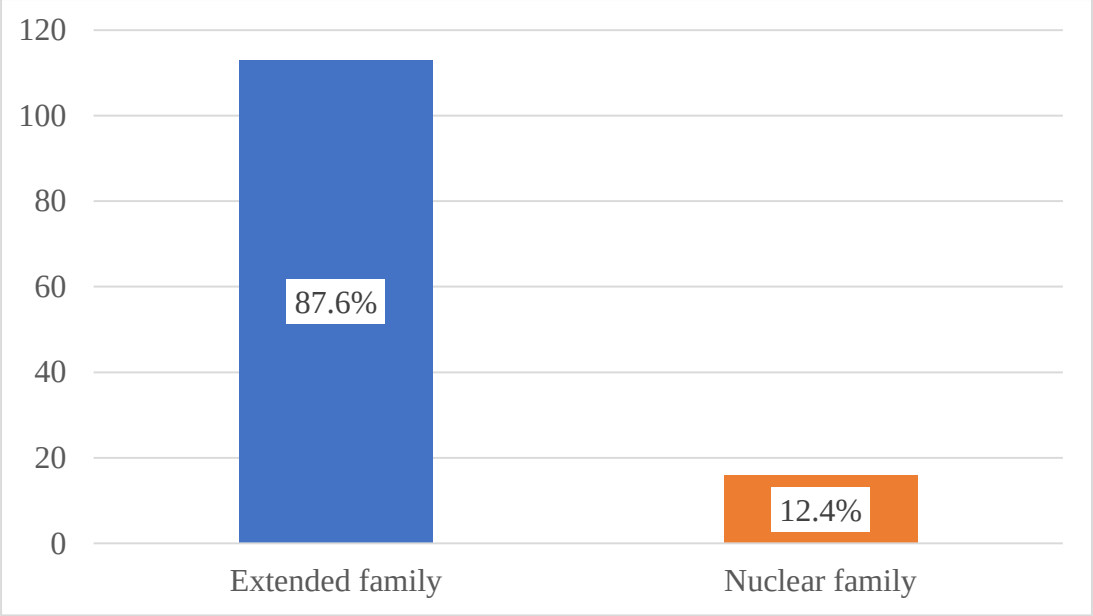


Figure-3: Family type of participants

4.1.7: Monthly Income of participants:

In this study 82.6% (106) monthly income was (0-5000) taka; 7.8% (10) monthly income was (6-10000) taka; 10.1% (13) monthly income was (11000-15000) taka.

Table-3: Monthly income:

Category	Frequency (n)	Percentage (%)
0 – 5000	106	82.6%
6000 – 10000	10	7.8%
11000 – 15000	13	10.1%
Total	129	100.0%

4.2.1: Experienced any violence or torture of the participant:

In this study researcher found 30.2% (39) was not experienced any violence or torture; and 69.8% (90) was experienced any violence or torture.

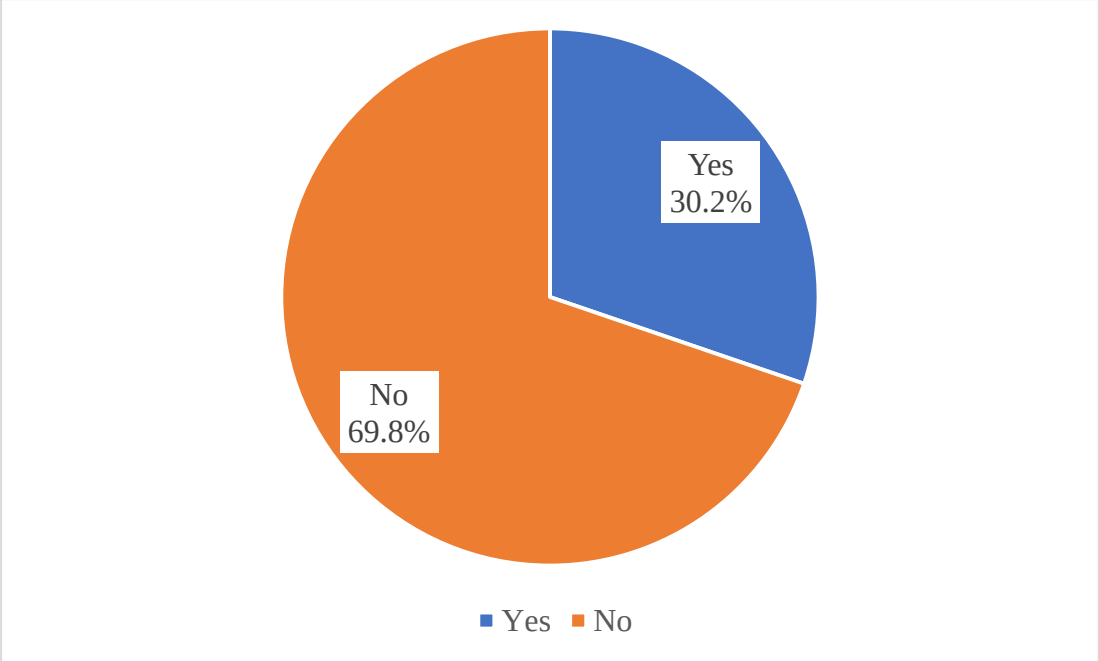


Figure-4: Experienced any violence or torture of the participant

4.2.2: Suffering from disability of the participant:

In this study 45.7% (59) were suffering disability; and 54.3% (70) were suffering no disability.

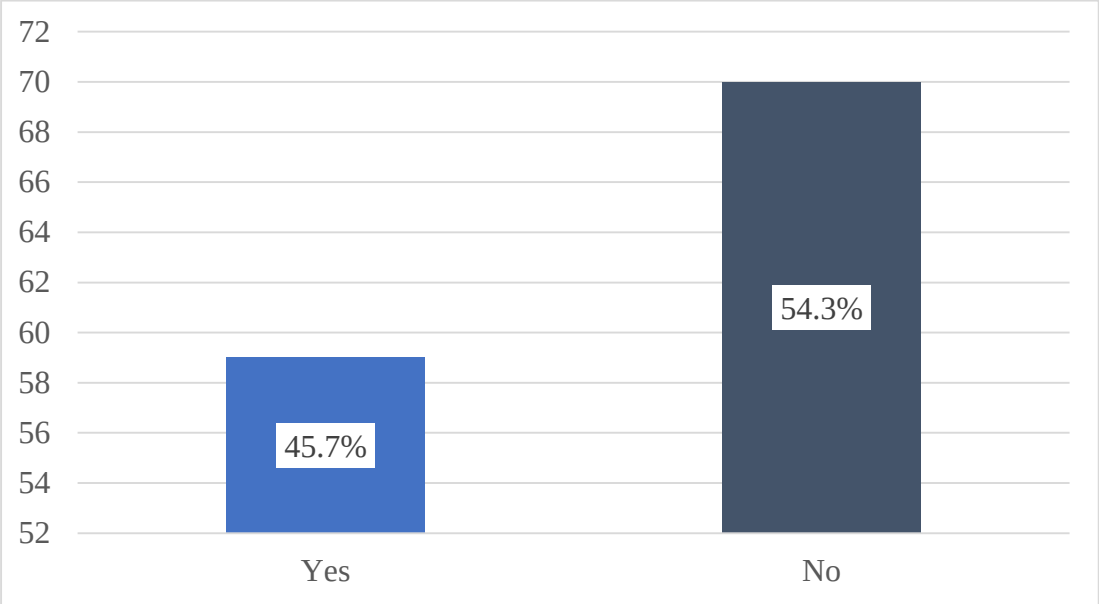


Figure-5: Suffering from disability of the participant

4.2.3: Duration of the participant:

In this study 122 (94.6%) duration was 0-13 years; 3 (2.3%) duration was 14-27 years; 4 (3.1%) was 28-40 years.

Table-4: Duration:

Category	Frequency (n)	Percentage (%)
0 – 13 years	122	94.6%
14 – 27 years	3	2.3%
28 – 40 years	4	3.1%
Total	129	100.0%

4.2.4: Taking rehabilitation service:

The majority of them 115 (89.1%) were not taking rehabilitation service; and 14 (10.9%) were taking rehabilitation.

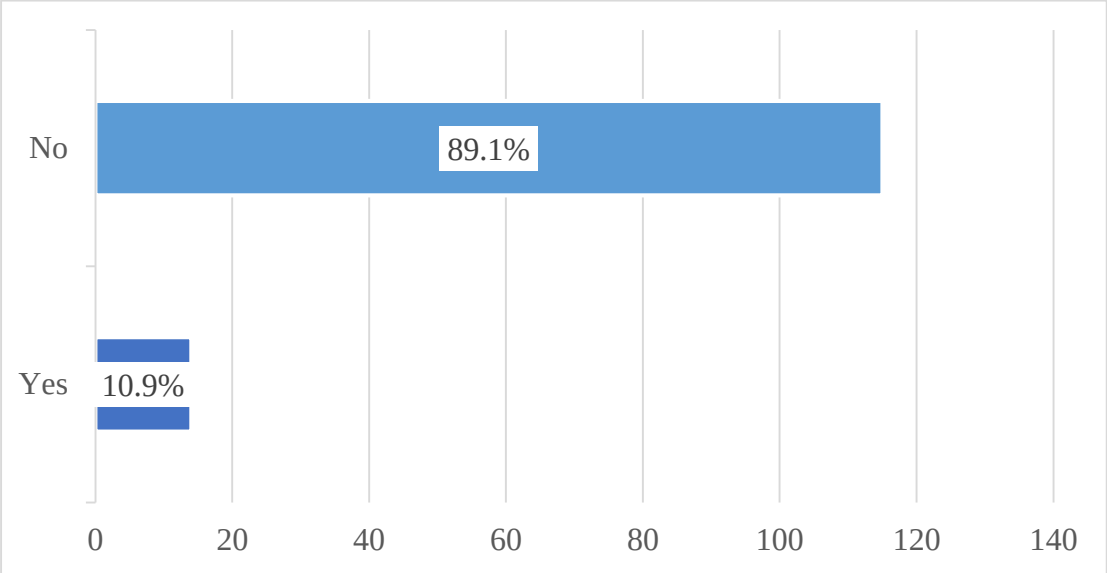


Figure-6: Taking rehabilitation service

4.3: Record number of days:
4.3.1: How many Difficulties:

In this study 82 (63.6%) duration was (0-10) days; 4 (3.1%) duration was (11-20); 43 (33.3%) duration days (21 – 30).

Table- 5: Difficulties:

Number of days	Frequency (n)	Percentage (%)
0 – 10	82	63.6%
11 – 20	4	3.1%
21 - 30	43	33.3%

4.3.2: Unable to carry out:
In this study 107 (82.9%) duration was (0-10) days; 3 (2.3%) duration days were (11 – 20); and 19 (14.7%) duration (21-30) days.

Table- 6: Carry out:

Number of days	Frequency (n)	Percentage (%)
0 – 10	107	82.9%
11 – 20	3	2.4%
21 - 30	19	14.7%

4.3.3: Usual activities:

In this study 20 (15.5%) duration was (0-10) days; 12 (9.3%) duration days were (11 – 20); and 97 (75.2%) duration (21-30).

Table - 7: Usual activities:

Number of days	Frequency (n)	Percentage (%)
0 – 10	20	15.5%
11 – 20	12	9.3%
21 - 30	97	75.5%

4.3.4: Level of Disability:

In this study 63 (48.8%) was None; 31 (24.0%) were Mild; and 23 (17.8%) were Moderate; and 8 (6.2%) were Severe; 4 (3.1%) were Extreme or cannot do.

Table - 8: Level of Disability:

Level of disability	Frequency (n)	Percentage (%)
None	63	48.8%
Mild	31	24.0%
Moderate	23	17.8%
Severe	8	6.2%
Extreme or cannot do	4	3.1%
Total	129	100.0%

4.4: WHO Questionnaire Domains result

4.4.1: Cognition:

In this study 67 (51.9%) was None; 30 (23.3%) were Mild; and 20 (15.5%) were Moderate; and 3 (2.3%) were Severe; 9 (7.0%) were Extreme or cannot do.

Table- 9: Level of disability in Cognition:

Level of disability	Frequency (n)	Percentage (%)
None	67	51.9%
Mild	30	23.3%
Moderate	20	15.5%
Severe	3	2.3%
Extreme or cannot do	9	7.0%
Total	129	100.0%

4.4.2: Mobility:

In this study 71 (55.0%) was None; 24 (18.6%) were Mild; and 9 (7.0%) were Moderate; and 6 (4.7%) were Severe; 19 (14.7%) were Extreme or cannot do.

Table-10: Level of disability in Mobility:

Level of disability	Frequency (n)	Percentage (%)
None	71	55.0%
Mild	24	18.6%
Moderate	9	7.0%
Severe	6	4.7%
Extreme or cannot do	19	14.7%
Total	129	100.0%

4.4.3: Self-care disability:

In this study 81 (62.8%) was None; 28 (21.7%) were Mild; and 6 (4.7%) were Moderate; and 6 (4.7%) were Severe; 8 (6.2%) were Extreme or cannot do.

Table-11: Level of disability in Self-care:

Level of disability	Frequency (n)	Percentage (%)
None	81	62.8%
Mild	28	21.7%
Moderate	6	4.7%
Severe	6	4.7%
Extreme or cannot do	8	6.2%
Total	129	100.0%

4.4.4: Getting Along with people disability:

In this study 31 (24.0%) was None; 37 (28.7%) were Mild; and 33 (25.6%) were Moderate; and 21 (16.3%) were Severe; 7 (5.4%) were Extreme or cannot do.

Table-12: Level of disability in Getting Along:

Level of disability	Frequency (n)	Percentage (%)
None	31	24.0%
Mild	37	28.7%
Moderate	33	25.6%
Severe	21	16.3%
Extreme or cannot do	7	5.4%
Total	129	100.0%

4.4.5: Life activities disability:

In this study 65 (50.4%) was None; 14 (10.9%) were Mild; and 8 (6.2%) were Moderate; and 15 (11.6%) were Severe; 27 (20.9%) were Extreme or cannot do.

Table-13: Level of disability in Life activities:

Level of disability	Frequency (n)	Percentage (%)
None	65	50.4%
Mild	14	10.9%
Moderate	8	6.2%
Severe	15	11.6%
Extreme or cannot do	27	20.9%
Total	129	100.0%

4.4.6: Participation in society disability:

In this study 64 (49.6%) was None; 30 (23.3%) were Mild; and 25 (19.4%) were Moderate; and 7 (5.4%) were Severe; 3 (2.3%) were Extreme or cannot do.

Table-14: Level of disability in Participation in society:

Level of disability	Frequency (n)	Percentage (%)
None	64	49.6%
Mild	30	23.3%
Moderate	25	19.4%
Severe	7	5.4%
Extreme or cannot do	3	2.3%
Total	129	100.0%

4.5.: Association between Age of the participant and level of disability:

In this study 129 Rohingya refuges were participate, where the researcher divided into 5 level of disability group and find out the association between age of the participants and level of disability.

Table-15: Association between Age of the participant and level of disability:

	Level of disability						
Age Category	None	Mild	Moderate	Severe	Extreme	Pearson Chi-Square (X^2)	P value
Less than 42 years	49	9	5	3	1	35.863	0.001*
42 years and above	13	22	18	5	4		

(* Significant at 95% confidence level).

4.6: Association between taking rehabilitation and level of disability:

In this study 129 Rohingya refuges were participate, where the researcher divided into 5 group and find out the association between taking rehabilitation and disability.

Table-16: Association between taking rehabilitation and level of disability:

Category	Yes	No	Pearson Chi-Square (X^2)	P value
None	2	61	12.106	0.017*
Mild	5	26		
Moderate	4	19		
Severe	1	7		
Extreme or cannot do	2	2		

(* Significant at 95% confidence level).

4.7: Association between torture and violence experience and level of disability:

In this study 129 Rohingya refuges were participate, where the researcher divided into 5 level of disability group and find out the association between torture and violence experience of the participants and level of disability.

Table-17: Association between torture and violence experience and level of disability:

	Level of disability						
Category	None	Mild	Moderate	Severe	Extreme	Pearson Chi-Square (X^2)	P value
Yes	14	11	9	4	1	4.720	0.317
No	48	20	14	4	4		

CHAPTER – V DISCUSSION

This study aims to calculate the prevalence of disability among Rohingya Refugees living in Bangladesh. Among 129 participants, most participants (51.9%) were attended from less than 42 years age group; and (48.1%) were 42 years and above age group; the mean and standard deviation of the study was 42.79 ± 17.629 and out of 129 participants, 100% (n=129) religion was Islam. In this study, there 71% (92) were male and 29% (37) were female. Education level of the participants was 80.6% (104) illiterate; 6.2% (8) were Primary level; 9.3% (12) were SSC level; 3.9% (5) were HSC level. The majority of them were 93.8% (121) were Married and 6.2% (8) were Unmarried; and the majority 87.6% (113) belongs in Extended family; and 12.4% (16) were belong nuclear family. In this study 82.6% (106) monthly income was (0-5000) taka; 7.8% (10) monthly income was (6-10000) taka; 10.1% (13) monthly income was (11000-15000) taka. Another study of Rohingya refugees in Malaysia were revealed that, among 959 participants (67.2%) were attended from (18 – 30) age group; (18.2%) were (31 – 40) age group; and (14.6%) were above 41 years age group, the mean and standard deviation of the study was 28.3 ± 9.03; and there were 77.5% was male respondent and 17.8% were female; there was 12.5% unemployed and 65.9% was employed, where 56.1% was illiterate, and 27.2% was primary educated; married percentage was 48.6% and unmarried was 37.5% (Tay et al., 2019).

Another study found that 22.2% of adults in the United States (53,316,677 persons) reported having a disability. Mobility disability (13.0%), cognition disability (10.6%), independent living (6.5%), eyesight (4.6%), and selfcare (3.6%) were the most commonly reported categories. The prevalence of any impairment ranged from 16.4% in Minnesota to 31.5% in Alabama. The prevalence of each disability type also varied by state. The prevalence of each disability type also varied by state. Vision disabilities ranged from 2.7% in Idaho and New Hampshire to 8.1% in Mississippi; cognition disabilities ranged from 6.9% in North Dakota and South Dakota to 16.8% in Arkansas; and mobility disabilities ranged from 8.5% in Minnesota to 20.7% in Mississippi (Long et al., 2013).

In this study researcher found 30.2% (39) was not experienced any violence or torture; and 69.8% (90) was experienced any violence or torture. Another study on Rohingya refugees in Malaysia was found that, Torture (n = 775, 81%), witnessing rape and other

types of sexual abuse (n = 771, 80%), a lack of food and water (n = 660, 69%), and witnessing murders of friends and family members (n = 611, 64%) were the most commonly approved items (Tay et al., 2019).

In this study 67 (51.9%) was None; 30 (23.3%) were Mild; and 20 (15.5%) were Moderate; and 3 (2.3%) were Severe; 9 (7.0%) were Extreme or cannot do in cognition domain of WHODAS 2.0. Another domain was mobility found that, in this study 71 (55.0%) was None; 24 (18.6%) were Mild; and 9 (7.0%) were Moderate; and 6 (4.7%) were Severe; 19 (14.7%) were Extreme or cannot do. Self- Care domain result was 81 (62.8%) was None; 28 (21.7%) were Mild; and 6 (4.7%) were Moderate; and 6 (4.7%) were Severe; 8 (6.2%) were Extreme or cannot do. In this study, getting along domain revealed 31 (24.0%) was None; 37 (28.7%) were Mild; and 33 (25.6%) were Moderate; and 21 (16.3%) were Severe; 7 (5.4%) were Extreme or cannot do. Another domain was Life activities, and the result was 65 (50.4%) was None; 14 (10.9%) were Mild; and 8 (6.2%) were Moderate; and 15 (11.6%) were Severe; 27 (20.9%) were Extreme or cannot do. The last domain was participation, and the result of this domain was 64 (49.6%) was None; 30 (23.3%) were Mild; and 25 (19.4%) were Moderate; and 7 (5.4%) were Severe; 3 (2.3%) were Extreme or cannot do.

Another study on Sahrawi refugee camps found that, the cognition domain with a global mean of 14.6% and a statistically significant difference between men (M =1.66%) and women (M = 16.96%) t (17) = 6.07; p < .001; Scores in the mobility category were also high, with a global mean of 27.87% (with no significant differences between men, 31%, and women, 27.3%; t (2.3) = 0.11; p =.93). Self-care had the lowest participation limitation score of 18.8% (18.52% women and 20% males; t (16.66) = 0.46; p =.65). Life activities was another domain with substantial participation challenges, with males scoring 5% and women scoring 27.68% t (17) = 4.1; p.001. The domain of social involvement had the most restrictions, reaching 40.85% for women and 23.8% for males, a significant difference t (10.56) = 2.3; p =.04 (Álvarez et al., 2021).

In this study researcher found the total score of WHODAS 2.0 score was 63 (48.8%) was None; 31 (24.0%) were Mild; and 23 (17.8%) were Moderate; and 8 (6.2%%) were Severe; 4 (3.1%) were Extreme or cannot do.

In this study, association between age of the participants and level of disability was found the p value (0.00*); and association between taking rehabilitation and level of disability was (0.017*); the association between torture and violence experience of the participants and level of disability was (0.317). Another study found that, the scores for

getting along and life activities were less significant, implying a rather subtle functional improvement in both areas (p 0.05). Nonetheless, a slightly higher self-care domain score suggested a worsening of self-care function in the subjects (Chiang et al., 2021).

Another study was reviled among all participants, 23% had experienced non-partner physical or sexual violence before coming in Dadaab, and 73% had experienced physical and/or sexual IPV or NPV in the previous year. Women with disabilities had a higher prevalence of suffering violence before coming in Dadaab and within the previous year than women without disabilities. For example, a larger number of women with disabilities (32%) than women without disabilities (16%) reported physical or sexual NPV. Furthermore, 69% of women with disabilities reported physical IPV and/or physical or sexual NPV in the previous year, compared to 54% of women without disabilities. Reports of IPV in the previous year (51% vs. 44%) and NPV in the previous year (44% and 35%) were also higher among women with a disability compared to women without a disability. Internal dependability of these three GBV components varied (past year IPV: Cronbach's = 0.92; past year NPV: Cronbach's = 0.53; before Dadaab NPV: Cronbach's = 0.44). Logistic regression models investigating the relationship between reported violence and functional impairment suggest that having a disability may be related with NPV before Dadaab, while the 95% CI for this effect size could not rule out no association (Hossain et al., 2020).

Another study found that, female (50.0) responses outnumbered male (43.4) respondents. The highest frequency (164.3) was seen in the oldest age group (60 years) (Moniruzzaman et al., 2016).

Another study found that, the global WHODAS score revealed disability in 604 of a total of 1214 people, resulting in a prevalence of 49.8% (95% CI (46.9-52.5), with the corresponding percentages for mild, moderate, severe, and extreme disability being 26.8%, 16.0%, 7.6%, and 0.1%, respectively. Disability rose with age, was more prevalent in women, and was more severe in specific domains. The prevalence of severe/extreme impairment was higher in women than in males in the following areas: getting around (26.8% vs. 12.1%); life activities (25.2% vs. 6.8%); and self-care (9.5% vs. 6.0%). Disability was more common in people with dementia, chronic liver disease, severe mental illness, and stroke. The 13-item measure discussed above produced prevalence values for disability levels that were quite close to those obtained using 36-item scores (Isla et al., 2014).

In this study the researcher found that, the difficulty present in 30 days was 82 (63.6%) duration was (0-10) days; 4 (3.1%) duration was (11-20); 43 (33.3%) duration days (21 – 30); unable to carry out was (82.9%) duration was (0-10) days; 3 (2.3%) duration days were (11 – 20); and 19 (14.7%) duration (21-30) days; usual activities 20 (15.5%) duration was (0-10) days; 12 (9.3%) duration days were (11 – 20); and 97 (75.2%) duration (21-30).

Other study demonstrates that a sizable proportion of respondents (56.19%) have a moderate level of impairment, while nearly 27% believe their level of disability is severe in terms of accessibility in the camp area. Some of them (17.14%) claim to be at a mild level of handicap because they are being healed with the help of health interventions. Understanding the current scenario with people with disabilities in camps is critical to understanding the overall situation. The number of disabled people in a family, their type and level of disability, and the reasons for their disability are the main issues of this section. According to the survey, 87% of homes have one person with a handicap, whereas the range of 2-4 people is quite small (13.3%). The proportion of respondents with a physical handicap is considerable (92.4%). More than one limitation is included in multiple categories of impairments. According to the report, the majority of several types of disabilities (34.3%) include physical, intellectual, hearing, speech, and visual difficulties. Furthermore, 20% of respondents have a visual impairment, 17.1% have a hearing impairment, and more than 12% have a speech impairment. The number of people with other sorts of disability is insignificant. Again, the level of impairment is determined by a variety of characteristics such as the type of disability, educational credentials, livelihood capabilities, accessibility to services, and resilience capacity (Chowdhury & Nasreen, 2020).

CHAPTER – VI LIMITATIONS

- Since Rohingya refugees do not understand any language other than their mother tongue, the researcher collected data through an interpreter, which has the potential for bias.
- Due to linguistic problems, 129 data collections were possible despite a sample size of 280.
- Data collection of complete sample size was not possible due to fixed timing of data collection from RRRC.
- As the camp conditions were not favorable at the time fixed by RRRC for data collection, adequate data collection was not possible.
- Due to lack of budget, it was not possible to collect more data.

CHAPTER – VII CONCLUSION AND RECOMMENDATION

6.1 Conclusion

The aim of this study to calculate the prevalence of disability among Rohingya refugees living in Bangladesh. In this study researcher found that, more than half of Rohingya refugees were not experience any violence or torture by Myanmar army, only few participants were found that, they experienced violence and torture by Myanmar army; also, association between torture and violence experience of the participants and level of disability was not significant. Researcher also found that, among the Rohingya population with disabilities, almost all have not received any form of rehabilitation or medical care, association between taking any rehabilitation and level of disability was found to be a significant. Although Rohingya camps has many treatment facilities, Rohingyas were not received any rehabilitation or medical care, in that case those who worked with Rohingya refugees especially health workers, various local and foreign NGOs were more aware. The researcher also found that, among Rohingya refugees who were suffering from disability, they face mild, moderate, severe and extreme or cannot do disability of each domain WHODAS 2.0 that means cognition, self- care, life activities, getting along, getting around and participation of society. The association between total score or total level of the participant and age of the participant were revealed a strong significant value. Mild and moderate disability was found to be higher among participants aged 42 years and above. Most of them showed mild and moderate disability, and a small number showed severe and extreme disability. Since they do not receive any kind of treatment even if they suffer from disability.

6.2 Recommendation

- The researcher encourages that, if a future study will be conducted in this particular area, the prevalence of disability among Rohingya refugees living in Bangladesh can be an attractive theme to work on.
- A similar study with large sample size can bring better results on prevalence of disability.
- Rohingya refugees faced violence and torture by the Myanmar military, which may have left them crippled, as well as leaving their home country and lives in camps in Bangladesh may have affected their mental health, researcher believe which should be studied in the future.

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Appendix - A

Institutional Review Board (IRB) Permission Letter

SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY
Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Ref : *Date :* .....

Ref.No: *SCMST/PT/ERB-2017-18/1-2023/31*

3rd January'2023

To

Sakil Miah

4th Professional B.Sc. in Physiotherapy

Saic College of Medical Science and Technology (SCMST)

Mirpur-14, Dhaka-1216.

Sub: Permission to collect data

Dear Miah,

Ethical review board (ERB) of SCMST pleased to inform you that your proposal has been reviewed by ERB of SCMST and we are giving you the permission to conduct study entitled "Prevalence of disability among rohingya refugees and availability of rehabilitation" and for successful completion of this study you can start data collection from now.

Wishing you all the best.

Thanking You,

11. 01. '23
Head of ERB
Ethical Review Board
Saic College of Medical Science and Technology

11. 01. 23
Principal
Saic College of Medical Science and Technology
Mirpur-14, Dhaka-1216

Address: Saic Tower, M-1/6, Mirpur-14, Dhaka-1216.Mobile:01936005804
E-mail: simt140@gmail.com, Web:www.saicmedical.edu.bd

Appendix - B

Permission letter for data collection

SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY

Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Ref : *Date :* .....

Ref.No: SCMST/PT/ERB-2017-18/1-2023/31(a)

28th February'2023

To

Refugee Relief and Repatriation Commissioner (RRRC)

Cox's Bazar

Sub: Permission to collect data.

Dear Sir/Mam,

Ethical review board (ERB) of SCMST pleased to inform you that Sakil Miah of final year B.Sc. in Physiotherapy student from Saic College of Medical Science and Technology doing a thesis entitle of "Prevalence of disability among rohingya refuges and availability of rehabilitation" and his data collection area is Camp-8E, Camp-8W & Camp-17 in Ukhiya, Cox Bazar. So he wants to take data from your organization/ department.

I hope you will give kind permission to collect data for successful completion of this study and oblige thereby.

Thanking You,

28/02/'23

Head of ERB
Ethical Review Board
Saic College of Medical Science and Technology

01.03.23

Principal
Saic College of Medical Science and Technology
Mirpur-14, Dhaka-1216

Address: Saic Tower, M-1/6, Mirpur-14, Dhaka-1206. Mobile: 01936005804
E-mail: simt140@gmail.com, Web:www.saicmedical.edu.bd

Permission letter for data collection

Government of the People's Republic of Bangladesh
Office of the Refugee Relief and Repatriation Commissioner
Cox's Bazar
www.rrrc.gov.bd

No: 51.04.2200.009.16.026.23. 1052 Date: 20 March 2023

Sub: Permission for Research Work in FDMNs Camp, Cox's Bazar.

Ref: Letter from Shakil Miah, Student of final year, Saic College of Medical Science and Technology; Dated: 9 March 2023

In response to the above mentioned letter, this office is pleased to grant your proposal for the permission for Research Work in FDMNs Camp in Cox's Bazar till 30 March 2023 under the following terms and conditions.

1. You are requested to inform before commencing the activities and coordinate while working, with the concerned CiC (Camp-in-Charge);
2. Must follow Govt. Policy, Rules and Laws;
3. You are not allowed to enter the Camps during Government Holidays.
4. You must leave the Camps before 3.30 pm.
5. The content/report must be submitted to RRRC Office as well as to CiC Office, before publishing.

Please feel free to contact with office if you have any further query.

Office of the Camp In-Charge Received No: 3610 Date: 30/3/23 Camp-17

Received 28.03.23 Information Assistant RRRC Camp-8W Ukhiya, Cox's Bazar.

20.03.2023
Sadhana Tripura
Senior Assistant Secretary
Phone: 01847-351662
Email: contact@rrrc.gov.bd

Shakil Miah
Student of final year
Saic College of Medical Science and Technology
NID No: 5554382951
Contact: 01703 031514
Email: asmabdullahshakil@gmail.com

Received 29/03/2023 Md. Ahosan Habib Senior Assistant Secretary Camp Incharge Camp-8E, Balukhali, Ukhiya.

Copy for Information and necessary action:
01. Camp-in-Charge; Camp- 8E, 8W and 17, Cox's Bazar
02. Office Copy

Appendix - C

Consent Form (English)

Consent Paper

Dear participant,

I am Sakil Miah, Student of B.Sc. in physiotherapy program in the Department of SAIC College of Medical Science & Technology (SCMST) which is affiliated by University of Dhaka. I am conducting the study entitled **"Prevalence of Disabilty among Rohingya Refugees and availability of Rehabilitation"** as a part of my thesis work for the partial fulfilment of B.Sc. in physiotherapy degree. There are the lists of question you need to fill- up which is include socio- demographic and disability related questions. For spending your time to participate in this interviewer administrated which will take around 10-15 minutes. There is list of questionnaires and you need to fill up each answer. The information gained from this questionnaire will be used to academic purposes and will be kept confidential. Your participation in this study is totally voluntarily and you have the right to withdraw from the interview without any clarification at any moment. You can ask any question to the researcher regarding the study to meet up your quarry. Looking forward your kind cooperation.

Declaration of the participant

I have been invited to participate in this survey. The foregoing information has been read to me and that have been answered to my satisfaction. I have noticed participation in this study is totally voluntary and I have the right to withdraw from the interview at any clarification. I give my consent voluntarily to be participants in this study.

Respondent name: Witness name:

Signature and date: Signature and date:

Or

Fingerprint

Appendix - D

QUESTIONNAIRE (ENGLISH)
PREVALENCE OF DISABILITY AMONG ROHINGYA REFUGEES AND AVAILABILITY OF REHABILITATION

Code number: | | | |

Date: ……. /……../……..

Name of respondent: ……

Camp number: ……

Mobile number: .....

Part 01: Socio-demographic Information

Question Number	Question	Answers
1	Age	……..
2	Gender	1. Male 2. Female 3. Others
3	Religion	1. Muslim 2. Hindu 3. Buddhist 4. Christian 5. Other
4	Education	1. Illiterate 2. Elementary level 3. High school level 4. Higher secondary level 5. Graduate
5	Marital status	1. Married 2. Unmarried 3. Divorced 4. Widow
6	Family Type	1. Extended family 2. Nuclear family
7	Monthly income	……

Part 02: Health related information		

8	Have you experienced any violence or torture?	1. Yes 2. No
9	Suffering from any disability?	1. Yes 2. No
10	Duration	……
11	Are you taking rehabilitation service or not?	1. Yes 2. No

Part: 03

WHODAS 2.0

WORLD HEALTH ORGANIZATION

DISABILITY ASSESSMENT SCHEDULE 2.0

36-item version, self-administered

This questionnaire asks about difficulties due to health conditions. Health conditions include diseases or illnesses, other health problems that may be short or long lasting, injuries, mental or emotional problems, and problems with alcohol or drugs.

Think back over the past 30 days and answer these questions, thinking about how much difficulty you had doing the following activities. For each question, please circle only one response.

In the past 30 days, how much difficulty did you have in:						
Understanding and communicating		None	Mild	Moderate	Severe	Extreme or cannot do
D1.1	Concentrating on doing something for ten minutes?	0	1	2	3	4
D1.2	Remembering to do important things?	0	1	2	3	4
D1.3	Analyzing and finding solutions to problems in day-to-day life?	0	1	2	3	4
D1.4	Learning a new task, for example, learning how to get to a new place?	0	1	2	3	4
D1.5	Generally understanding what people say?	0	1	2	3	4
D1.6	Starting and maintaining a conversation?	0	1	2	3	4
Getting around						
D2.1	Standing for long periods such as 30 minutes?	0	1	2	3	4
D2.2	Standing up from sitting down?	0	1	2	3	4
D2.3	Moving around inside your home?	0	1	2	3	4
D2.4	Getting out of your home?	0	1	2	3	4
D2.5	Walking a long distance such as a kilometer [or equivalent]?	0	1	2	3	4

In the past 30 days, how much difficulty did you have in:						
Self-care:		None	Mild	Moderate	Severe	Extreme or cannot do
D3.1	Washing your whole body?	0	1	2	3	4
D3.2	Getting dressed?	0	1	2	3	4
D3.3	Eating?	0	1	2	3	4
D3.4	Staying by yourself for a few days?	0	1	2	3	4
Getting along with people						
D4.1	Dealing with people you do not know?	0	1	2	3	4
D4.2	Maintaining a friendship?	0	1	2	3	4
D4.3	Getting along with people who are close to you?	0	1	2	3	4
D4.4	Making new friends?	0	1	2	3	4
D4.5	Sexual activities?	0	1	2	3	4
Life activities						
D5.1	Taking care of your household responsibilities?	0	1	2	3	4
D5.2	Doing most important household tasks well?	0	1	2	3	4
D5.3	Getting all the household work done that you needed to do?	0	1	2	3	4
D5.4	Getting your household work done as quickly as needed?	0	1	2	3	4

Please continue to next page …

If you work (paid, non-paid, self-employed) or go to school, complete questions D5.5–D5.8, below. Otherwise, skip to D6.1.

Because of your health condition, in the past 30 days, how much difficulty did you have in:						
		None	Mild	Moderate	Severe	Extreme or cannot do
D5.5	Your day-to-day work/school?	0	1	2	3	4
D5.6	Doing your most important work/school tasks well?	0	1	2	3	4
D5.7	Getting all the work done that you need to do?	0	1	2	3	4
D5.8	Getting your work done as quickly as needed	0	1	2	3	4

Participation in society:						
in the past 30 days		None	Mild	Moderate	Severe	Extreme or cannot do
D6.1	How much of a problem did you have in joining in community activities (for example, festivities, religious or other activities) in the same way as anyone else can?	0	1	2	3	4
D6.2	How much of a problem did you have because of barriers or hindrances in the world around you?	0	1	2	3	4
D6.3	How much of a problem did you have living with dignity because of the attitudes and actions of others?	0	1	2	3	4
D6.4	How much time did you spend on your health condition, or its consequences?	0	1	2	3	4
D6.5	How much have you been emotionally affected by your health condition?	0	1	2	3	4

Please continue to next page …

D6.6	How much has your health been a drain on the financial resources of you or your family?	0	1	2	3	4
D6.7	How much of a problem did your family have because of your health problems?	0	1	2	3	4
D6.8	How much of a problem did you have in doing things by yourself for relaxation or pleasure?	0	1	2	3	4

H1	Overall, in the past 30 days, how many days were these difficulties present?	Record number of days ____
H2	In the past 30 days, for how many days were you totally unable to carry out your usual activities or work because of any health condition?	Record number of days ____
H3	In the past 30 days, not counting the days that you were totally unable, for how many days did you cut back or reduce your usual activities or work because of any health condition?	Record number of days ____

This completes the questionnaire. Thank you.