FUNCTIONAL DISABILITY AND QUALITY OF LIFE AMONG ELDERLY IN BANGLADESH

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Functional Disability and Quality of Life among Elderly in Bangladesh

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DECLARATION

This work has not previously been accepted in substance for any degree and is not concurrently submitted in candidature for any degree. This dissertation is being submitted in partial fulfilment 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 consent taken from the physiotherapy department of Saic College of Medical Science and Technology (SCMST).

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ACRONYMS

AADL:	Advanced Activities of Daily Living.
ADL:	Activities of Daily Living.
BADL:	Basic Activities of Daily Living.
BMI:	Body Mass Index
BPT:	B.Sc. in Physiotherapy
DU:	Dhaka University
IADL:	Instrumental Activities of Daily Living.
ICF:	International Classification of Functioning, Disability, and Health.
QOL:	Quality of Life.
SAIC:	Student Admission Information Centre
SCMST:	Saic College of Medical Science and Technology
WHO:	World Health Organisation.
WHODAS 2.0:	World Health Organisation Disability Assessment Schedule 2.0
WHOQOL-BREF:	The World Health Organization Quality of Life Brief Version.

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ABSTRACT

Introduction: In Bangladesh, old people are increasing day by day; people above sixty are considered as old people. These people of aging group face several health problems. Their quality life is decreasing day by day due to our socio-economic condition. Therefore, there is a need to investigate functional disability and quality life of elderly people in Bangladesh.

Objective: To determine the functional disability and quality of life among the elderly in Bangladesh

Materials and method: This study was conducted in cross-sectional type of descriptive study. Data was collected from 222 people of aged 60 and above 60. Data was collected on the based on socio-demographic, health-status and WHODAS 2.0 questionnaire was prepared for measuring functional disability. WHOQOL-BREF questionnaire was prepared for measuring quality life.

Result: Among the participants (60-90) aged group, (41.9%) elderly participants were suffering moderate disability, (56.3%) participants were suffering severe disability and (1.8%) participants were suffering extreme disability. On the other hand participants' quality of life, (7.5%) respondent's quality of life were poor, (49.2%) respondents quality of life were moderate, (40.0%) respondents quality of life were good, and (3.3%) respondents quality of life were very good among those aged 60 to 90.

Conclusion: The discussion of the study shows that most of the elderly are suffering from several diseases and live in poverty, their quality of life affected with functional disability. Therefore, to improve quality of life, disability friendly environment and proper hospital management should be ensured.

Keyword: Functional disability, Quality of life, Elderly.

CHAPTER:I INTRODUCTION

1.1 Background

At the biological level, aging is caused by the build-up of numerous types of cellular and molecular damage over time. As a result, physical and mental abilities gradually deteriorate, disease risk increases, and eventually, death occurs. Globally, people are living longer. Today, the majority of people may anticipate living into their 60s and beyond. The number of older people and their share of the population are increasing in every nation on earth. One in six individuals on the planet will be 60 or older by 2030. By this point, there will be 1.4 billion people over the age of 60, up from 1 billion in 2020. The world's population is projected to reach seven billion people by 2050 (WHO, 2022).

According to the World Population Ageing Report 2013, there were 840628, 570459, and 120199 people in the world who were age 60 or older, 65, and/or 80. Additionally, there were 60033, 38513, 5248, 468549, 307699, and 57576 in Asia, 169874, 125152, and 33239 in Africa, and 33239, 125152, and 33239 in Europe. According to Bangladesh's statistics data, between the years 1974 and 2012, the population's age ranged from 1.38 million to 7.59 million. The seventh most populous country in terms of population (152.51 million) and density (1015 people per square kilometre) is Bangladesh (Barikdar and Lasker, 2016).

Researcher said that, Functional limits are a group of daily actions that support a person in carrying out their daily functions. Activities of daily living (ADL) (health, work, self-knowledge, and leisure) and Instrumental Activities of daily living (IADL) (symbolized by work and social cohesiveness) are the two basic categories into which they may be divided. Therefore, a person's limited ability to do any or a group of these tasks is referred to as a functional disability. These activities at older ages are significant because they indicate the health state and give insight into social and medical services through aged policy initiatives. An increased risk of various physical and mental health issues that might cause impairment or even death exists for older persons (Malik, 2022).

The aging population has a big impact on health. Although the frequency of functional impairment among older persons varies by nation, it is anticipated to rise in tandem with the aging of the global population. Given the detrimental effects of age-related functional impairments, it is imperative to screen for or assess functional impairment/disability as soon as possible, particularly in primary care to allow for the prompt initiation of interventions aimed at delaying the onset or progression of functional disability or age-related impairments. In order to detect individuals at risk of functional disability, such as older persons with recurrent falls or hospitalization episodes, multi-morbidity, cognitive decline, and poly-pharmacy, complete geriatric evaluations are required in both primary care and hospital settings. The degree of functional impairment is a crucial metric for assessing the burden of disease as well as the rates of morbidity and death in the elderly (Yau, et al., 2022).

Physical impairments, functional limitations, depressive symptoms, and low cognition are among the most prevalent issues that arise as people get older. When these circumstances combine, the elderly's health is put at danger in later life due to the impairment. Many linked hazards are thought to be responsible for disability in older persons. But there are four common risk factors: depression, multi-morbidity, day-to-day activity management, and functional limitations. Studies indicate that the aging process places older adults at risk for physiological restrictions, especially those related to functional health. As a result, these restrictions worsen with aging and cause functional losses, such as mental and physical impairments, which eventually lead to functional disability. Older persons who have functional disabilities run the risk of losing their health and their capacity to work, which can be dangerous (Malik, 2022).

There is currently a lack of information about the prevalence of functional impairment among older individuals, particularly in low- and middle-income nations, despite the fact that it is a significant public health concern. Based on a nationwide study, the prevalence of at least one ADL or IADL handicap was estimated to be between 36.2% and 37.1% among older individuals 60 years of age and older in the United States. In Europe, there was a range of 11% to 44% for the prevalence of at least one (ADL) impairment and 8% to 40% for the prevalence of at least one IADL disability. In Japan, the percentage of persons 65 years of age and more who are disabled and in need of long-term care was reported to be around 20%, but in China,

the percentage of older adults with ADL impairment was 18.3% in 2015.These are two instances of fast aging nations (Yau, et al., 2022)

Author said that, these tasks can be broken down into three main categories, including. Basic Activities of Daily Living (BADL), which include fundamental activities like self-care, as determined by health, work, leisure, and self-knowledge. Advanced Activities of Daily Living (AADL), a set of leisure activities, independent of work pursuits, educational activities, and social participation, which depend on personal motivation; and, finally, Instrumental Activities of Daily Living (IADL), which refer to things like: preparing meals, cleaning, shopping, and paying bills The IADLs are characterized by work and social interaction, such as getting together with friends and taking part in community activities (Virtuoso, 2015). 42 present of older people had a functional handicap of some kind and 5% of them had a severe or extremely severe disability (Tareque, et al., 2017).

Quality of life is related with functional disability. The concepts of quality of life (QOL) and happiness, physiology, and psychology are strongly linked. It gives individual lives more weight than survival time. According to a Chinese study, senior citizens' quality of life (QOL) is low in rural regions due to limitations on economic growth, cultural and educational attainment, and access to healthcare and other services. Poor quality of life (QOL) has been associated in the past with advanced age, unemployment, low education, low income, disease, and poverty. Few studies have been done on the connection between functional impairment and quality of life, despite the fact that many studies on (QOL) have been conducted among the elderly (Zhang, et al., 2019)

Author said that, chronic diseases and physical disabilities are more common among older people, which has an impact on their quality of life. Despite living longer and in better health, many people see an increase in handicap as they age. The quality of life is impacted by sensory deficiencies, functional decline, cognitive decline, and depressive symptoms, particularly in the oldest people who may have the most disabilities. There is no one definition that can be used to define or quantify QOL because it is not a single thing. The World Health Organization's QOL group did come up with a useful definition of QOL, though, which they stated as "the individuals' perception of their position in life in the context of the culture and value

systems in which they live and in relation to their goals, expectations, standards, and concerns." Physical, emotional, spiritual, cognitive, and social well-being have all been highlighted as playing significant roles in QOL, despite the fact that the notion is multifaceted (Lapid, et al., 2011).

Several studies conducted on the elderly have revealed, for instance, that subjective cognitive impairment is a significant factor impacting quality of life (QOL) and that disability and cognitive impairment are strongly associated. In addition, seniors' sadness and poor quality of life are likely to be predicted by a lack of or a decline in close social interaction. Improving social roles, taking part in group activities, and residing with others, thus, had a favourable impact on fostering the mental and physical well-being as well as raising the quality of life of senior participants. (QOL) often serves as a key metric for policy implementation by the government and highlights the problems with population health and psychosocial wellbeing. Thus, studies on the quality of life of the elderly will serve as a foundation for developing and putting into action suitable strategies and policies aimed at enhancing the quality of life of the old (Zhang, et al., 2019).

1.2 Rationale

In the world, Bangladesh is a small country but huge populated country. Bangladesh is the seventh most populated country in the world. In Bangladesh above 60-65 years old people is called ageing. Ageing is the progressive physiological changes in an organism that lead to senescence. As people getting older there daily activities become disrupted and working efficacy day by day decrease that's why they faces lot of functional disability related problem, like chronic back pain, hearing loss, vision problem, chronic heart disease, cancer etc. In these condition they faces lot of difficulties to performed of daily activities or more complex tasks like as walking, standing, bathing, dressing, grooming etc. As well as elder people faces lot of difficulties to transfer themselves from bed to chair and back. On the other hand their quality of life is inseparable connected with functional disability because healthy lifestyle and fitness keep the body well and remain the body from any health related disorder. Quality of life depends on money anxiety, stress and depression. In Bangladesh there are a few researches about functional disability among elderly people. As well as there are some research about the quality of life among elderly people but there is no specific research about topic of functional disability and quality of life among elderly people. Though there are few research works on "functional disability" and "quality of life", the number of research on this topic is quite inadequate. I chose this topic to investigate about this topic, analyse the finding and add some recommendations regarding this topic which can be a big help in further study on this topic in the context of Bangladesh. This study helps to establish awareness regarding the functional disability and quality of life of elderly. It also helps to provide in branch for future study.

1.3 Research Question

What are the functional disability and quality of life among elderly in Bangladesh?

1.4 Objectives of the study

1.4.1. General objective:

To determine the functional disability and quality of life among the elderly in Bangladesh

1.4.2. Specific objectives:

i) To determine the level of functional disability by WHODAS2.0 scale among the elderly living in different parts of Bangladesh namely Probin nibash,Dhamrai Upazila,Mirpur,Dhaka

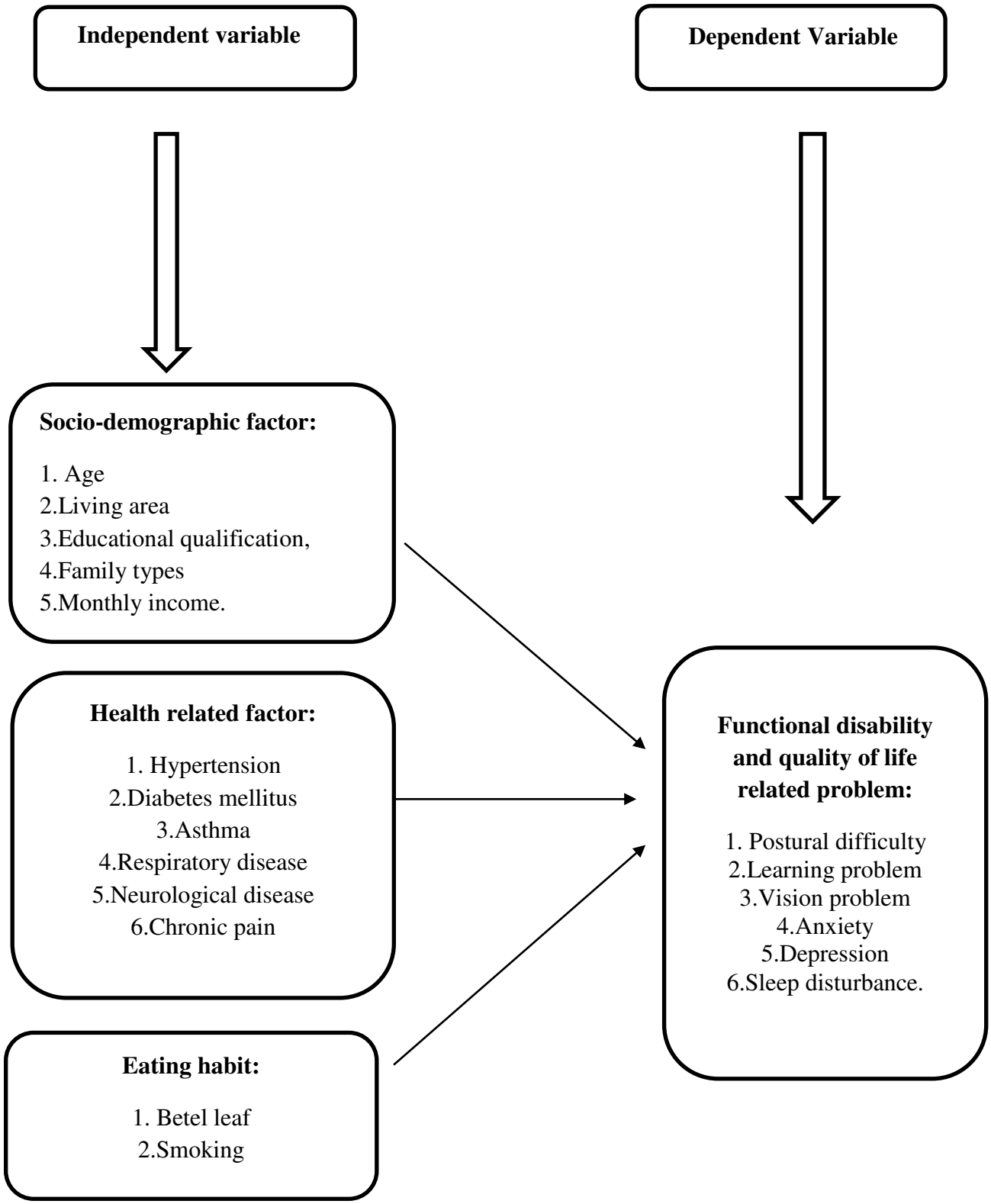
ii) To find out the level quality of life among the elderly by the WHOQOL~BREF scale

iii) To explore the socio demographic characteristics of the study subjects

iv) To determine the association between participants age and physical health status

v) To determine the association between the total disability score (WHODAS2.0) and total quality of life score (WHOQOL~BREF)

1.5 Conceptual framework



1.6 Operation Definition

Aging: Aging is the process of growing older, both biologically and socially.

Functional Disability: Any long term limitation resulting from an illness, health condition or impairment that affects a person's ability to perform certain activities of daily living without substantial assistance or supervision.

Quality of life: Who defines quality of life as an individual perception of their position in life in the context of the culture and value system in which they live in relation to their goals, expectations standards and concern.

Elderly people: An older person is defined by the United Nations as a person who is over 60 years of age. However, families and communities often use other socio-cultural referents to define age, including family status, physical appearance, or age related health condition.

WHODAS 2.0: WHODAS 2.0 is a practical, generic assessment instrument that can measure health and disability at population level or in clinical practice.

WHOQOL-BREF: The WHOQOL-100 quality of life assessment was developed by the WHOQOL group with fifteen international field centres simultaneously, in an attempt to develop a quality of life assessment half would be applicable cross-culturally.

CHAPTER:II LITERATURE REVIEW

According to demographic forecasts, every nation's population is expected to age, which will have a significant impact on the social, economic, and health systems. It is projected that the number of people in the globe who are 60 years of age or over will surpass that of children by 2047, having increased from 841 million in 2013 to over 2 billion by 2050. About two-thirds of people in the globe today live in low-income and middle-income nations; by 2050, 21·1% of the population will be 60 years of age or older, and 80% of them will do so. When compared to life expectancy statistics for 2010–15, it is anticipated that, over the same period, global life expectancies will increase, reaching 83 years in high-income regions and 75 years in low- and middle-income regions by 2045–50. The difference in life expectancies between more developed and less developed world regions is also expected to close (Chatterji, et al., 2015).

An increased risk of various physical and mental health issues that might cause impairment or even death exists for older persons. Physical impairments, functional limitations, depressive symptoms, and low cognition are among the most prevalent issues that arise as people get older. When these circumstances combine, the elderly's health is put at danger in later life due to the impairment. Many linked hazards are thought to be responsible for disability in older persons. But there are four common risk factors: depression, multi-morbidity, day-to-day activity management, and functional limitations. Studies indicate that the aging process places older adults at risk for physiological restrictions, especially those related to functional health. As a result, these restrictions worsen with aging and cause functional losses, such as mental and physical impairments, which eventually culminate in functional disability (Malik, 2022).

The number of people in less developed nations who are 60 years of age or older is expected to increase from 554 million in 2013 to roughly 1.6 billion by 2050. This is because the yearly growth rate of this demographic segment in these regions is nearly three times higher than that of more developed regions of the world. In order to express the number of years of healthy life lost due to poor health, healthy life expectancy measures both mortality and morbidity data into a single index. It does

this by using a range of severities, which are based on assigning varying weights to different degrees of disability resulting from different disorders. According to data from the Global Burden of Disease 2010 survey, there was little progress achieved in reducing the non-fatal health impacts of illnesses between 1990 and 2010, even while life expectancy increased more slowly in the healthy population. For instance, males in their 50s experienced a healthy life expectancy rise of 0.75% years for every year that life expectancy increased during this time (Chatterji, et al., 2015).

Around the world, the population is aging quickly, and this is visible in less developed countries like Bangladesh. Although aging-related issues have been extensively studied in the industrialized world, Bangladeshi older individuals have not been the subject of many studies. Given that wealthy countries are aging slower than less developed ones, Bangladesh should focus more on studies pertaining to the elderly. Studies on the aging population in Bangladesh and much of the less developed globe are noticeably devoid of disability research. An incident that occurs before birth or before might cause disability. It can also arise from an acute illness, trauma, or chronic condition that gradually impairs one's capacity to function physically or cognitively throughout middle to later life (Tareque, et al., 2017).

The extremely quick falls in Asia's fertility and mortality rates are reflected in the region's aging population. In many nations, increased income has been linked to such declines. However, this demographic shift has also resulted in a rise in the percentage of older people in the population. The sheer number of people participating is equally as significant as these dynamics. Moreover half of the world's population or more than 4.5 billion people lived in Asia's of 2020 (including China and India) all of which have populations of over 1 billion). An estimated 414 million Asian's aged 65 and over were estimated which is 20% more than the overall U.S. population (331.4 million). What's more notable is that by 2060, there will be more than 1.2 billion Asian's who are 65 years old or older, which means that one in ten individuals worldwide would be older (Wan, et al., 2022).

Previously, Bangladeshi society provided for the elderly but this is changing as a result of social psychological and economic perspective from social, economic and political perspective, Bangladesh is quite concerned about the senior population's current rapid growth. The national census shows that the number of old individuals

has gradually increased between 1974 and 2011. Between the ages of 60 and 64, there were 1682629 people in the population in 1974 and 3218974 people in 2011. In 1974 and 2011, respectively there were 735255 and 1998760 people in such age group. Over 70 year old elderly populations ranged from 1639056 to 1998760 within the same time period. According to a report the proportion of seniors aged 60 to 64, 65 to 69, 70 to 75 and over 70 were 37%, 21%, 20% and 22% respectively (Barikdar and Lasker, 2016).

Any condition that makes it more difficult for a person to engage in specific activities or enjoy equal access within a given society is referred to as disability. Disabilities can be caused by combination of cognitive, developmental, intellectual, mental, physical, or sensory issues. A person may be born with a disability or develop one throughout their lifetime. However, disabilities are not binary and can be present in particular characteristics depending on the individuals. Historically, they have only being recognized based on a limited set of criteria. Along with morbidity and mortality rates the degree of disability is a crucial measure of the illness burden (Gupta, et al., 2014).

According to a report by the Bangladesh Bureau of statistics, the population of people over 65 is on the rise. The material that is now available demonstrates that there are several social, mental, physiological and financial issues that older people in contemporary society face. The elderly in Bangladesh experience a variety of health issues, including fatigue, toothache, hearing, vision, backache, rheumatic pain, stiffness in the joints, dementia, persistent cough, difficulty breathing, asthma, palpation and high blood pressure and ineptitude and urination, which may require long term psychological treatment, nursing care and hospitalization (Barikdar and Lasker, 2016).

Elderly frailty, or weakness brought on by aging, as well as acute disorders can cause functional decline, a type of impairment. Elderly persons frequently have episodic functional impairment, which is linked to a significant risk of on-going health deterioration (Tareque, et al., 2017).

Nutritional status may change as a result of the complex process of aging, which also involves changes in physiology, psychology, and society. Among those who are undernourished, the higher functional disability people, in general, may be

due to the lower muscle mass, which contributes to lower muscle strength and reduced physical activity. Disability rates rise with aging, and among the elderly, the elderly who are older have a higher likelihood of being disabled than the elderly who are younger. Our research revealed that the likelihood of being functionally disabled increased with participant age. Comparing participants' ages with those of younger age groups, those under the age of 70 had a 2.6-fold higher likelihood of being functionally disabled (Vaish, et al., 2020).

In this study functional disability among older adults in India function disability was significantly higher in women than in older men. Our findings first attempted to comprehend how functional disability varied by gender and discovered that there were significant differences. Given the various risk factors that are related to them (Socioeconomic status and general wellbeing) and consistent with earlier studies women are more likely to experience functional disability (Banks, et al., 2017).

Bangladesh is a less developed, predominately rural nation with a population of around 150 million people. Although there are still few health services available, the young have made significant progress, but the number of elderly people living in rural areas is rising, and they receive little outside of the family care. The goal of the current study was to uncover significant functional capacity issues in senior residents in villages managed by Gonoshasthaya Kendra (GK), a community development organization that offers primary healthcare through paramedics who have completed a two-year training program there. GK was in charge of providing medical treatment to 600 communities with a combined population of about 1.5 million at the time of the study. 40 health centres were managed by 16 sub-centres, and a paramedic was dispatched from each of them to provide care for the rural population (Cherry, et al., 2012). Age related limitations on physical and functional health outcomes at older ages put older adult’s general well-being at risk (Fleischmann, et al., 2018).

The ranking of disabilities was extremely consistent across all age groups, with 20% to 50% of those aged 85 or older rating their inability to lift and carry objects, see outside of their immediate environment, or go a short distance outside of their house as "much trouble" or "can't do at all. Only uterine prolapse and sexual difficulties in women did not rise with age in the reporting of problematic health

conditions, which followed a pattern similar to that for disability. Joint pain was by far the most prevalent symptom, and once the age of 70 had been reached, the percentage of people reporting this symptom did not significantly rise. For both men and women, the second and third most frequent conditions throughout those 85 years were chest pain and urine incontinence. Age had no bearing on the recording of "other" difficulties. The number of respondents reporting each ailment was low, despite the fact that responses to this question had been coded to collect reports of back pain, digestive system issues, hypertension, diabetes, and hypertension (Cherry, et al., 2012). Vision impairment is linked to a much higher rate of falls, social isolation and dependency in addition to making it difficult to carry out daily tasks (Gupta, et al., 2014).

All but one handicap reported by women and nine out of twelve disabilities reported by men were related to widowhood (no living spouse). The few people who were "extremely poor or destitute," in comparison, were not more at risk than the richest people in these villages, except from not having enough to eat. For both men and women, difficulties seeing and hearing, going outside, and lifting and carrying large items were the things that were most closely associated with illiteracy. After accounting for age, a male who was unemployed at the time of the census was more likely to be impaired at the time of the survey, putting him at greater risk in 7 of the 12 functional capacities. Smoking and disability were not associated (Cherry, et al., 2012). Any disability related to physical functional or mental health is more likely to affect older adults (Akosile, et al., 2018).

Depending on the type of illness, the relationship between disability and problematic health issues differed noticeably. Although the most frequent complaint, painful joints were solely related to difficulties lifting, but hemiplegia and resting tremor were linked to a higher risk of reporting all aspects of impairment. Breathing issues were frequently correlated with impairment in males but not in women. Little evidence linked disability with chest pain consistently. Further investigation revealed a substantial correlation between reports of chest pain and depressive symptoms: 39.3% (13307/33861) of those who did not report depressive symptoms experienced chest discomfort, compared to 55.9% (5345/9556) of those who said that depression frequently made living difficult. The bivariate relationship between chest discomfort and, for instance, having trouble walking around the house was reduced when

depression was included in the model. Overall, a subject who was "very often depressed" was more likely to report difficulties on each of the disability questions, which showed a significant relationship between depression and reported disabilities (except hearing for women) (Cherry, et al., 2012).

It is normal for elderly people to experience disabilities that impair functionality and make it difficult for them to carry out daily tasks (ADL) (Lahiri, et al., 2014).

Both men and women who reported troublesome urine incontinence were more likely to report each impairment, indicating that there was an at least equal relationship between the two conditions (except, for women, not getting enough food). Urinary incontinence and depression were closely correlated across all age categories, with depression being reported generally in 41.0% of those with problematic incontinence but only 14.6% of those without. Urinary incontinence was found to be more significantly correlated with overall disability than any other health issue, with the exception of hemiplegia tremor and resting tremor, in a linear regression in which total disability score was the dependent variable. It was discovered that elderly disabled people in Bangladeshi rural communities relied on the family for support. The creation and critical assessment of community-based interventions tailored exclusively for the elderly in underdeveloped rural communities are urgently needed since migration to urban areas threatens family cohesion (Cherry, et al., 2012).

Every person's quality of life is ever-changing. It happens once when a person is a child, once when they are young, and again when they are elderly. "Old men are children for the second time" is a saying about aging (Aristophanes). The latter stage of life is known as old age the stage of life that follows childhood and middle age (Dhamo and Kocollari, 2014).

Due to limitations on their ability to participate, disabled persons face a variety of obstacles in their daily lives, which have an impact on their health, education, and social and economic engagement They also endure greater rates of poverty and reliance. Over the world, there is a rising tendency in the prevalence of non-communicable diseases such diabetes, mental disorders, cancer, cardiovascular disease, and respiratory illnesses. Disabilities resulting from these disorders are

substantial. Around 15% of people worldwide are estimated to be disabled, and 2-4% of those people have significant functional challenges. These statistics are from WHO estimations. According to an examination of GBD 2004 statistics, the percentage of persons with moderate or severe impairments worldwide was 15.3%, or about 978 million people, while the percentage of people with severe disabilities was 2.9%, or 185 million people (Kuvalekar, et al., 2015).

It is influenced by a person's physical and mental well-being, independent level, social connections, and personal values, as well as how they interact with key elements of their environment (Barwais, 2011).

The average lifespan of people has been rising around the globe. The lifespan of an individual can be affected by a variety of factors, such as heredity, lifestyle, healthy nutrition, quitting smoking, and physical activity life. Age-related decline in physical and mental abilities can sometimes increase the likelihood that an aged person will experience several health issues. Emotional disruptions can be caused by a variety of factors, including loneliness, impaired 9 sexual activity, and chronic metabolic illnesses. The elderly's quality of life may be reduced by several issues. According to WHO declarations, a person's assessment of their place in life in relation to the culture and value systems they live in is considered to be a measure of their quality of life as well as with regard to their objectives, assumptions, requirements, and worries. As a result of a confluence of physical, functional, emotional, and social variables, quality of life is also defined as a state of wellness. The quality of life of senior persons can be negatively impacted by low economic, cultural, educational, health care, and social interaction situations (Khaje-Bishak, et al., 2014).

However, quality of life has been seen as a vital component of material well-being (money, standard of living, access to services, environment), close relationships (social connections, social well-being, etc.), and (psychological well-being. support, societal engagement), health (physical health, fitness, mobility, ability to detect illness symptoms, ability to work), emotional well-being (emotions, self-esteem, spirituality, cognitive functions), and productivity (satisfaction with ability to work, competence, autonomy, meaningful roles) (Shahnaz, 2015).

Psychological and social well-being is the main determinants of life quality. Behavioural, psychological, and social support, for instance, might lessen the burden of chronic illnesses, which frequently influence the quality of life in elderly individuals. For instance, engaging in healthy behaviours can help manage chronic illnesses, and having control over one's daily activities can affect how well-being is perceived in the midst of illness. Key determinants of QOL include social resources, which include social interactions and social support. In order to maintain a level of living that enables elderly people to be independent, socially engaged, and have access to quality medical care (Browning, et al., 2013).

The WHOQOL-BREF questionnaire, which consists of 26 items total and includes two that assess general health, was used to measure the respondents' quality of life. Environmental, social interactions, psychological, and physical dimensions are the four areas in which the WHOQOL-BREF assesses quality of life. Using a scale of 1 to 5, respondents provided their answers to every question. Using a scale of 0 for the lowest quality of life and 100 for the highest quality of life, the acquired findings were transformed. According to the linear regression model, living alone, being physically and socially inactive, being unable to ask for help, having a weaker capacity for the outside world to adjust to functional demands, and having a higher number of chronic illnesses all contribute to a lower quality of life generally. Another significant predictor of a worse quality of life in the female group was a lower educational attainment level (Cwirlej-Sozanski, et al., 2020).

Financial resources are also crucial. The general wellbeing of people and society, however, is referred to as quality of life (QOL). One type of outcome or product that can be discovered through the interaction of social, health, financial, and environmental factors that influence human and social development is quality of life. Globally, the model of linear regression showed that worse QoL is correlated with living alone, being physically and socially inactive, and being unable to care for one's own needs to rely on others for assistance, worse external environment adaptability to functional needs, and a higher incidence of chronic diseases. A lower degree of education was a further significant predictor of a worse quality of life in the group of women (Cwirlej-Sozanska, et al., 2020).

The WHOQOL-BREF questionnaire, a general tool for measuring quality of life, contains 26 questions, of which 2 assess general health. The WHOQOL-BREF evaluates the quality of life (QOL) in four areas: physical, psychological, social and environmental. Each question was answered on a scale of 1 to 5 by respondents. The results were scaled from 0 to 100, where 100 represents the best Quality of life, and 0 represents the lowest (QOL) (Whoqol, 1998).

To determine the degree of impairment, the whole WHODAS 2.0 questionnaire—which consists of 36 questions—was utilized. It is important to note that WHODAS 2.0 has a direct association with the International Classification of Functioning, impairment and Health (ICF), which sets it apart from other instruments for evaluating impairment due to its unique characteristic. This instrument allowed for the assessment of overall disability and disability in six categories during the study: Mobility (D2), Self-care (D3), Getting along (D4), Household Life Activities (D5.1), Participation (D6), and Cognition (D1) are the areas of focus. Regarding life activities, such as job and education (D5.2), they were not examined in this study because the subjects were all above the age of 80. On a scale of 1 to 5, with 1 denoting no difficulty and 5 denoting total difficulty in the specified fields, respondents provided their answers to each question. A scale ranging from 0 to 100 was applied to the acquired results. ICF's qualitative scale, which runs from 0–4% (no disability) to 25–49% (mild disability), 50–95% (severe impairment), and 96–100% (extreme disability), may be used to visualize the results pertaining to the whole community's level of disability (Cwirlej-Sozanski, et al., 2020).

On an ICF qualitative scale, the results pertaining to the level of impairment for the entire community can be shown, with the range being 0 - 4% (no disability), 5 - 24% (mild disability), 25 - 49% (moderate disability), 50 - 95% (severe disability), and 96 - 100% (extreme disability) (Salomon, et al., 2012).

The World Health Organization Disability Assessment Schedule 2.0 (WHODAS-2.0) is a functional impairment and disability assessment instrument. The WHODAS-2.0 is based on the International Classification of Functioning, Disability, and Health (ICF) conceptual framework. It measures an individual's functioning in six broad domains: understanding and communicating; getting around (ability to move one's body); self-care (ability to take care of oneself, dress, eat, and live

independently); getting along (ability to interact with others); life activities (ability to fulfil obligations at home, at work, and in school); and participation in society (ability to participate in civic, recreational, and community activities) (Holmberg, et al., 2021).

CHAPTER:III METHODOLOGY

3.1 Study design:

It was a cross sectional type of descriptive study carried out with the aim of assessing the functional disability and quality of life among elderly in Bangladesh.

3.2 Study place:

Probin nibash (Agargaon), Dhaka city (Mirpur), 10 rural villages of Dhamrai

Upazila, Dhaka.

3.3 Study period:

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

3.4 Study population

The elderly people having functional disability living in Probin Nibash,Dhaka city,10 rural villages of Dhamrai Upazila constituted the study population for the present study.

3.5 Sample size:

The required sample size for the proposed study was calculated by using the following statistical formula.

$n = \frac{z^2 pq}{d^2}$

Here,

n= Required sample size

z= Confidence level at 95% (standard value of 1.96)

p= p is the prevalence take as 42% or 0.42 (Tareque, et al., 2017)

d= Margin of error at 5% (0.05)

So sample size was 375

3.6 Sampling technique:

Convenience sampling technique was applied this study for selecting the participants.

3.7 Eligibility criteria:

3.7.1 Inclusion criteria

- Above aged 60 years old
- Who were functionally disabled
- Who were willing to participant in the study

3.7.2 Exclusion criteria

- Who were mentally unstable
- Who were suffering chronic disease (COPD, Tuberculosis)
- Who were suffering cancer or metastasis

3.8 Method of data collection:

Face to face formal interview was used to collect data from the participants.

3.9 Instrument of data collection:

A pretested questionnaire was prepared according to the objectives of the present study. The questionnaire contained both open ended and close ended questions. The questionnaire had three parts. First part contained questions on socio-demographic information and also health status topic like asthma, hypertension. The second part contained questions on functional disability (WHODAS 2.0 Scale) on various topics like standing, walking, household chores etc. The last part included question on quality of life (WHOQOL-BREF Scale) on various topics like physical life, social life and environmental life.

3.9.1 Tools of data collection:

The height of the elderly was measured by the only tool; a measurement tape. A digital portable weight machine was used for taking body weight of the elderly.

3.9.2 Procedure of data collection:

The researcher herself collected data from the respondents in Probin Nibash (Agargaon), Dhaka city (Mirpur), 10 rural villages of Dhamrai Upazila. These were the study places for the present research. The permission for collecting data from the elderly at Probin Nibash was obtained from the director. Before starting the interview the aims and objectives of the research were explained in details to the respondents. Obtaining informed written consent from the respondents, the researcher collected all those data and filled up the questionnaire by taking interviews. The researcher asked several questions to collect the information and opinion of the respondents about research question. The researcher went to 10 villages of Dhamrai upazila. The elderly living in those villages were selected by convenience sampling technique. Thereafter the selected elderly were interviewed by the researcher using the questionnaire.

3.9.3 Data management:

At the end of each day the collected questionnaires were checked for any error or inconsistency. Necessary corrections were made. The recorded data were coded according 1,2,3 for entry into the SPSS.25 version program.

3.9.4 Data analysis:

Analysis of the data was carried out according to the objectives of the study. Mean and percentage were two measurements of descriptive statistics used in the most of the cases. Relationship was assessed between dependent and independent variables.

3.10 Result:

The findings of the study had been presented by frequency tabulation of the characteristics. The results were also presented by various charts, graphs and description of the variables.

3.11 Ethical consideration:

The researcher submitted a research proposal to the department of physiotherapy for approval and obtained the written permission in time from the Ethical review board of SAIC College of Medical Science and Technology (SCMST) to carry out the study.

No physical examination or any invasive technique was used in the present research. There was no direct benefit to respondents; however, the study findings might be beneficial for the elder people. The purpose of the study was explained to every participant and asked for their response. The respondents who gave informed verbal consent included in the study. The participant was also informed of his/her right to discontinue at any point of interview. Refusal to participate involved no loss of benefits which he/she was otherwise entitled.

Data of the participants were maintained with strict confidentiality. Every participant was given a unique code number for this study. The documents for these code numbers linking subjects were kept in a locked cabinet under the direct supervision of the researcher.

3.12 Limitation

- Required sample size for the present study was 375. But researcher collected data from 222 elderly. Due to shortage of time data could not collected from the calculated sample size.
- In this study researcher used only two tools one was (WHODAS2.0) scale to measure the functional disability among elderly. Another tool was (WHOQOL~BREF) scale to measure the quality of life among elderly. But, to do a perfect study, more tools could be used.
- Convenient sampling technique was applied to select the study participants. It is a non-probability sampling technique. Ideally random sampling technique should be used to prevent selection bias.
- Despite repeated requests some respondents showed lack of co-operation and reluctant to answer some of the questions.
- The study was carried out Dhaka and Dhamrai Upazila. It would be better to include different Upazilas from 8 divisions of the country.

CHAPTER:IV RESULT

The objective of the present study was to assess the functional disability and quality of life among the elderly in Bangladesh. The required data were collected from the respondents by using pretested questionnaire and analysed with the help of SPSS program. The result has been presented by tabulation and graph and description in below.

4.1: Socio demographic Information

4.1.1: Regarding frequency distribution of the respondents by age-

Table no.1: Frequency distribution of the participants by age.

Age group in years	Frequency	
	N	%
60 – 70	164	73.9
71 - 80	50	22.5
81 - 90	8	3.6
Total	222	100.00

Mean= 68.24, SD= ±6.238

Regarding frequency distribution of the respondents by age it was showed that out of 222, 164 (73.9%) elderly belonged to the age group of 60-70 years, 50 (22.5%) respondents were in the age group of 71-80 years and 8 (3.6%) respondents were in the age group of 81-90 years. The mean age of the participants was 68.24 years and SD was ±6.238 (Table no.1).

4.1.2: Regarding frequency distribution of the respondents by gender-

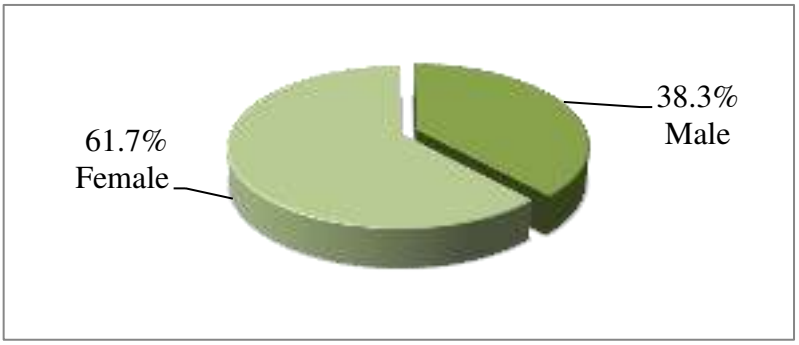


Figure no.1: Gender of the participants

About gender of the participants the study was revealed that 137(61.7%) subjects were female and 85 (38.3%) respondents were male (Figure no.1).

4.1.3: Regarding frequency distribution of the respondents by living area-

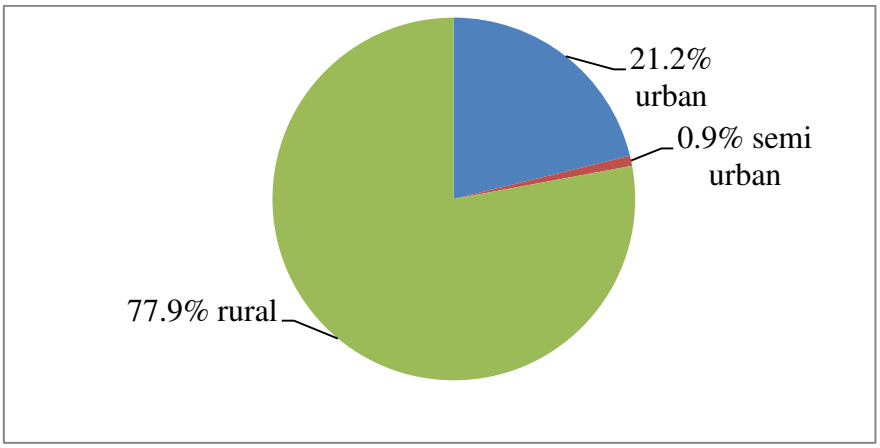


Figure no.2: Living area of the participants

About frequency distribution of respondents by living area, it was showed that 173 (77.9%) respondents were rural people, 47 (21.2%) respondents were living in urban area and 2 (0.9%) respondents were semi urban people (Figure no.2).

4.1.4: Regarding frequency distribution of the respondents by educational qualification-

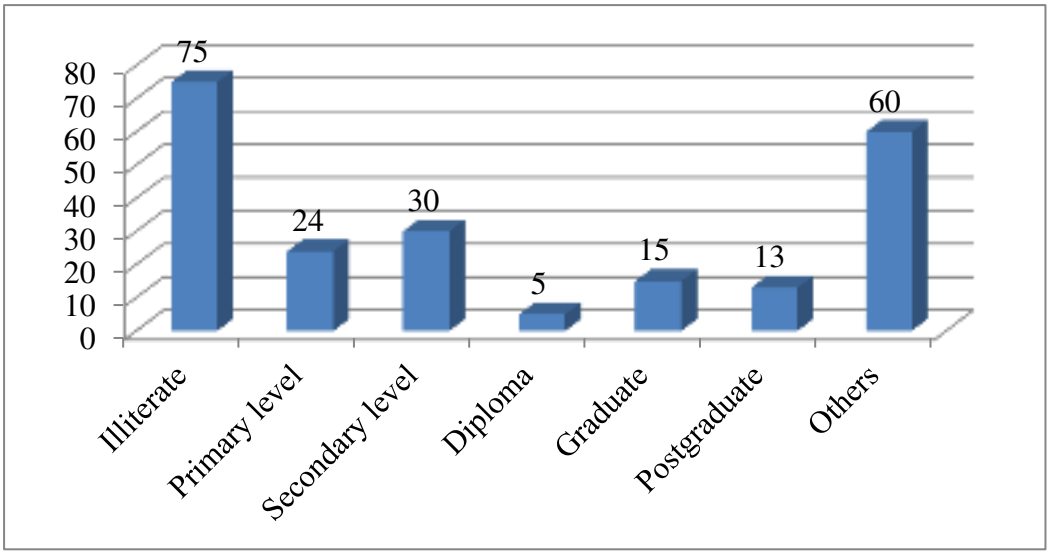


Figure no.3: Educational qualification of the participants

Regarding frequency distribution of respondents by educational qualification, the study found that 75 (33.8%) respondents were illiterate, 24 (10.8%) respondents had primary level, 30 (13.5%) respondents had secondary level, 5 (2.3%) respondents had diploma degree, 15 (2.3%) respondents were graduate, 13 (5.9%) respondents were postgraduate and 60 (27.0%) respondents were others (Figure no.3).

4.1.5: Regarding frequency distribution of the respondents by occupational status-

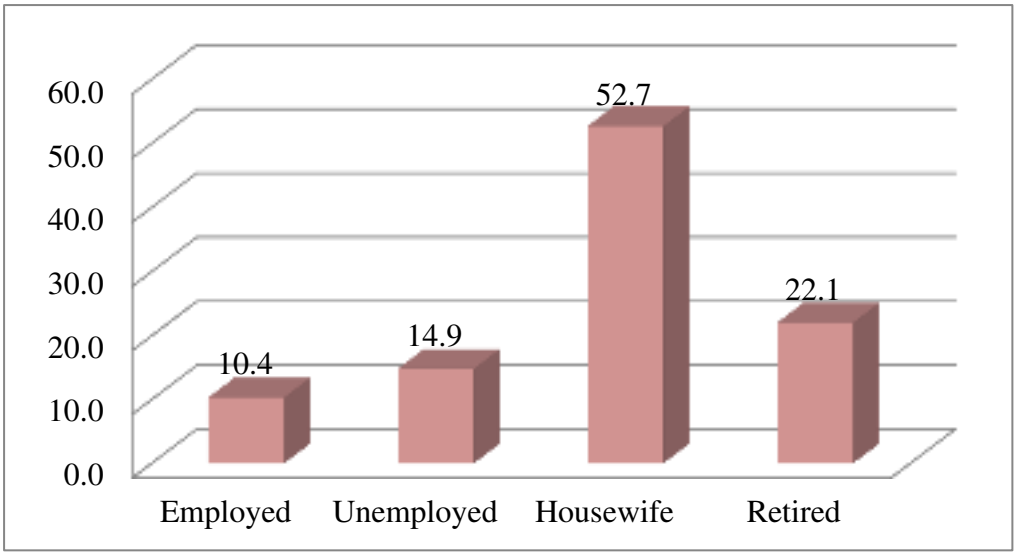


Figure.4: Occupational status of the participants

About occupational status, it was revealed that 23 (10.4%) participants were employed, 33(14.9%) elderly were unemployed, 117 (52.7%) participants were housewives, 49 (22.1%) elderly were retired (Figure no.4).

4.1.6: Regarding frequency distribution of the respondents by marital status-

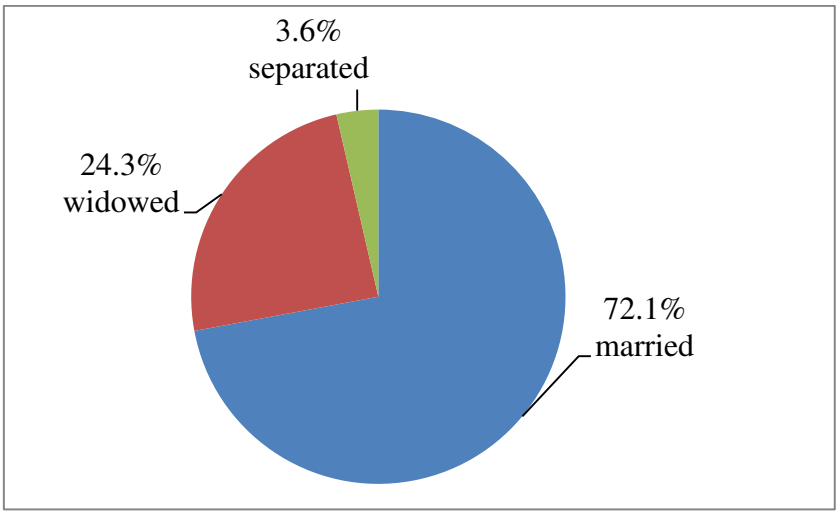


Figure no.5: Marital status of the participants

Regarding frequency distribution of respondents by marital status, the study showed that 160 (72.1%) elderly were married, 54 (24.3%) elderly were widowed/widower and 8 (3.6%) elderly were separated / divorced (Figure no.5).

4.1.7: Regarding frequency distribution of the respondents by the types of the family-

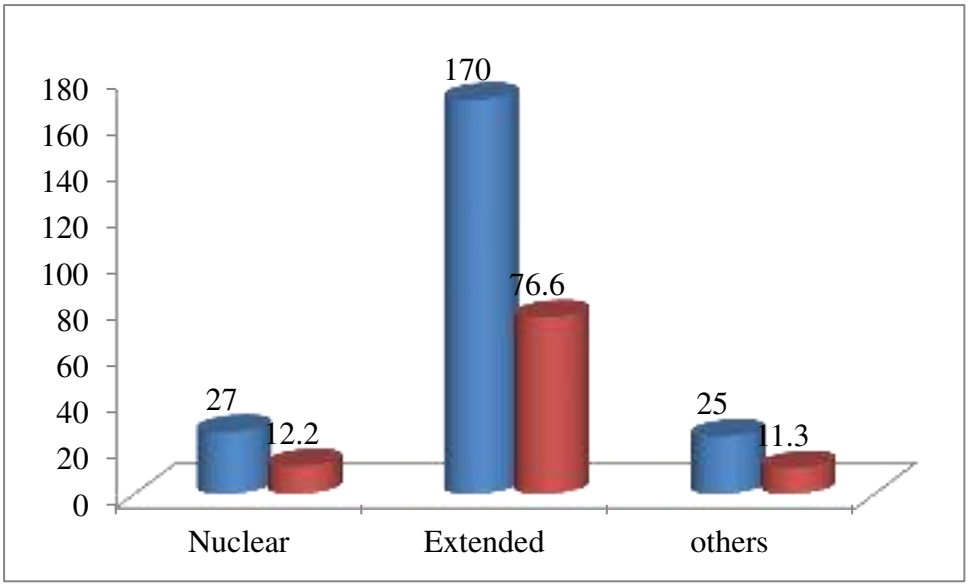


Figure no.6: Types of the family of the participants

About frequency distribution of the respondents by type of family, it was revealed that 27 (12.2%) respondents were in nuclear family, 170 (76.6%) respondents were in extended family and 25(11.3%) respondents were in others types (Figure no.6).

4.1.8: Regarding frequency distribution of the respondents by monthly income-

Table no.2: Frequency distribution of the participants by monthly income.

Monthly income	Frequency	
	N	%
Taka 0 - 18000	210	94.6
Taka 19000 - 36000	11	5.0
Taka 37000 - 50000	1	0.5
Total	222	100.00

Mean= 4184.68, SD= ±6952.10

About frequency distribution of the respondents by monthly income, the study showed that 210 (94.6%) elderly had monthly income of taka 18000 or less. It was also found that 11 (5.0%) elderly had taka 19000 – 36000 as monthly income and 1 (0.5%) elderly had taka 37000-50000. The mean monthly income was taka 4184.68 and SD was ±6952.10 (Table no.2).

4.2: General health related information

4.2.1: Regarding frequency distribution of the respondents by BMI-

Table no.3: Frequency distribution of the participants BMI.

BMI group	Frequency	
	N	%
Underweight (<18.5)	9	4.1
Normal (18.5-24.9)	149	67.1
Overweight (25-29.9)	58	26.1
Obese (>=30)	6	2.7
Total	222	100.00

Mean= 23.41, SD= ±3.22

Regarding frequency distribution of the respondents by BMI it was revealed that out of 222 participants BMI status, 149 (67.1%) elderly had normal weight (18.5-24.9). It was also found that 58 (26.1%) elderly were overweight (25-29.9) and 6 (2.7%) elderly were obese. The mean BMI was 23.41 and SD was ±3.22 (Table no.3).

4.2.2: Regarding frequency distribution of the respondents by habit-

Table no.4: Frequency distribution of the participants by habit.

Habit	Frequency			
	Yes		No	
	N	%	N	%
Smoking	27	12.2	195	87.8
Betel leaf	60	27	162	73

About frequency distribution of the respondents by habit, it was found that 27 (12.2%) were smokers and 195 (87.8%) were non-smokers. It was also found that 60 (27%) participants had the habit of betel leaf on the other hand 162 (73%) participants had not the habit of betel leaf (Table no 4).

4.2.3: Regarding frequency distribution of the respondents by health status-

Table no.5: Frequency distribution of the participants by health status.

Health disease	Frequency			
	Yes		No	
	N	%	N	%
Hypertension	111	50	111	50
Diabetes mellitus	67	30.2	155	69.8
Asthma	33	14.9	189	85.1
Cardiovascular	36	16.2	186	83.8
Respiratory	1	0.5	221	99.5
Neurological	29	13.1	192	86.5
Others	141	63.5	81	36.5

*Multiple responses

About frequency distribution of the respondents by health status, it was showed that 111 (50%) participants were suffering from hypertension, 67 (30.2%) participants were suffering from diabetes, 33 (14.9%) participants were suffering from asthma, 36 (16.2%) participants were suffering from cardiovascular disease, 1 (0.5%) participants were suffering from respiratory disease, 29 (13.1%) participants were suffering from neurological disease, 141 (63.5%) participants were suffering from other disease (Table no.5).

4.3: Functional disability related information (WHODAS 2.0)

4.3.1: Regarding frequency distribution of the respondents by functional disability (WHODAS 2.0)-

Table no.6: Frequency distribution of the participants by functional disability (WHODAS 2.0).

Question	Frequency									
	None		Mild		Moderate		Severe		Extreme or cannot do	
	N	%	N	%	N	%	N	%	N	%
Standing	0	0	3	1.4	81	36.5	120	54.1	18	8.1
Household	11	5.0	55	24.8	118	53.2	25	11.3	13	5.9
Learning	14	6.3	63	28.4	112	50.5	20	9.0	13	5.9
Problem activities	17	7.7	59	26.6	113	50.9	21	9.5	12	5.4
Health problems	1	0.5	10	4.5	72	32.4	128	57.7	11	5.0
Concentrate	7	3.2	20	9.0	139	62.6	44	19.8	12	5.4
Walking distance	1	0.5	2	0.9	42	18.9	119	53.6	58	26.1
Washing	47	21.2	34	15.3	109	49.1	19	8.6	13	5.9
Getting dressed	46	20.7	37	16.7	108	48.6	19	8.6	12	5.4
Dealing	44	19.8	108	48.6	59	26.6	2	0.9	9	4.1
Friendship	38	17.1	110	49.5	61	27.5	4	1.8	9	4.1
Day-to-day work	10	4.5	13	5.9	57	25.7	109	49.1	33	14.9

About frequency distribution of the participants by functional disability, in the scale it was found that 3 (1.4%) participants were suffering from mild pain, 81 (36.5%) were suffering from moderate pain, 120 (54.1%) was suffering from severe pain, 18 (8.1%) were suffering from extreme pain in standing. In household, responsibilities it was found that 11(5.0%) none, 55(24.8%) mild, 118(53.2%) moderate, 25 (11.3%) severe, 13 (5.9%) extreme participants. In learning a new task, it was found that 14 (6.3%) none, 63 (28.4%) mild, 112 (50.5%) moderate, 20 (9.0%) severe, 13 (5.9%) extreme participants. In problem of community, activities it was found that 17 (7.7%) none, 59 (26.6%) mild, 113 (50.9%) moderate, 21 (9.5%) severe, 12 (5.4%) extreme participants. In health problems, it was found that 1 (0.5%) none, 10 (4.5%) mild, 72 (32.4%) moderate, 128 (57.7%) severe, 11 (5.0%) extreme participants. In concentrate, it was found that 7 (3.2%) none, 20(9.0%) mild, 139 (62.6%) moderate, 44 (19.8%) severe, 12 (5.4%) extreme participants. In walking distance, it was found that 1 (0.5%) none, 2 (0.9%) mild, 42 (18.9%) moderate, 119 (53.6%) severe, 58 (26.1%) extreme participants. In washing, it was found that 47 (21.2%) none, 34 (15.3%) mild, 109 (49.1%) moderate, 19 (8.6%) severe, 13(5.9%) extreme participants. In getting dressed, it was found that 46 (20.7%) none, 37 (16.7%) mild, 108 (48.6%) moderate, 19 (8.6%) severe, 12 (5.4%) extreme participants. In dealing, it was found that 44(19.8%) none, 108(48.6%) mild, 59 (26.6%) moderate, 2 (0.9%) severe, 9(4.1%) extreme participants. In friendship, it was found that 38 (17.1%) none, 110 (49.5%) mild, 61 (27.5%) moderate, 4 (1.8%) severe, 9 (4.1%) extreme participants. In day-to-day work, it was found that 10(4.5%) none, 13 (5.9%) mild, 57 (25.7%) moderate, 109 (49.1%) severe, 33 (14.9%) extreme participants (Table no.6).

4.3.2: Regarding frequency distribution of the respondents by disability score (WHODAS 2.0)-

Table no.7: Frequency distribution of the participant's disability score (WHODAS 2.0).

Total score(WHODAS2.0)	Frequency	
	N	%
<49 (Moderate disability)	93	41.9
50-95 (Severe disability)	125	56.3
96-100 (Extreme disability)	4	1.8
Total	222	100

Mean=53.3506, SD= ±15.04628

About frequency distribution of the participant's scores by (WHODAS 2.0), it was found that 93 (41.9%) participants were suffering from moderate disability, 125 (56.3%) participants were suffering from severe disability and 4 (1.8%) participants were suffering from extreme disability. Total mean was 53.3506 and SD was ±15.04628 (Table no.7).

4.4: Quality of life related information (WHOQOL~BREF)

4.4.1: Regarding frequency distribution of the respondents by quality of life and health-

Table no.8: Frequency distribution of the participant's quality of life and health.

Question	Frequency					
	Very poor		Poor		Neither poor nor good	
	N	%	N	%	N	%
Rate the quality of life	12	5.4	91	41.0	119	53.6
Satisfied health	15	6.8	105	47.3	102	45.9

Participant's quality of life measured by the scale of WHOQOL~BREF scale, it was found that the rate of quality of life 12 (5.4%) was very poor, 91 (41.0%) was poor, 119 (53.6%) neither poor nor good. In satisfied health found that 15 (6.8%) was very poor, 105 (47.3%) was poor, 102 (45.9%) was neither poor nor good (Table no.8).

4.4.1: Regarding frequency distribution of the respondents by physical health-

Table no.9: Frequency distribution of the participant's physical health.

Physical Health	Frequency	
	N	%
0-20 (Poor)	33	13.8
21-40 (Good)	122	55.8
>41(Very good)	67	30.4
Total	222	100

Mean=34.5676, SD= ±11.90963

About frequency distribution of the participants by physical health, it was revealed that 33 (13.8%) participant's physical health status was poor, 122 (55.8%) participant's physical health status was good and 67 (30.4%) participant's physical health status was very good. Total mean was 34.5676 and SD was ±11.90963 (Table no.9).

4.4.2: Regarding frequency distribution of the respondents by psychological health

Table no.10: Frequency distribution of the participant's psychological health.

Psychological Health	Frequency	
	N	%
<25 (Very poor)	37	16.9
26-46 (Poor)	125	58.1
>47 (Neither poor nor good)	60	25.0
Total	222	100

Mean=39.1847, SD= ±12.75729

Frequency distribution of psychological health status, it was found that 37 (16.9%) participant's psychological health status was very poor, 125 (58.1%) participant's psychological health was poor and 60 (25.0%) participant's psychological health was neither poor nor good. Total mean was 39.1847 and SD was ±12.75729 (Table no.10).

4.4.3: Regarding frequency distribution of the respondents by social relationship-

Table no.11: Frequency distribution of the participant's social relationship.

Social Relationship	Frequency	
	N	%
<25 (Poor)	56	25.5
26-46 (Neither poor nor good)	97	45.4
>47 (Good)	69	29.1
Total	222	100

Mean=38.9955, SD= ±16.13840

Regarding frequency distribution of social relationship status, it was found that 56 (25.5%) participant's social relation was poor, 97 (45.4%) participant's social relationship was neither poor nor good and 69 (29.1%) participant's social relationship was good. Total mean was 38.9955 and SD was ±16.13840 (Table no.11).

4.4.4: Regarding frequency distribution of the respondents by environment status-

Table no-12: Frequency distribution of the participant's environment status.

Environment status	Frequency	
	N	%
<50 (Neither poor nor good)	162	67.5
51-71 (Poor)	48	27.5
>72 (Good)	12	5.0
Total	222	100

Mean=46.1171, SD= ±13.47882

About frequency distribution of the participants by environment status, it was revealed 162 (67.5%) participant's environment status was neither poor nor good, 48 (27.5%) participant's environment status was poor and 12 (5.0%) participant's environment status was good. Total mean was 46.1171 and SD was ±13.47882 (Table no.12).

4.4.5: Regarding frequency distribution of the participant's total quality of life score-

Table no.13: Frequency distribution of the participant's total quality of life score.

Total Quality Life Score	Frequency	
	N	%
0-20 (Poor QOL)	10	7.5
21-40 (Moderate QOL)	118	49.2
41-60 (Good QOL)	87	40.0
61-80 (Very good QOL)	7	3.3
Total	222	100

Mean=39.7455, SD= ±11.06989

Frequency distribution of the participants total quality of life score, it was showed 10 (7.5%) participant's quality of life was poor, 118 (49.2%) participant's quality of life was moderate, 87 (40.0%) participant's quality of life was good, 7 (3.3%) participant's quality of life was very good. Total mean was 39.7455 and SD was ±11.06989 (Table no.13).

4.4.6: Regarding frequency distribution of the participants by age and physical health status-

Table no-14: Frequency distribution of the participants by age and physical health status.

Age group	Frequency	Physical health		
		Frequency		
(60-70) years	164(73.9%)	0-20 (Poor)	21-40 (Good)	>41(Very good)
(71-80) years	50(22.5%)	33(13.8%)	122(55.8%)	67(30.4%)
(81-90) years	8(3.6%)			
Total= 222(100%)		Total= 222(100%)		

$\chi 2 = 13.369$, $df = 4$, $p = 0.010$

The study revealed that out of 222 participants 164 (73.9%) elderly belonged to the age group of 60-70 years, 50 (22.5%) elderly were in the age group of 71-80 years and 8 (3.6%) elderly participants were in the age group of 81-90 years. It was also found that 33 (13.8%) participant's physical health status was poor, 122 (55.8%) participant's physical health status was good and 67 (30.4%) participant's physical health status was very good. The association between age of the elderly participants and physical health status of the participants was not statically significant. ($\chi 2 = 13.369$, $df = 4$, $p = 0.010$) (Table no.14).

4.4.7: Regarding frequency distribution of the respondents by total score of WHODAS2.0 SCALE and total score of WHOQOL~BREF SCALE-

Table no.15: Frequency distribution of the respondents by total score of WHODAS2.0 SCALE and total score of WHOQOL~BREF SCALE.

WHODAS2.0	Frequency	WHOQOL~BREF			
		Frequency			
<49 (Moderate disability)	93(41.9%)	0-20 (Poor QOL)	21-40 (Moderate QOL)	41-60 (Good QOL)	61-80 (Very good QOL)
50-95 (Severe disability)	125(56.3%)	10(7.5%)	118(49.2%)	87(40.0%)	7(3.3%)
96-100 (Extreme disability)	4(1.8%)				

$\chi 2 = 22.140$, $df = 6$, $p = 0.001$

Frequency of the chi-square test of the respondents by total score of WHODAS2.0 SCALE and total score of WHOQOL~BREF SCALE, it was showed that out of 222 participants, 93 (41.9%) participants were suffering from moderate disability, 125 (56.3%) participants were suffering from severe disability, 4 (1.8%) participants were suffering from extreme disability. It was also showed that 10 (7.5%) participant's quality of life was poor, 118 (49.2%) participant's quality of life was moderate, 87 (40.0%) participant's quality of life was good and 7 (3.3%) participant's quality of life was very good. The association between the total disability score and total quality of life score was statistically highly significant ($\chi 2 = 22.140$, df = 6, p = 0.001) (Table no.15).

CHAPTER:V DISCUSSION

The present study was carried out with the aim of functional disability and quality of life among elderly in Bangladesh. The information was collected by using a pretested questionnaire. The discussion part has been presented in the following sections.

Regarding frequency distribution of the respondents by age it was showed that out of 222, 73.9% elderly belonged to the age group of 60-70 years, 22.5% respondents were in the age group of 71-80 years and 3.6% respondents were in the age group of 81-90 years. The mean age of the participants was 68.24 years and SD was ±6.238 (Table no.1). Zhang, et al., did a research on functional disability and quality of life, among rural elderly in Anhui province, China. They collected data from 3336 participants among them 45.8% belong to age group of 60-69, 39.7% respondent were in the age group of 70-79 and 14.5% respondent were age group of ≥80 (Zhang, et al., 2022).

The present study was revealed that, 61.7% elderly respondents were female and 38.3% elderly respondents were male (Figure no.1). Cwirlej-Sozanska, et al., did a research on disability and quality life, here the researchers' shows factors associated with disability and quality. This research entitled "Factors associated with disability and quality of life among the oldest-old living in community in Poland. In this study, out of 100%, 30.52% belong to the group of male, and the group of female consist of 69.48% (Cwirlej-Sozanska, et al., 2020).

It was showed that, 77.9% elderly respondents were rural people, 21.2% elderly respondents were urban people and 0.9% elderly respondents were semi urban people (Figure no.2). Cwirlej-Sozanska, et al., did a research on disability and quality life, here the researchers' shows factors associated with disability and quality, oldest-old living in community in Poland. In this study stated that out of 100% participants, 27.91% respondents were live in city, 72.09% respondents were countryside (Cwirlej-Sozanska, et al., 2020).

The study was found that, 33.8% elderly were illiterate respondents, 10.8% elderly were primary level respondents, 13.5% elderly were secondary level respondents, 2.3% elderly were diploma respondents, 2.3% elderly were graduate

respondents, 5.9% elderly were postgraduate respondents, 27.0% elderly were others respondents (Figure no.2). A study in Poland by Cwirlej-Sozanska, et al., stated that out of 100% participants, 73.90% respondents were studied in vocational level and 26.10% respondents were studied in secondary level. (Cwirlej-Sozanska, et al., 2020).

It was revealed that, 10.4% elderly were employed people, 14.9% elderly were unemployed, 52.7% elderly were housewife, 22.1% elderly were retired respondents (Figure no.4). Another study by Zhang, et al., did a research on functional disability and quality of life, among rural elderly in Anhui province, China. In this study, they collected data from 3336 participants among them 64.1% were unemployed and 35.9% were employed respondents (Zhang, et al., 2022).

The present study was found that, 72.1% elderly were married people, 24.3% elderly were widowed/widower and 3.6% elderly were separated / divorced people (Figure no.5). A study at New Delhi in India by Vaish, et al., revealed that among 100% research participants, 66.9% were married people, 31.7% were widowed/widower and 1.4% were separated/divorced respondents (Vaish, et al., 2020).

It was revealed that 12.2% respondents were in nuclear family, 76.6% respondents were in extended family and 11.3% respondents were in others types (Figure no.6). A community-based cross-sectional study was done by Vaish, et al., this research entitled “Functional; disability among elderly: Among 100% research participants, 78.1% were lived in joint family and 21.9% were lived in nuclear family (Vaish, et al.,2020).

About frequency distribution of the respondents by monthly income, the study showed that 94.6% elderly had monthly income of taka 18000 or less. It was also found that 5.0% elderly had taka 19000 – 36000 as monthly income and (0.5%) elderly had taka 37000-50000. The mean monthly income was taka 4184.68 and SD was ±6952.10 (Table no.2). A study at New Delhi in India by Vaish, et al., revealed that out of 100% respondents, participant monthly income was 30.0% were <2000, 31.4% were 2000-4000 , 10.6% were 4000-6000 and 28.0% were>6000 (Vaish, et al.,2020).

Regarding frequency distribution of the respondents by BMI it was revealed that out of 222 participants BMI status, 167.1% elderly had normal weight, 26.1% elderly were overweight and 2.7% elderly were obese. The mean BMI was 23.41 and SD was ±3.22 (Table no.3). Justyna Kilian et al., showed the rising incidence of disability among elderly people results in a growing need for a long-term care. The title of this paper is "Assessment of disability of life in elderly people in institutional care". Researchers collected data from 100 participants. Out of 100 participants, 5.0% were underweight BMI status, 50.0% were normal BMI status, 30.0% overweight BMI status and 15.0% obesity BMI status (Justyna Kilian et al.,2017).

About frequency distribution of the respondents by habit, it was found that 12.2% were smokers and 87.8% were non-smokers. It was also found that 27% participants had the habit of betel leaf on the other hand 73% participants had not the habit of betel leaf (Table no 4). Cherry et al., studied the extent and nature of difficulty with activities of daily living (disabilities) of rural area of Bangladesh. The title of this research article is "Disability among elderly rural villagers: report of a survey from Gonoshasthaya Kendra: Bangladesh." The survey was done among 45.9% residents, among men 45.9% were non- smoker, 54.1% were smoker and in women 98.2% were non-smoker, 1.8% were smoker (Cherry et al.,2012).

About frequency distribution of the respondents by health status, it was showed that 50% participants were suffering from hypertension, 30.2% participants were suffering from diabetes, 14.9% participants were suffering from asthma, 16.2% participants were suffering from cardiovascular disease, 0.5% participants were suffering from respiratory disease, 13.1% participants were suffering from neurological disease, 63.5% participants were suffering from other disease (Table no.5). Another study at University of Rzeszow in Poland by Justyna Kilian, et al., stated that out of 100% participants, 30.0% respondents were suffering from coronary heart disease, 44.0% respondents were suffering from hypertension, 14.0% respondents were suffering from atherosclerosis, 2.0% respondents were suffering from stroke, 31.0% respondents were suffering from diabetes mellitus, 2.0% respondents were suffering from COPD, 4.0% respondents were suffering from allergy, 1.0% respondents were suffering from cancer, 4.0% respondents were suffering from asthma, 28.0% respondents were suffering from osteoporosis, 20.0% respondents were suffering from osteoarthritis of the peripheral joints, 25.0%

respondents were suffering from osteoarthritis and back pain, 40.0% respondents were suffering from incontinence, 11.0% respondents were suffering from migraine and 15.0% respondents were suffering from depression (Justyna Kilian, et al., 2017).

In the scale, it was found that 1.4% participants were suffering from mild pain, 36.5% participants were suffering from moderate pain, 54.1% participants were suffering from severe pain, 8.1% participants were suffering from extreme pain in standing. In household responsibilities, it was found that 5.0% none, 24.8% mild, 53.2% moderate, 11.3% severe, 5.9% extreme participants. In learning a new task it was found that 6.3% none, 28.4% mild, 50.5% moderate, 9.0% severe, 5.9% extreme participant. In problem of community activities, it was found that 7.7% none, 26.6% mild, 50.9% moderate, 9.5% severe, 5.4% extreme participants. In Health problems, it was found that 0.5% none, 4.5% mild, 32.4% moderate, 57.7% severe, 5.0% extreme participants. In Concentrate it was found that 3.2% none, 9.0% mild, 62.6% moderate, 19.8% severe, 5.4% extreme participants. In walking distance, it was found that 0.5% none, 0.9% mild, 18.9% moderate, 53.6% severe, 26.1% extreme participants. In washing it was found that 21.2% none, 15.3% mild, 49.1% moderate, 8.6% severe, 5.9% extreme participants. In getting dressed, it was found that 20.7% none, 16.7% mild, 48.6% moderate, 8.6% severe, 5.4% extreme participants. In dealing it was found that 19.8% none, 48.6% mild, 26.6% moderate, 0.9% severe, 4.1% extreme participants. In friendship it was found that 17.1% none, 49.5% mild, 27.5% moderate, 1.8% severe, 4.1% extreme participant. In day-to-day work it was found that 4.5% none, 5.9% mild, 25.7% moderate, 49.1% severe, 14.9% extreme participants (Table no.6). Another study at University of Rzeszow in Poland by Justyna Kilian, et al., stated that, in understanding and communicating, 21.0% no disability, 58.0% slight disability, 19.0% moderate disability, 2.0% severe disability, 0.0% very severe disability, mean 13.65,SD ±12.37. In getting around, 5.0% no disability, 20.0% slight disability, 30.0% moderate disability, 31.0% severe disability, 14.0% very severe disability, mean 47.94,SD ±32.42. In self-care, 16.0% no disability, 37.0% slight disability, 22.0% moderate disability, 22.0% severe disability, 3.0% very severe disability, mean 32.40,SD ±29.72. In getting along with people 74.0% no disability, 5.0% slight disability, 21.0% moderate disability, 0.0% severe disability, 0.0% very severe disability, mean 6.67, SD ±12.31. In participation in society 1.0% no disability, 21.0% slight disability, 60.0% moderate disability, 18.0%

severe disability, 0.0% very severe disability, mean 34.29,SD ±14.82 (Justyna Kilian, et al., 2017).

About frequency distribution of the participant's scores by (WHODAS 2.0), it was found that 41.9% participants were suffering from moderate disability, 56.3% participants were suffering from severe disability and 1.8% participants were suffering from extreme disability. Total mean was 53.3506 and SD was ±15.04628 (Table no.7). Cwirlej-Sozanska, et al., did a research on disability and quality life, here the researchers' shows factors associated with disability and quality stated that, total disability 17.14%, in men 16.38% were affected with disability and in women 17.26% were affected with disability (Cwirlej-Sozanska, et al., 2020).

About frequency distribution of the participants by physical health, it was revealed that 13.8% participant's physical health status was poor, 55.8% participant's physical health status was good and 30.4% participant's physical health status was very good. Total mean was 34.5676 and SD was ±11.90963 (Table no.9). Another study at Yogyakarta in Indonesia by Hadning, et al. stated that physical health status means 61.18 and SD ±10.62, physical health was good (Hadning, et al., 2021).

Frequency distribution of psychological health status, it was found that 16.9% participant's psychological health status was very poor, 58.1% participant's psychological health was poor and 25.0% participant's psychological health was neither poor nor good. Total mean was 39.1847 and SD was ±12.75729 (Table no.10). Hadning, et al., studied quality of life in Indonesia during COVID-19 pandemic of health workers. Researcher stated that psychological health status means 60.33 and SD ±15.44, psychological health was good (Hadning, et al., 2021).

Regarding frequency distribution of social relationship status, it was found that 25.5% participant's social relation was poor, 45.4% participant's social relationship was neither poor nor good and 29.1% participant's social relationship was good .Total mean was 38.9955 and SD was ±16.13840 (Table no.11). Another study at Yogyakarta in Indonesia by Hadning, et al., showed that social relationships status mean was 51.57.10 and SD was ±17.61, social relationships was moderate (Hadning, et al., 2021).

About frequency distribution of the participants by environment status, it was revealed 67.5% participant's environment status was neither poor nor good, 27.5% participant's environment status was poor and 5.0% participant's environment status was good. Total mean was 46.1171 and SD was ±13.47882 (Table no.12). A study at Yogyakarta in Indonesia by Hadning, et al., stated that, environment status mean was 57.28 and SD was ±12.48, environmental health was moderate (Hadning, et al., 2021).

Frequency distribution of the participants total quality of life score, it was showed 7.5% participant's quality of life was poor, 49.2% participant's quality of life was moderate, 40.0% participant's quality of life was good, 3.3% participant's quality of life was very good. Total mean was 39.7455 and SD was ±11.06989 (Table no.13).

Frequency of the chi-square test of the respondents by total score of WHODAS2.0 SCALE and total score of WHOQOL~BREF SCALE, it was showed that out of 222 participants, 41.9% participants were suffering from moderate disability, 56.3% participants were suffering from severe disability, 1.8% participants were suffering from extreme disability. It was also showed that 7.5% participant's quality of life was poor, 49.2% participant's quality of life was moderate, 40.0% participant's quality of life was good and 3.3% participant's quality of life was very good. The association between the total disability score and total quality of life score was statistically highly significant (χ 2 = 22.140, df = 6, p = 0.001) (Table no.15).

CHAPTER:VI LIMITATIONS

Every study has its own set of limitations. There was some situational limitation while considering the study. Those are as follows:

- Required sample size for the present study was 375. But researcher collected data from 222 elderly. Due to shortage of time data could not collected from the calculated sample size.
- In this study researcher used only two tools one was (WHODAS2.0) scale to measure the functional disability among elderly. Another tool was (WHOQOL~BREF) scale to measure the quality of life among elderly. But, to do a perfect study, more tools could be used.
- Convenient sampling technique was applied to select the study participants. It is a non-probability sampling technique. Ideally random sampling technique should be used to prevent selection bias.
- Despite repeated requests some respondents showed lack of co-operation and reluctant to answer some of the questions.
- The study was carried out Dhaka and Dhamrai upazila. It would be better to include different Upazilas from 8 divisions of the country.

CHAPTER:VII CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Aging is a natural process of human life cycle and that causes a huge change. Aging is the result of molecular and cellular damage which happens over time in human body and it affects the physical and mental functionality in regular life. Aging leads to a gradual decrease in physical and mental capacity, a growing risk of disease and ultimately death. Functional disability means the limitation and restriction of a person's functionality of day to day life. Quality of Life refers to the overall well-being of a person which includes happiness, psychology, physiology, social and economic status and personal satisfaction. There are connection among aging, functional disability and quality of life.

It was a cross sectional type of descriptive study carried out with the objective of determining the functional disability and quality of life among the elderly in Bangladesh. The information was collected from 222 elderly by using a pretested questionnaire. Both male and female participants age group 60-90 were inclusion criteria.

The survey showed that about 73.9% elderly belonged to the age group of 60-70 years, 22.5% respondents were in the age group of 71-80 years and 3.6% respondents were in the age group of 81-90 years. About 61.7% participants were female and 38.3% participants were male. It was also found that 77.9% participants were living in rural area and also 33.8% participants were illiterate. In the study 52.7% participants were housewife and 22.1% participants were retired. About marital status, 72.1% participants were married, 24.3% were widowed / widower and 3.6% participants were separated / divorced. About 26.1% participants were overweight and 67.1% participants were normal weight.

The study revealed that 50% participants were suffering from hypertension, 30.2% participants were suffering from diabetes mellitus, 14.9% participants were suffering from asthma, 16.2% participants were suffering from cardiovascular disease and 13.1% participants were suffering from neurological disease.

In WHODAS2.0 (Disability) scale, it was showed that about 41.9% participants were suffering from moderate disability, 56.3% participants were suffering from severe disability and 1.8% participants were suffering from extreme disability.

On the other hand WHOQOL~BREF (Quality of life) scale, it was found that about 7.5% participant's quality of life was poor, 49.2% participant's quality of life was moderate, 40.0% participant's quality of life was good and 3.3% participants' quality of life was very good.

The association between functional disability and quality of life among elderly was statistically significant (χ 2 = 22.140, df = 6, p = 0.001).

6.2 Recommendation

Based on findings, some recommendations are given below. The following recommendations could be a help for further assessment.

- Proper nutrition, medication, exercise, regular health check-up and a disciplined lifestyle is recommended for the patients of diabetes mellitus, hypertension, and asthma, cardiovascular, respiratory, neurological and other disease.
- Elderly people have difficulties to do standing works, so, it is recommended to take rest for a while, when they stand for long time.
- A proper movable environment should be given to the elderly people. The floor of the house, bathroom and toilet should be smooth, neat and clean and dry to avoid any kind of accidents which could be reasons of further functional disabilities.
- Regular counseling, a good relationship, family supports are mandatorily recommended to maintain the quality of life of elderly people.
- Affordable health care services and disability friendly environment should be established for the elderly people with functional disability. Social policy needs a lot of reformation for quality of life.
- Financial support should be given to the elderly of functional disability because most of them are not financially solvent and independent.
- Seminar, talk show should be arranged to make social awareness of functional disability and quality of life elderly in Bangladesh.
- Government hospital, hospital for old people should provide a proper treatment at low cost.
- Encouraging further research in this area should be done. Further research finds new insight about functional disability and quality of life of elderly people in Bangladesh.
- Public awareness should increase to eradicate all stigma associated with aging and functional disability.
- At urban side, besides, giving old allowance, primary medical check-up for elderly with functional disability should be free.

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Appendix-A

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-2017-18/1-2023/04*

3rd January'2023

To

Aysha

4th Professional B.Sc. in Physiotherapy

Saic College of Medical Science and Technology (SCMST)

Mirpur-14, Dhaka-1216.

Sub: Permission to collect data

Dear Aysha,

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 "Functional disability and quality of life among elderly people in Bangladesh" 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
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Appendix - B

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-2017-18/1-2023/04

22nd January'2023

To

Director General

Probin Hitoishi Songho

Probin Bhaban, E-10, Agargaon

Sher –e-Bangla Nagar, Dhaka-1207.

Sub: Permission to collect data

Dear Sir/Mam,

Ethical review board (ERB) of SCMST pleased to inform you that Aysha of final year B.Sc. in Physiotherapy student from Saic College of Medical Science and Technology doing a thesis entitle of "Functional disability and quality of life among elderly people in Bangladesh" which has been reviewed by ERB of SCMST and we are giving permission to her to conduct this study. Her data collection area is old aged home, probin hospital etc, so she wants to take data from your hospital/department.

I hope you will give kind permission to her to collect data to complete her study successfully and oblige thereby.

Thanking You,

22/01/2023

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

22.01.23

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

Appendix - C

আইডি নাম্বারঃ

সম্মতিপত্র

প্রিয় অংশগ্রহণকারী ,

আমি **আয়শা,** ঢাকা বিশ্ববিদ্যালয় দ্বারা অনুমোদিত " **সাইক কলেজ অব মেডিকেল সায়েন্স এন্ড টেকনোলজি"** (এস সি এম এস টি) , ফিজিওথেরাপি বিভাগে ব্যাচেলর অফ ফিজিওথেরাপি প্রোগ্রামের ছাত্রী । আমার ব্যাচেলর ডিগ্রীর আংশিক পূর্ণতার জন্য একটি গবেষনা করছি। গবেষনার শিরোনামটি হল-

"**বাংলাদেশের প্রবীণ ব্যাক্তিদের মধ্যে কার্য অক্ষমতা এবং জীবনযাত্রার মান নির্ণয়"**

এখানে, সামাজিক জনসংখ্যা সংক্রান্ত তথ্য স্বাস্থ্যগত আচরণ এবং কার্য অক্ষমতা এবং জীবনের গুণমান অন্তর্ভুক্ত করে এমন প্রশ্নের একটি তালিকা রয়েছে যা আপনাকে পূরণ করতে হবে । এটি প্রায় ২০-২৫ মিনিট সময় নেবে। সম্পূর্ণ তথ্য সংগ্রহ করার জন্য একবার আপনার সাথে স্বাক্ষাৎ করা প্রয়োজন । আমি আপনাকে জানাতে চাই যে এটি সম্পূর্ন একটি একাডেমিক অধ্যায়ন এবং তথ্য প্রাপ্ত করার জন্য। এটি অন্য কোন উদ্দেশ্যে ব্যবহার করা হবে না । আপনার দ্বারা প্রাপ্ত সমস্ত তথ্য গোপন রাখা হবে এবং তথ্যের উৎসও বেনামী থাকবে, এই গবেষনায় আপনার অংশগ্রহন স্বেচ্ছায় এবং সেই সাথে সাক্ষাৎকারের সময় আপনি পছন্দ করেন না বা উত্তর দিতে চান না এমন প্রশ্নের উত্তর না দেওয়ার অধিকার রয়েছে ।

আমি শুরু করার আগে আপনার কোন প্রশ্ন আছে ?

তাহলে সাক্ষাৎকার নিয়ে এগিয়ে যেতে আমি কি আপনার সম্মতি পেতে পারি ?

হ্যাঁ না

অংশগ্রহ্নকারীর স্বাক্ষরঃ

ঠিকানাঃ তারিখঃ

মোবাইল নাম্বারঃ

গবেষকের স্বাক্ষরঃ তারিখঃ

স্বাক্ষীর স্বাক্ষরঃ

Consent Form

Dear participant,

I am Aysha student of bachelor of physiotherapy program in the Department of physiotherapy, Saic College of Medical Science and Technology (SCMST) affiliated by "UNIVERSITY OF DHAKA". Conducting the study entitled-
FUNCTIONAL DISABILITY AND QUALITY OF LIFE AMONG ELDERLY IN BANGLADESH.

As a part of my thesis work for the partial fulfilment of Bachelor degree. There is a list of Question you need to fill up which is include socio-demographic information, health seeking behave and socioeconomic status. This will take approximately 25-30 minutes. I need to meet you just once to collect entire information. I would like to inform you that this is a purely academic study and obtain information will not be used for any other purpose. All information provided by you will be kept confidential and also source of information will remain anonymous, your participation in this study voluntarily and also the right not to answer a particular question that you don't like or do not want to answer during interview.

Do you have any question before I start?

So, may I have your consent to proceed with the interview?

Yes No

Signature and date of the Participant ……

Signature and date of the Interviewer ……

Signature and date of the Physiotherapist ……

Appendix - D

প্রশ্নবলি (বাংলা)

বাংলাদেশের প্রবীণ ব্যাক্তিদের মধ্যে কার্য অক্ষমতা এবং জীবণযাত্রার মান নির্ণয়

কোড নং .....

তারিখঃ.....

অংশগ্রাহকের নামঃ.....

ঠিকানাঃ.....

.....

মোবাইল নাম্বারঃ .....

সেকশনঃ ১ সামাজিক জনসংখ্যা সংক্রান্ত তথ্য

প্রশ্ন নং	প্রশ্ন	উত্তর
১	আপনার বয়স কত ?	
২	আপনার লিঙ্গ কি? ১।পুরুষ ২।মহিলা ৩। অন্যান্য	
৩	আপনি কোথায় বাস করেন ? ১। শহর ২। মফস্বল ৩। গ্রাম	
৪	আপনার শিক্ষাগত যোগ্যতা কি? ১। নিরক্ষর ২। প্রাথমিক স্তর ৩। মাধ্যমিক স্তর ৪। ডিপ্লোমা ৫। স্নাতক ৬।স্নাতকোত্তর ৭। অন্যান্য	

৫	আপনার পেশা কি? ১। কর্মজীবি ২। বেকার ৩। গৃহিনী ৪। অবসরপ্রাপ্ত	
৬	আপনার বৈবাহিক অবস্থা কি? ১। বিবাহিত ২। অবিবাহিত ৩। বিধবা/বিপত্নীক ৪। বিচ্ছিন্ন/তালাকপ্রাপ্ত	
৭	আপনার পরিবারের ধরন কি? ১। একক পরিবার ২। যৌথ পরিবার ৩। অন্যান্য	
৮	আপনার মাসিক আয় কত?	
৯	আপনার ধর্ম কি? ১। মুসলিম ২। হিন্দু ৩। বৌদ্ধ ৪। খ্রিষ্ট্রান ৫। অন্যান্য	

সেকশনঃ ২ সাধারণ স্বাস্থ্য সম্পর্কিত তথ্য

প্রশ্ন নং	প্রশ্ন	উত্তর
১	বডি মাস ইনডেক্স ব্যাক্তির উচ্চতা (কেজি) ব্যাক্তির ওজন (কেজি)	
২	আপনার কি ধূমপান করা / পান খাওয়ার অভ্যাস আছে ?	
৩	আপনি কি কোনো স্বাস্থ্যজনিত সমস্যায় ভুগছেন? ১। উচ্চরক্তচাপ ২। বহুমূত্র রোগ ৩।শ্বাসকষ্ট ৪। হৃদরোগ ৫। শ্বাসকষ্ট ৬। ফুসুফুস ক্যান্সার ৭। স্নায়ুরোগ ৮। অন্যান্য	

সেকশনঃ ৩ কার্য অক্ষমতা সম্পর্কিত তথ্য

গত ৩০ দিনের আপনার কতোটা অসুবিধা হয়েছিলো নিম্নোক্ত কাজ সমূহেঃ

এস-১	দীর্ঘ সময়ের জন্য দাঁড়িয়ে থাকা যেমন ৩০ মিনিট	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-২	আপনার পারিবারিক দায়িত্বের প্রতি যত্নশীল হওয়া	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-৩	নতুন কাজ শেখা , উদহরনস্বরুপ একটি নতুন জায়গায় কিভাবে যেতে হয়?	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-৪	সম্প্রদায়ের কার্যক্রমে যোগদান করতে আপনার কতোটা সমস্যা হয়েছে যেভাবে অন্য কেউ করতে পারে (উদাহরণস্বরূপ উৎসব, ধর্মীয় অথাবা অন্যান্য কার্যক্রম)	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-৫	আপনার এই শারীরিক সমস্যা আপনাকে কতটুকু মানসিকভাবে প্রভাবিত করেছে ?	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-৬	কোনো কিছুতে ১০ মিনিট ধরে মনোযোগী হওয়া ।	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-৭	দীর্ঘ দূরত্বে হাটা ১ কিলোমিটার বা তার সমপরিমান	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-৮	আপনার পুরো শরীর ধৌত করা	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-৯	নিজের পোশাক পরিধান করা	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-১০	অপরিচিত লোকের সাথে কিরুপ আচরন করতে পারেন	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-১১	আপনি কি আপনার বন্ধুত্বের সম্পর্ক বজায় রাখ তে পারেন ?	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এস-১২	আপনি কি আপনার প্রতিদিনের কাজ করতে পারেন ?	হয়নি	কম	মাঝারি	তীব্র	চরম বা করতে পারিনি
এইচ-১	সামগ্রিক , গত ৩০ দিন এই অসুবিধা সমূহ কতদিন ছিলো ?	দিনের রেকর্ড সংখ্যা				
এইচ-২	গত ৩০ দিনে , কোনো স্বাস্থ্যগত অবস্থার কারনে আপনি কতদিন ধরে আপনার স্বাভাবিক ক্রিয়াকলাপ বা কাজ করতে সম্পূর্ণরুপে অক্ষম ছিলেন ?	দিনের রেকর্ড সংখ্যা				
এইচ-৩	আপনার স্বাস্থ্যগত অবস্থার কারণে, গত ৩০ দিনে আপনার যেদিনগুলি সম্পূর্ণরুপে অক্ষম ছিলেন তা গনণা না করে ,আপনি কত দিনের জন্য আপনার স্বাভাবিক ক্রিয়াকলাপ কমিয়েছেন বা কম করেছেন	দিনের রেকর্ড সংখ্যা				

সেকশনঃ ৪ জীবনের গুণ্মান সম্পর্কিত তথ্য

গত ৪ সপ্তাহে নিম্নলখিত প্রশ্নগুলো নিয়ে আপনি কি কি অভিজ্ঞতা অনুভব করেছেন।

		খুব খারাপ	মন্দ	না ভালো না মন্দ	ভালো	খুব ভালো
১	আপনি আপনার জীবনের মান কিভাবে মূল্যায়ন করবেন?	১	২	৩	৪	৫
		খুব খারাপ	মন্দ	না ভালো না মন্দ	ভালো	খুব ভালো
২	আপনি আপনার স্বাস্থ্য নিয়ে কতটা সন্তুষ্ট?	১	২	৩	৪	৫
		একেবারেই না	একটূ	মাঝারি পরিমান	অতীব	চরম
৩	আপনি কতটা অনুভব করেন যে শরীরিক ব্যাথা আপনাকে আপনার করনীয় কাজে বাধা দেয় ?	১	২	৩	৪	৫
৪	আপনার দৈনন্দিন জীবনে কাজ করার জন্য কোনো চিকিৎসার প্রয়োজন আছে কি?	১	২	৩	৪	৫
৫	আপনি আপনার জীবন কতটা উপভোগ করেন ?	১	২	৩	৪	৫
৬	আপনি কতটা আপনার জীবনকে অর্থবহ বলে মনে করেন ?	১	২	৩	৪	৫
৭	আপনি কতটা ভালোভাবে মনোনিবেশ করতে পারছেন ?	১	২	৩	৪	৫
৮	আপনি আপনার দৈনন্দিন জীবনে কতটা নিরাপদ বোধ করেন?	১	২	৩	৪	৫
৯	আপনার শারীরক অবস্থ্যা কতটা স্বাস্থ্যকর	১	২	৩	৪	৫
		একেবারেই না	একটূ	পরমিতভাবে	অধিকাংশ ক্ষেত্রে	সম্পূর্ন রুপে
১০	আপনার দৈনন্দিন জীবিনের জন্য যথেষ্ট কর্মশক্তি আছে কি?	১	২	৩	৪	৫
১১	আপনি কি আপনার শারীরিক আকার গ্রহন করতে সক্ষম ?	১	২	৩	৪	৫

১২	আপনার প্রয়োজন মেটানোর জন্য আপনার কাছে যথেষ্ট অর্থ আছে ?	১	২	৩	৪	৫
১৩	আপনার দৈনন্দিন জীবনে আপনার প্রয়োজনীয় তথ্য উপলব্ধি করা কতটা জরুরি?	১	২	৩	৪	৫
১৪	অবসর সময় কাটানোর জন্য আপনার কতটুকু সুযোগ আছে ?	১	২	৩	৪	৫
		খুব খারাপ	মন্দ	মন্দও না ভালোও না	ভালো	খুব ভালো
১৫	আপনি চারপাশের পরিবেশের সাথে কতটুকু মানিয়ে চলতে পারেন?	১	২	৩	৪	৫
		অত্যন্ত সন্তুষ্ট	অসন্তুষ্ট	সন্তুষ্ট বা অসন্তুষ্ট	সন্টষ্ট	খুব সন্তুষ্ট
১৬	আপনি আপনার ঘুম নিয়ে কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
১৭	আপনি আপনার দৈনন্দিন জীবনের ক্রিয়াকলাপ সম্পাদনকরার ক্ষমতা নিয়ে কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
১৮	আপনার কাজের ক্ষমতা নিয়ে আপনি কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
১৯	আপনি নিজে কে নিয়ে কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
২০	আপনি আপনার ব্যাক্তিগত সম্পর্ক নিয়ে কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
২১	আপনি আপনার যৌন জীবন নিয়ে কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
২২	আপনি আপনার বন্ধুদের কাছ থেকে পাওয়া সাহায্যের বিষয়ে কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
২৩	আপনি আপনার বসবাসে অবস্থা নিয়ে কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
২৪	স্বাস্থ্যসেবা বিষয়ে আপনার উপলব্ধি নিয়ে আপনি কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
২৫	আপনি আপনার পরিবহন সুবিধা নিয়ে কতটা সন্তুষ্ট ?	১	২	৩	৪	৫
		কখনো না	প্রায়ই কখনোই না	প্রায়ই	খুব প্রায়ই	সর্বদা

২৬	আপনি কতবার এরুপ নেতিবাচক অনুভূতি অনুভুব করেছেন , যেমন- বাজে মেজাজ, উদ্বিগ্ন, বিষন্নতা	১	২	৩	৪	৫

Questionnaire (English)

Functional Disability and Quality of life among Elderly in Bangladesh

Code no:

Date:

Participant name: …….

Address: …….

Phone number: ……..

Section: 1. Socio-demographic information

Q.N	Question	Ans.
1.	What is your age?	
2.	What is your gender? 1.Male 2.Female 3.Others	
3.	Where do you live? 1.Urban 2.Semi urban 3.Rural	
4.	What is your educational qualification? 1.Illiterate 2.Primary level 3.Secondary level 4.Diploma 5.Graduate 6.Postgraduate 7.Others	
5.	What is your occupational status? 1.Employed 2.Unemployed 3.Housewife 4.Retired	

6.	What is your marital status? 1.Married 2.Unmarried 3.Widowed/Widower 4.Separated/Divorced	
7.	Types of your family? 1.Nuclear 2.Extended 3.Others	
8.	What's about your monthly income?	
9.	What is your religion? 1.Muslim 2.Hindu 3.Buddhist 4.Christian 5.Others	

Section 2: General health related information

Q.N	Question	Answer
1.	BMI- Height of the participant (ft) Weight of the participant (kg)	
2.	Do you have habit of Smoking/betel leaf? 1.Yes 2.No	
3.	Are you suffering from any health problems? (kindly enter the number in the blank space). 1.Hypertension 2.Diabetes mellitus 3.Asthma 4.Cardiovascular disease 5.Respiratory problem 6.Lung cancer 7.Neurological disease 8.Others	

Section 3: Functional disability related information (WHODAS 2.0)

In the past 30 days, how much difficulty did you have in:

S1	Standing for long periods such as 30 minutes?	None	Mild	Moderate	Severe	Extreme or cannot do
S2	Taking care of your household responsibilities?	None	Mild	Moderate	Severe	Extreme or cannot do
S3	Learning a new task, for example, learning how to get to a new place?	None	Mild	Moderate	Severe	Extreme or cannot do
S4	How much of a problem did you have joining in community activities (for example, festivities, religious or other activities) in the same way as anyone else can?	None	Mild	Moderate	Severe	Extreme or cannot do
S5	How much have you been emotionally affected by your health problems?	None	Mild	Moderate	Severe	Extreme or cannot do
S6	Concentrating on doing something for ten minutes?	None	Mild	Moderate	Severe	Extreme or cannot do
S7	Walking a long distance such as a kilometer [or equivalent]	None	Mild	Moderate	Severe	Extreme or cannot do
S8	Washing your whole body?	None	Mild	Moderate	Severe	Extreme or cannot do
S9	Getting dressed?	None	Mild	Moderate	Severe	Extreme or cannot do
S10	Dealing with people you do not know?	None	Mild	Moderate	Severe	Extreme or cannot do
S11	Maintaining a friendship?	None	Mild	Moderate	Severe	Extreme or cannot do
S12	Your day-to-day work?	None	Mild	Moderate	Severe	Extreme or cannot do

H1	Overall, in the past 30 days, how many days were these difficulties present?	**Record number of days……**
H2	In the past 30 days, 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, for how many days did you cut back or reduce your usual activities or work because of any health condition?	**Record number of days**

Section 4: Quality of life related information (WHOQOL-BREF)

The following questions ask about how much you have experienced certain things in the last four weeks.

		Very poor	Poor	Neither poor nor good	Good	Very good
1.	How would you rate your quality of life?	1	2	3	4	5
		Very poor	Poor	Neither poor nor good	Good	Very good
2.	How satisfied are you with your health?	1	2	3	4	5
		Not at all	A little	A moderate amount	Very much	Extremely
3.	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4.	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5.	How much do you enjoy life?	1	2	3	4	5
6.	To what extent do you feel your life to be meaningful?	1	2	3	4	5
7.	How well are you able to concentrate?	1	2	3	4	5
8.	How safe do you feel in your daily life?	1	2	3	4	5
9.	How healthy is your physical environment?	1	2	3	4	5
		Not at all	A little	Moderately	Mostly	Completely
10.	Do you have enough energy for everyday life?	1	2	3	4	5
11.	Are you able to accept your bodily appearance?	1	2	3	4	5
12.	Have you enough money to meet your needs?	1	2	3	4	5
13.	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14.	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5
		Very poor	Poor	Neither poor nor good	Good	Very good
15.	How well are you able to get around?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
16.	How satisfied are you with you sleep?	1	2	3	4	5
17.	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18.	How satisfied are you with your capacity for work?	1	2	3	4	5
19.	How satisfied are you with yourself?	1	2	3	4	5
20.	How satisfied are you with your personal relationships?	1	2	3	4	5
21.	How satisfied are you with your sex life?	1	2	3	4	5
22.	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23.	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24.	How satisfied are you with your access to health service?	1	2	3	4	5
25.	How satisfied are you with your transport?	1	2	3	4	5
		Never	Seldom	Quite often	Very often	Always
26.	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	1	2	3	4	5

GANT CHART

Activities	July 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23
Proposal presentation												
Introduction												
Literature Review												
Methodology												
Data Collection												
Data Analysis												
Result												
1st progress Presentation												
Discussion												
Conclusion And Recommendation												
2nd Progress Presentation												
Communication With Supervisor												
Final Submission												

Bangladesh
Rangpur
Rangpur
Rajshahi
Rajshahi
Dhaka
Dhaka
Sylhet
Sylhet
Khulna
Khulna
Barisal
Barisal
Chittagong
Chittagong