Faculty of Medicine
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LEVEL OF DEPRESSION AMONG THE ELDERLY PEOPLE AT OLD HOME

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We the undersigned certify that we have carefully read and recommended to the faculty of medicine, University of Dhaka; for the acceptance of this dissertation entitled"**Level of depression among the elderly people at old home**"Submitted by **Kamrojjaman Sojib,** for partial fulfillment of the requirements for the degree of Bachelor of Science in Physiotherapy (B.Sc in PT).

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DECLARATION

I declare that the work presented here is my own. All sources used have been cited here appropriately. Any mistakes and inaccuracies is my own. I also declare that for any publication, presentation or dissemination of information of the study. I would be bound to take written consent from the Department of Physiotherapy, Bangladesh Health Professions Institute (BHPI).

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Acknowledgement

All the praise must go to Almighty Allah. At first I would like to express my

gratitude to my parents who provided me a lot of encouragement to complete this study. I also gratefully acknowledge the untiring and tolerant supervision and encouragement of my supervisor **Professor Md. Obaidul Haque**, Head of the Department of Physiotherapy & Vice-Principal, BHPI, CRP. I remain ever grateful to him for his guidance and support without which I could not have come to this stage. I again would like to pay my gratitude to him, for giving me the permission to start this study and providing me support. May Allah bless him.

Also, it's my honor to mention **Mohammad Anwar Hossain**, Associate Professor of Physiotherapy, BHPI, Senior Consultant & Head of the Department of Physiotherapy, CRP for given me permission to collect my data from Musculoskeletal Unit, Department of Physiotherapy, CRP and **Md. Shofiqul Islam,** Assistant Professor, Department of Physiotherapy for his valuable advice, support and guide to conduct this research. I can'

I am indebted to Ganesh dey, Clinical Physiotherapist, Musculoskeletal unit, CRP, Savar, and my beloved juniors from 2nd year B. Sc. in Physiotherapy shoikot and reza for endless support and helping me to collect participant's information from Musculoskeletal unit, CRP, Savar, Dhaka, Bangladesh.

Acronyms

ADL	: Active Daily Living
GDS	: Geriatric depression scale
BHPI	: Bangladesh Health Profession Institute
BMRC	: Bangladesh Medical Research Council
CRP	: Centre for the Rehabilitation of the Paralysed
IRB	: Institutional Review Board
QOL	: Quality of life
WHO	: World Health Organization

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ABSTRACT

Aging means so many things to so many individuals; it can be viewed as incorporating aspects of the biologic, social, psychologic, functional and spiritual domains. Throughout a person's life, various traumatic experiences, either physical or emotional, may actually weaken the individual ability to repair or maintain himself/herself. Role changes, major life events and co morbidity contribute to an increased rate of depression in the geriatric population. A descriptive study was conducted to evaluate the level of depression among the elderly people. For this study, Purposive sampling was applied & 70 subjects were interviewed in selected old age homes by using a Modified Geriatric Depression Scale (GDS -15). The collected data were analyzed by descriptive and inferential statistics. The study findings showed that the overall mean for the depression among elderly was 6.39 with the SD of 3.96 and 27.1% of the elderly were suffering from mild depression where as14.3% with severe depression. There was a significant association between the levels of depression and selected demographic variables such as gender, marital status, education level, family type, reasons to join old age homes & duration of stay except for age and religion. Helping older adults adjust to limitations, while accentuating positive attributes, may aid older people in remaining independent and may perpetuate a high quality of life during later years. Therefore, there is need to develop and plan the individualistic intervention to decrease depression level among elderly.

Keywords: GDS, Depression, Elderly, Old homes

CHAPTER- I INTRODUCTION

1.1 Background

Aging is a biological process that continues throughout life, and humans have no control over that the elderly population is generally defined as people over 65 years of age (Alam et al., 2021). Old age is usually discussed in connection with the different types of problems encountered by the aged and the welfare measures associated with providing them a better quality of life. It has been observed that physical diseases, psychological illness and adjustment problems are quite common during this phase of life. People in general are approacensive and speak about the difficulties that they face during the fag end of their lives. In elderly physical changes include wrinkling of skin, stopped posture, flabbiness of muscles, decreased vision and hearing, a decreased efficiency of cardiovascular system. The theme of this age period is loss, which may be identified like loss of physical abilities, loss of intellectual processes, loss of work role and occupational identification (Retirement), loss of intimate ties, such as death of spouse, friends and other a acquaintances **(**Dhara, 2013).

Depression is common in the elderly and is a major public health problem. The WHO (2005) also emphasizes that depression, which is the fourth most common illness, can lead to physical, emotional, social and economic problems (Chalise, 2014). The prevalence rate of depression varies worldwide and their prevalence rates range between 10% (2020). A study shows the depression ranges from 34.6% to 77.5% in old age home (Weyerer et al., 1995). Depression in late life is associated with significant morbidity, including deficits in a range of cognitive functions and considerable influence on functional impairment, disability (Chalise, 2014), decreased quality of life, and has a negative effect on the body's recovery from illness, increases the rate of suicide, increases use of health care services and expenses and can result in early death and disturbance in the general state of wellness (Steffens, 2000).

Depressive symptoms are associated with greater impairment and decreased quality of life among patients with coexisting chronic illnesses, such as emphysema, cancer, and diabetes. When depression coexists with other medical conditions, the resulting disability appears to be additive (Langa et al., 2004).

However, even in older adults without a disability, depression significantly increases the risk for subsequent incident ADL and mobility disability (Penninx et al., 1999). Further, studies show that "depressed persons, including depressed elderly persons, use two to three times as many medical services as people who are not depressed" (Langa et al., 2004). Other studies have estimated that "elderly persons with depressive symptoms accrued 50% higher healthcare costs from more frequent use of medical services" than do other older adults not suffering from depression (Katon, 2008).

Unfortunately, depression is particularly problematic in developing countries, where data on the prevalence and scope of the disease as well as the resources to address it are sorely lacking. Cost-effective interventions are available, but do not often reach those who need them because of a number of overwhelming challenges in low-resource settings—lack of facilities and trained mental health personnel, questions about effective population-based screening, and the general stigma surrounding mental disorders (Chalise, 2014).

Although Bangladesh is one of the developed countries in the world, elderly is increasing rapidly both in absolute number and proportion. According to latest census of 2011, the proportion of elderly 60 years and above in Bangladesh is undergoing a significant demographic shift as the proportion of older people rose to 9.29% last year from 7.47% in 2011, indicating a fast-ageing population. But the government has not given priority to identify the problems of the elderly through research and to implement existing senior citizen act for the wellbeing of elderly. Depression among elderly in Bangladesh has not been well studied. Little is known about the true rates of depression, its correlates and predictors.

There is no exact figure reported for the incidence of depression among Bangladeshi elderly. However, a study was performed among elderly patients in Patuakhali city and the neighboring village is showed that GD prevalence rate was 36.9% (Disu et al., 2019).

In Bangladesh traditionally old age home is designed only for the elderly who do not have their children to take care of them. But recently with the effect of modernization, urbanization, nucleation of family, migration of youths to urban area, and foreign countries those people who prefer to live in the old age home are increasing. But, due to limited capacity and limited number of old age home**,** community people have started to open old age home in the different parts of the country. The aim of this study is to determine the level of depression among the elderly living in old homes. The rationale for this study is the widely held impression that depression is common in elderly and results in more days of disability than chronic medical conditions such as heart disease, hypertension and diabetes (Williams & Strasser, 1999).

1.2 Rationale

Elder people are less focused for their lifestyle improvement and they are in a risk of cope up with this modern world. Elder people are affected many type of mental disorder. Depression is very common in older people which affects them physically also. To care them the level of depression are to measure to provide them healthy life.

Depression is one of the most common conditions associated with suicide in adults and is also a widely under-recognized and undertreated medical illness. Studies show that many adults who die by suicide (up to 75 percent) visited a physician within a month before death. All these facts highlight the urgency that must be undertaken in the detection and treatment of depression.

1.3 Research Question

What are the levels of depression among elderly people at old home?

4. Objectives

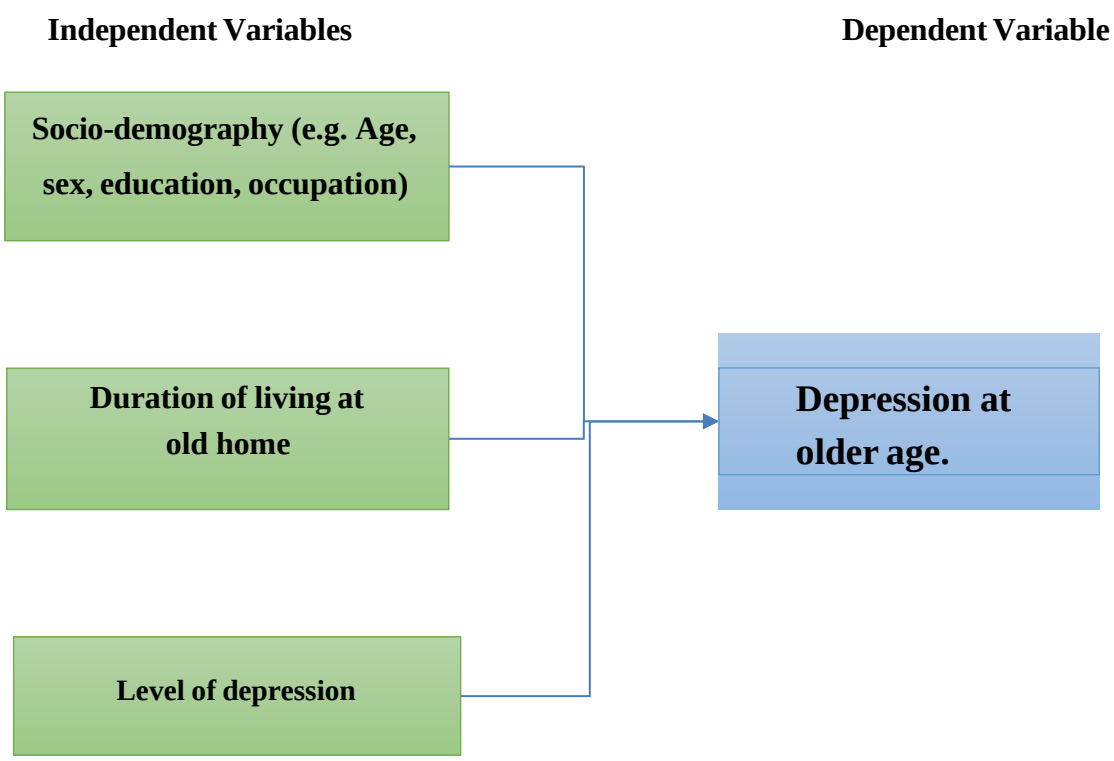
General objective

To find out the level of depression among the elderly people who are living at old home.

Specific objectives

I. To explore the socio-demographic informationof elder people.
I. To identify the life style related information of elder people.
II. To find out the level of depression among the elderly people.

1.5 Conceptual Framework



1.6 Operational Definition

GDS-15

A blueprint on the Geriatric Depression Scale was prepared that consisted five areas. It depicted the distribution of items according to the content area. Personal integrity had 3 (20.0%), emotional stability had 4 (26.67%), social stability had 2 (13.33%), mental hygiene ideology had 3 (20%) and vitality had 3 (20%) items covering all the Geriatric Depression Scale.

Depression

Depression is a common mental disorder that presents with depressed mood, loss of interestor pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration. Moreover, depression often comes with symptoms of anxiety. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. At its worst, depression can lead to suicide. Almost 1 million lives are lost yearly due to suicide, which translates to 3000 suicide deaths every day. For every person who completesa suicide, 20 or more may attempt to end his or her life.

CHAPTER-II LITERATURE REVIEW

Ageing is a normal process, which is associated with physical, social and psychological changes. The number of older population of both developed and developing countries has considerably increased in the 20th century (Kader Maideen et al., 2014)

In Nepal a study out of 150 respondents seventy one (47.33%) had depression. Among the depressed population, fifty (70.42%) were having mild depression and twenty one (29.58%) had severe depression. Regarding socio-demographic variables, 18.31% of the respondents were in the age group of 65-69 years, 33.80% were of the age group 70-74 years, 32.40% were of the age group of 75-79 years, 15.49% were 80 years and above. Male constituted 43.66% of total population while 56.34% of total population was female. All the respondents followed Hindu religion. Out of total population, 53.33% were from rural area, 30% were from urban area and 16.66% from semi urban area. Majority of them (78%) were uneducated. Regarding marital status, 52% were widow/widower, 26.66% were separated, 15.33% were single, 5.33% were married and 0.006% was divorced. Higher part (58.67%) of the respondents had got financial support whereas 41.33% had not. The subjects were admitted in the old age home in lack of caregiver (64%), 10.67% because of family conflict, 9.33% because of loss of spouse, 6% due to low economy and 1% on their own will (Ranjan et al., 2014).

In a community study among the 359 participants, 57% were females. The mean (standard deviation) age of the participants was 67.4 (5.9) years. The majority of them belonged to nuclear family (88%), had no formal education (62%), were unemployed (69%), currently married (68%), and receiving a pension (81%). The prevalence of depression among elderly age 60 years and above is 69% [95% confidence interval (CI) 63.6–73.1). Binary logistic regression showed that single/widow [adjusted odds ratio (aOR) = 3.9, 95% CI 2.0–7.5] and hard of hearing (aOR = 2.2, 95% CI 1.1–4.1) are significant risk factors for depression. There were 359 participants, and their mean (SD) age was 67.4 (5.9) years. The majority of them

were females (57.4%), age less than 70 years, have no formal education (62.1%), currently married (67.7%), belong to a nuclear family (87.7%), and receive pension (81.3%). Of the 359 participants, 246 (69%, 95% CI 63.6–73.1) have depression (GDS ≥5). Among them, 137 (56%) have mild depression, 61 (25%) have moderate depression, and 48 (19%) have severe depression (Laksham et al., 2019).

In a private nursing home in Hong kong a total 245 participants which of them 91 males and 154 females, who constituted 37.1% and 62.9% of the recruited population, respectively. The mean age of recruited population was 80.5 years. A total of 71 residents (23 male and 48 females) had significant depressive symptoms. This accounted for 29.0% of the recruited population. The prevalence of significant depressive symptoms in male and female were 25.3% and 31.2% respectively (Lun Chow et al., 2004).

Out of a total 42 were eligible for the study. The mean age group for the geriatric inpatients was 69.1 with a standard deviation (SD) of 4.8. The mean number of illnesses was 2.5 (SD=1.3). The mean duration of illness was 5.8 years (SD=5.2). The mean anxiety score was 21 (SD=12.9) and the mean depression score was 22.3 (SD=14.4). Forty- seven percent (n=20) of the patients were from Kathmandu and 53% (n=22) of the patients were from outside Kathmandu. The mean age of the patients was 69.4 years with a standard deviation of 4.3 years. The mean anxiety score was 6.8 (SD=3.2) and the mean depression score was 7.6 (SD=3.2). 56.1% (n=24) of the geriatric medical inpatients were having significant depressive symptoms as compared to only 17.3% (n=4) of healthy community dwellers. Similarly 76.1% (n=32) of geriatric medical inpatients were having significant anxiety symptoms as opposed to 21.7% (n=5) of the healthy community dwellers. Out of the 42 hospitalized geriatric medical inpatients, significant depressive symptoms were present in 57.1% (n=24) of the patients (Kumar et al., 2010).

Elderly Sri Lankans (11.2% of the nation’s population) have witnessed many years of ethnic conflict, a destructive tsunami and increasing emigration of young adults. The 15-item Geriatric Depression Scale (GDS-15) was administered to 1181 elderly Sri Lankans; the presence of clinically significant depressive symptoms was defined as a GDS-15 score of ≥6. The prevalence of depressive symptoms was observed to

be 27.8% overall: 24.0% for men, and 30.8% for women.The weighted prevalence of depressive symptoms among community-dwelling elderly Sri Lankans was 27.8% overall: 24.0% among men, and 30.8% among women. It varied considerably with sociodemographic or health characteristics, ranging from 15.5% among those who perceived income adequacy to 66.9% among those with physical disability (Malhotra et al., 2009).

A study of Taiwan among 1500 participents one month prevalence of psychiatric disorders was 37.3%, with 15.3% depressive neurosis and 5.9% major depression. A high risk of depressive disorders was found among widows with a low educational level living in the urban community, and among those with physical illness (Chong et al., 2001).

A study in Korea a total of 295 participants the prevalence of depression among the subjects was 63%. Of the elderly, 21% had severe depressive symptoms. The mean depression score was 6.21 (SD = 3.83) and it was higher in women than in men. The number of subjects was 295. The mean age of the subjects was 72.7 years (SD = 4.8, range = 65–84 years). Sixty five percent (n = 192) of the subjects were women. Sixty percent (n = 178) of the subjects were married, and the rest were bereaved, separated, or divorced. In total, 43.4% of subjects were residing with a spouse (in men 61.2%, in women 33.9%). In terms of education level, only 23.7% were high school or college graduates. The mean score of perceived health status was 2.5 (SD = 0.9), and the score was higher in men than in women. The mean co-morbidity was 2.9 and it was higher in women (3.1) than in men (2.7) (Kim et al., 2009).

It has been documented that elderly are more prone to psychological problems and depression is the commonest geriatric psychiatric disorders. In fact the elderly in India face a multitude of psychological, social, and physical health problems. In the word of Seneca “old age is an incurable disease”, however as Sir James sterling commented “you do not heal old age, you protect it, you promote it and you extend it.” These are in fact the underlying principles of Preventive Medicine. A study of depression among aged in Surat city respondents comprised of a total of 105 elderly people. The majority (80.8%) of the subjects were in the age range of 64–76 years. The mean age of the subjects was 69 ± 8.84 years. 43 (41%) were males and 62

(59%) were females and 36.5% females and 63.5% males were aged >70 years. overall 39.04% of depression in city. In which 20% aged in severe depression need institutional treatment. Severe depression old age is more in affluent area and old age home and it is twice that of slum area, though a statistically significance.

It was observed that illiterates have a much lower rate of depression (26.6%) than literates (44%). This association was not observable in the slum area, however those residing in the affluent areas and in the old age homes had a higher rate of severe depression among the literates. In our study 14.3%, 6.7% and 10.5% individuals were chewing tobacco, smoking tobacco and consuming alcohol respectively and only 2 (1.9%) were habituated to all of these three. The prevalence of depression was moderately high (39.04%) among the elderly in our study population (Jariwala et al., 2010).

CHAPTER-III METHODOLOGY

3.1 Study Design

This study was conducted using cross sectional survey under a quantitative study design.Survey methodology was chosen to meet the study aim as an effective way to collect data.

3.2 Study Area

Old home at Bangladesh association for the aged and institute of geriatricmedicine.

Institute for autistic children and blind, old home and TN mother child hospital.

3.3 Study Population

Peoples who are living at old home would be collected using convenience sampling from Tertiary level rehabilitation hospitals like Old home at Bangladesh association for the aged and institute of geriatric medicine. Institute for autistic children and blind, old home and TN mother child hospital.

3.4 Sample Size

A sample is a smaller group taken from the population. Sometimes the sample size may be big and sometimes it may be small, depending on the population and the characteristics ofthe study.

n = Z^2 pq ÷ d^2

Z (confidence interval) = 1.96

P (prevalence) = 50%

d = 0.05

And, q= (1-p)

= (1-0.84)

= 0.16

N = Z^2 pq ÷ d^2

=(3. 84 × 0.84 × 0.16) ÷ 0.0025

= 0.3072 ÷ 0.0025

= 122.88

The actual sample size was, n= 123

3.5 Sampling Technique

The study was conducted by using the convenience sampling methods due to the time limitation and as it was the one of the easiest, cheapest and quicker method of sample selection. The researcher used this procedure, because, getting of those samples whose

criteria were concerned with the study purpose.

3.6 Inclusion Criteria

- People who had living old homes
- Age range 65 to 85 years
- People who were willingly participate in the study.

3.7 Exclusion Criteria

- People who had psychiatric disorders.
- People who had cognitive problem.
- People who can not communicate, language barrier. Physical disabilities

3.8 Data Collection Tools

- Record or Data collection form
- Informed Consent
- Structured questionnaire
- Modified geriatric depression scale (MGDS/15)
- Papers, pen, and pencil etc.

3.9 Data Collection Procedure

At the very beginning researcher clarified that, the participant had the right to refuse to answer of any question during completing questionnaire. They could withdraw from the study at any time. Researcher also clarified to all participants about the aim of the study.

Participants were ensured that any personal information would not be published anywhere. Researcher took permission from each volunteer participant by using a written consent form. After getting consent from the participants, standard questionnaire was used to identify complains and collect demographic information. Questions were asked accordingto the Bangla format. For conducting the interview, the researcher conducted a face to face interview and asked questions. Physical environment was considered strictly. Stimuli that could distract interviewee were removed to ensure adequate attention of interview. Interviewee was asked questions alone as much as possible with consent as sometimes close relatives could guide answer for them. The researcher built a rapport and clarified questions during the interview. Face to face interviews are the most effective way to get full cooperation of the participant in a survey. Face to face interviews are also effective todescribe characteristics of a population. Face to face interviews was used to find specific data which describes the population descriptively during discussion. According to the participants' understanding level, sometimes the questions were described in the native language so that the patients can understand the questions perfectly and answer accurately. All the data were collected by the researcher own to avoid the errors.

3.9 Data Analysis

Data were analyzed with the software named Statistical Package for the Social Science (SPSS) version 22.0. The variables were labeled in a list and the researcher established a computer based data definition record file that consist of a list of variables in order. The researcher put the name of the variables in the variable view of SPSS and defined the types, values, decimal, label alignment and measurement level of data. The next step was cleaningnew data files to check the inputted data set to ensure that all data has been accurately transcribed from the questionnaire sheet to the SPSS data view. Then the raw data were ready for analysis in SPSS. Data were collected on frequency and contingency tables. Measurements of central tendency were carried out using the mean plus standard deviation (SD) for variables. For the study of the association of numeric variables chi squared test were used. Data were analyzed by descriptive statistics and calculated as percentages and presented by using table, bar graph, pie charts etc. Microsoft office Excel 2013 was used to decoratingthe bar graph and pie charts. The results of this study were consisted of quantitative data. By this study a lot of information was collected.

3.10 Ethical Issues

The researcher maintained some ethical considerations: Researcher has followed the Bangladesh Medical Research Council (BMRC) guideline & WHO research guideline. The proposal of the dissertation including methodology was presented to the Institutional Review Board (IRB) of Bangladesh Health Professions Institute (BHPI) for oral presentation defense was done infront of the IRB. Then the necessary information was approved by Institutional Review Board and was permitted to do this research. After getting the permission of doing this study from the academic institute the researcher had been started to do it. The researcher had been taken permission for data collection from the Musculo-skeletal unit of Savar, CRP. The participants would be informed before to inviteparticipation in the study. A written consent form used to take the permission of each participant for the study. The

researcher ensured that all participants were informed abouttheir rights and reserves and about the aim and objectives of the study. Researcher also ensured that the organization (CRP) was not hampered by the study. All kinds of confidentiality highly maintained. The researcher ensured not to leak out any type of confidentialities. The researcher was eligible to do the study after knowing the academic and clinical rules of doing the study about what should be done and what should not. All rights of the participants were reserved and researcher was accountable to the participant to answer any type of study related question.

CHAPTER-IV RESULTS

4.1 Socio-demographic information

4.1.1 Participants age

There were 70 participants in this study, among them 60-69 age range participants were 32.80%, 70-79 age range participants were 57% and more than 80 age range participants were 10%.

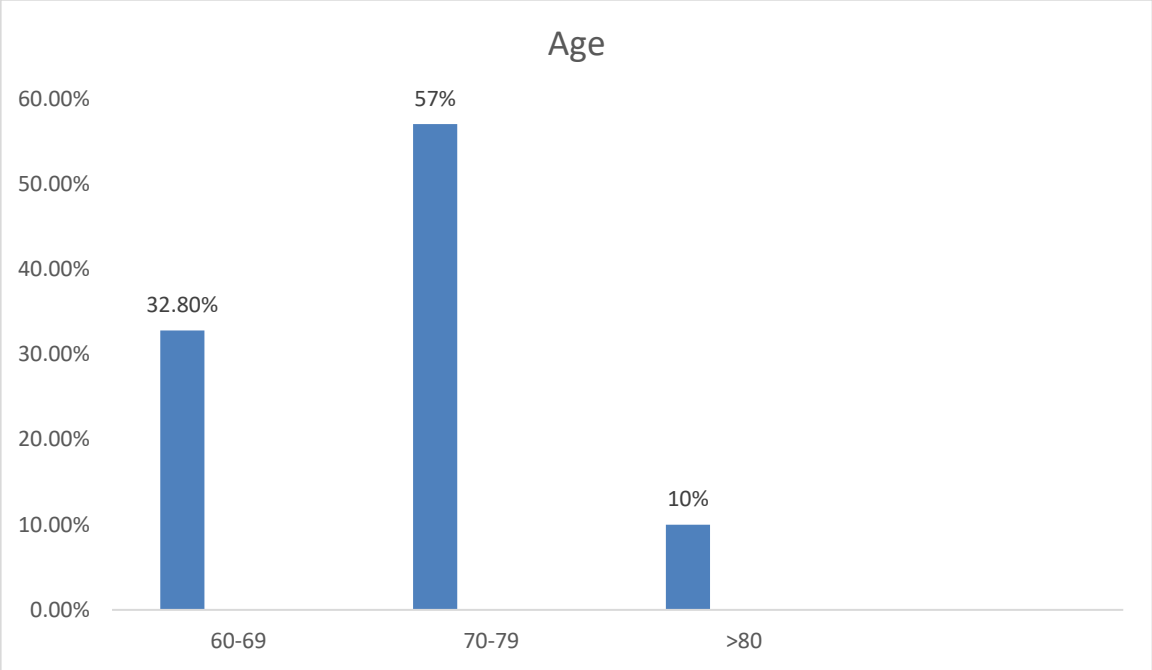


Fig 1: Age of the participants

4.1.2 Gender

Among 70 participants most of them were male 38.57% (n=27) and other participants were female 61.43% (n=43).

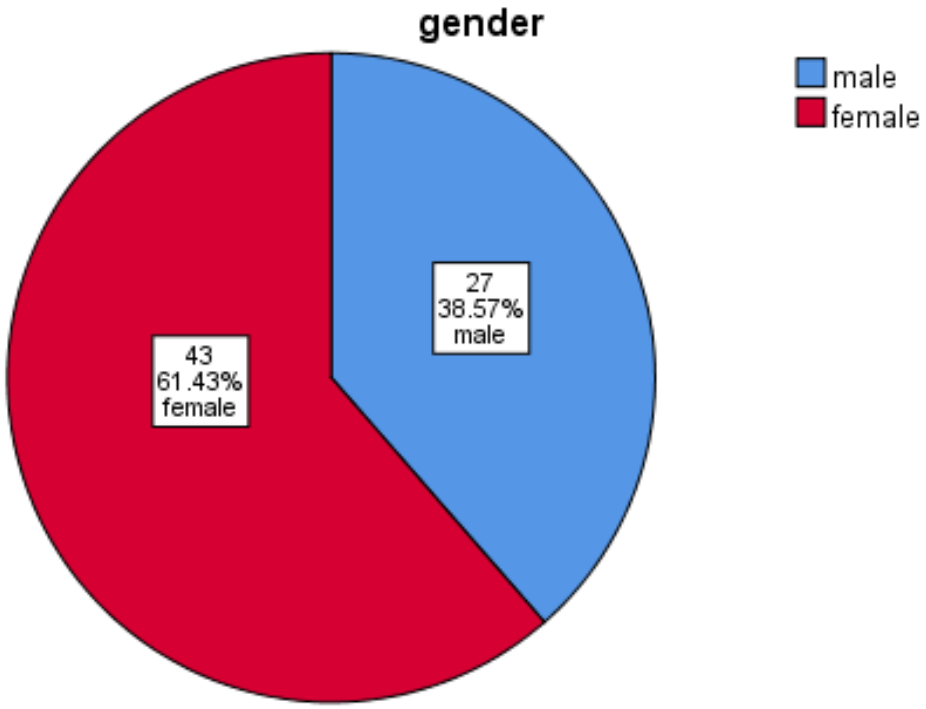


Fig 2: Gender of the participants

4.1.3 Reasons to join old homes

Among 70 participants most them about 81.43% participants reason were no body to look after them in their family and only a few 18.57% were does not wish to stay with the family.

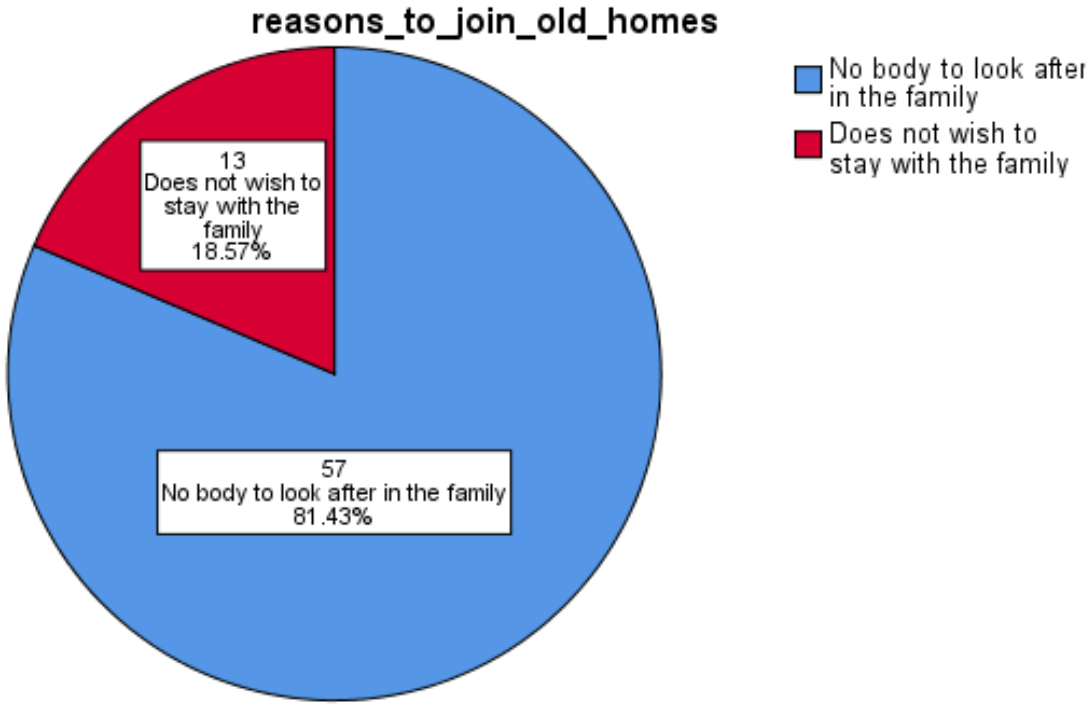


Fig 3: Reasons to join old homes of the participants

4.1.1 Marital status

Among 70 participants most of them were married 55.71%, 30% were unmarried and only a few 14.29% were widowed.

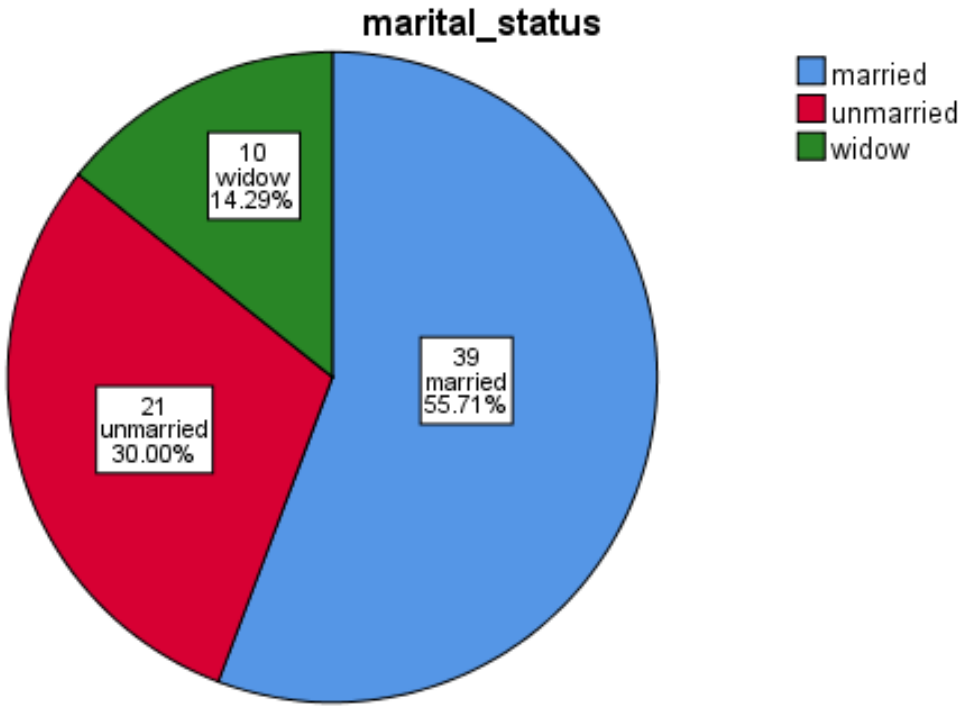


Fig 4: Marital status of the participants

4.1.1 Religion

Among 70 participants most of them were muslim about 85.71%, 8,57% participants were hindu, only 4.29% were Buddha of them and omly a few 1.43% were chirtian.

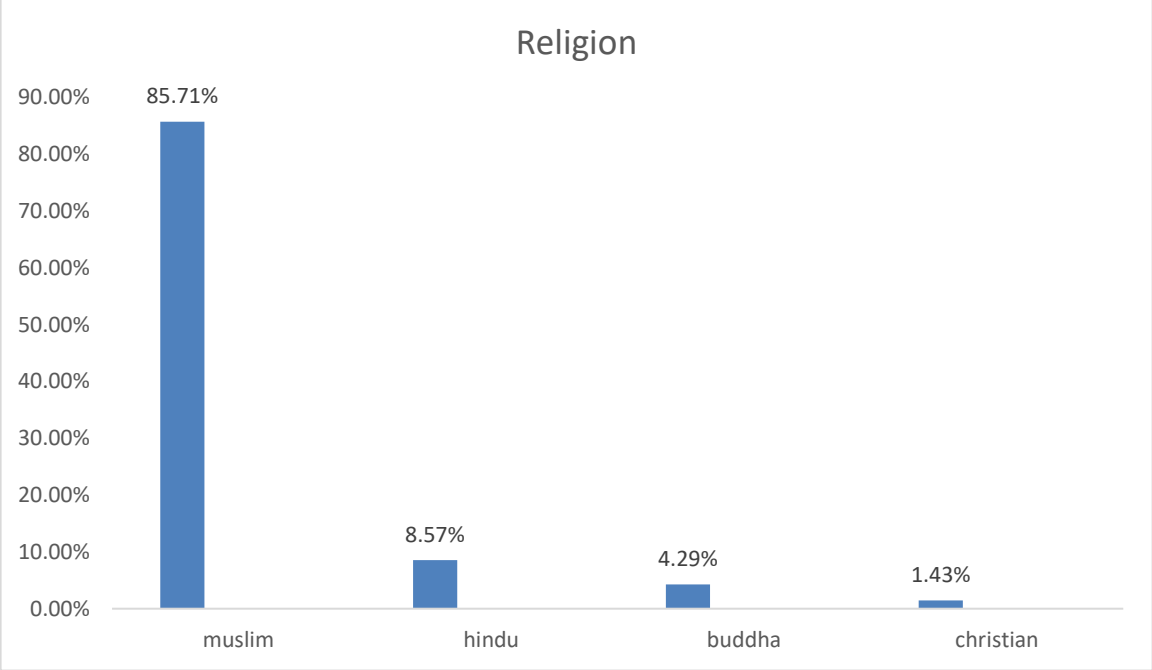


Fig 5: Religion status of the participants

4.1.1 Educational status

Among 70 participants most of them 54.29% were primary level participants and 32.86% of them were SSC level educated and only a few participants 12.86% were higher educated.

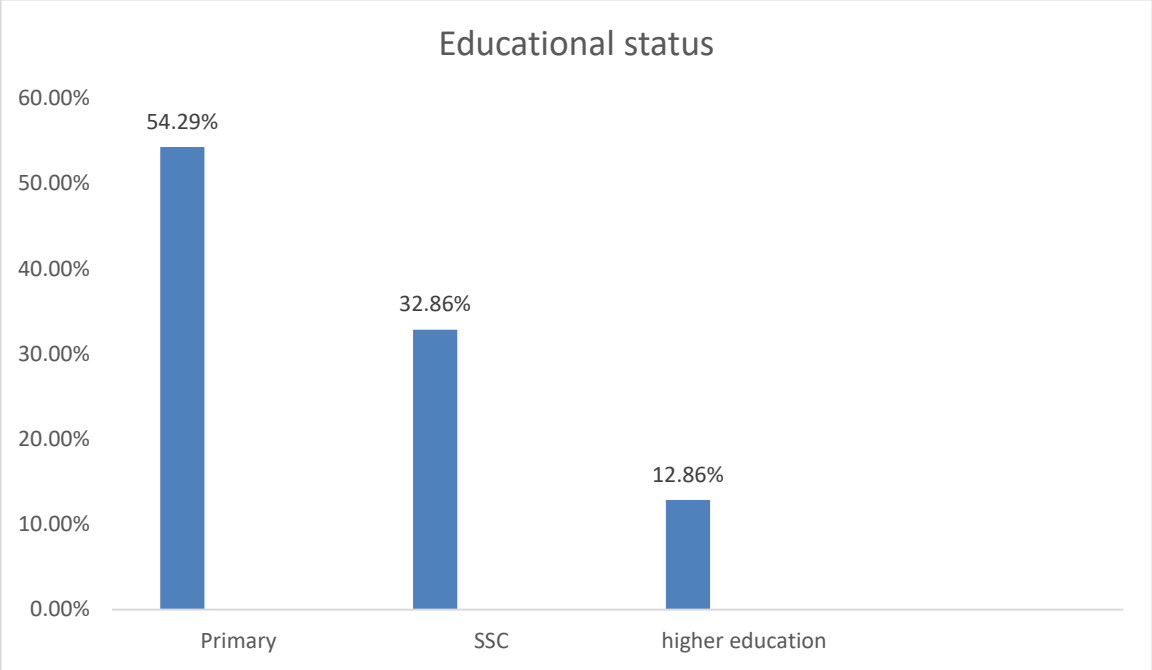


Fig 6: Educational status of the participants

4.1.1 **Type of family**

Among 70 participants most of them had nuclear type of family about 62.86%, about 28.57% had joint type of family and only a few participants 8.57% had extended type of family.

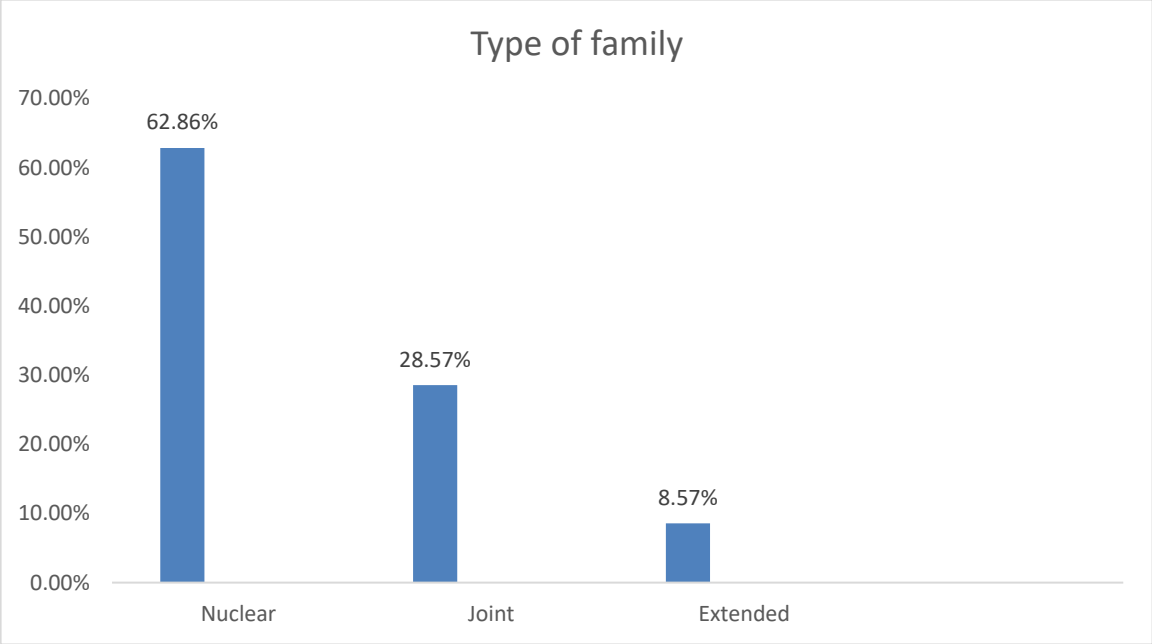


Fig 7: Type of family of the participants

4.1.1 Duration of stay at the old home

Among 70 participants of them 52.86% were lived more than 2 years at the old home, about 22.86% of them lived 1 to 2 years, only a few 17.14% were lived 6-12 months and very few among them only 7.14% were lived about 6 months or less at the old home.

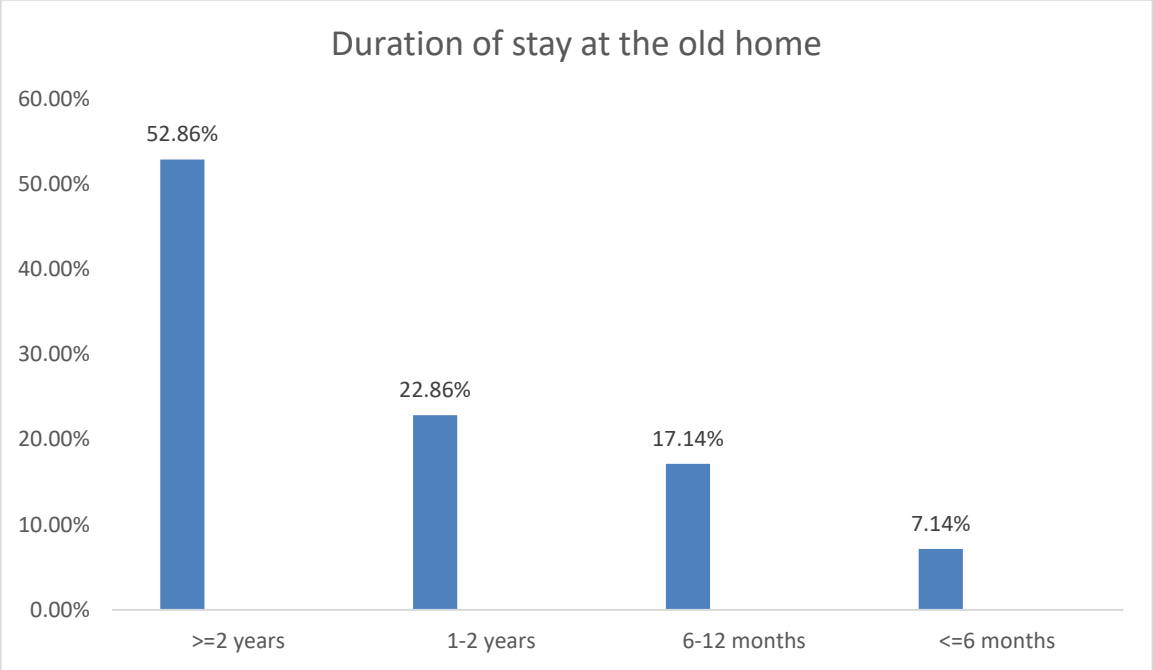


Fig 8: Duration of stay at the old homes of the participants

Table 1: Levels of depression among elderly (n=70)

Level of Depression	Score	Frequency	%
No Depression	0-4	26	37.1%
Mild Depression	5-8	19	27.1%
Moderate Depression	9-11	15	21.4%
Severe depression	12-15	10	14.3%

Data presented in the Table 1 showed that the two third (62.8%) of the subjects experienced some level of depression. Among them highest percentage (27.1%) belonged to mild depression, only (14.3%) to severe category and (21.4%) to moderate depression.

Table 2: Mean, SD of Depression Level among Elderly (n=70)

Depression among elderly	Mean	SD
	6.39	3.965

The findings of the study show that the overall Mean for the depression among elderly was 6.39 with the SD of 3.965.

Table 3: Association between the level of depression and selected demographic variables

Characteristics	**Calculated Value (X2)**	**P Value**
Age	380.022	.000
Gender	21.474	.064
Marital status	23.534	.603
Education Level	41.189	.030
Religion	47.375	.168
Family Type	36.830	.077
Reasons of joining old age homes	29.915	.005
Duration of stay	66.690	.004

The data presented showed that there was significant association between level of depression and variables like gender, marital status, education level, family type, reasons to join old age homes & duration of stay.

Table-4: Participants age

	Total participants	Mean	Mode	Median	Standard deviation	Minimum	Maximum
	70	71.76	65	71	5.057	65	85

There were 70 participants in this study. Mean age among them was 71.76. Median age was 71. Age range from minimum was 65 and maximum was 85. Standard deviation of age was 5.05.

CHAPTER-V DISCUSSION

There are eighty millions elderly in India. Among them 68.75% go to sleep on an empty stomach, 37.5% are lonely, 8.125% felt no one even knows they exist and 15% are blind only because they cannot afford the treatment. 90% have to continue their work if they have to live (Lun Chow et al., 2004)

The findings of the present study is consistent with a study carried out among geriatric population in Nepal, which showed majority (53.2%) were experiencing depressive illness, among them 34.2% were mild and 19% were severe (Khatri et al., 2006).

Majority (62.8%) of elderly experienced some form of depression. Out of which 27.1% showed mild depression, 21.4% were at moderate intensity and least 14.3% of them experienced severe depression. Similarly another study from a tertiary level hospital in Nepal conducted among hospitalized geriatric medical inpatients concluded that 57.1% of hospitalized geriatric patient had depressive symptoms and 17.3% of healthy community dwelling had depression (Kumar et al., 2010).

A descriptive study on prevalence of depression among 50 elderly from old age homes revealed 8% of them had mild depression, 56% with moderate intensity and 36% with severe depression (Sherina et al., 2005).

Cross-sectional descriptive survey done at elderly welfare centre and public health centers in Korea showed the prevalence of depression to be 63% (Kim et al., 2009).

In contrast to above studies, there are studies which showed prevalence of depression among elderly to be lower than the above figures. The overall prevalence of depressive disorder among the elderly population of rural areas of Udupi district, Karnataka, India was found to be 21.7% (Barua & Kar, 2010).

This difference in the prevalence with this study might be due to the different instruments used for measuring depression. But other studies which used the same instrument as our study to detect depression, also showed lower figure.

The prevalence of depressive symptoms among community-dwelling elderly Sri Lankans was 27.8% (Malhotra et al., 2009).

Relating the socio-demographic variable and prevalence of depression, in this study it was found that there was significant association between the prevalence of depression and history of physical illness. This result is supported by the study done in Taiwan, which found out that there was high risk of depressive disorders among those with physical illness (Chong et al., 2001). Similarly, study conducted in Srilanka found that there was significant correlation of depressive symptoms with physical disability (Malhotra et al., 2009).

But the study done in Korea showed a significantly low correlation of depression with comorbidity (Kim et al., 2009). In our study significant association was found with other socio-demographic variables like age, gender, educational level, marital status and length of stay in old age home. Another study also shows depression to have significantly low correlation with sex and education (Kim et al., 2009).

5.1 Limitations

There might be some limitations in every research. In this study small sample size may be constituted a limitation. As the study was conducted from 2 old homes of Bangladesh which might not represent the whole population with elderly in the context of Bangladesh. Another major limitation was time and resource which have great impact on study and affect the result to generalize for wider population. As the study period was short so the adequate

CHAPTER-VI COMCLUSION & RECOMMENDATION

6.1 Conclusion

Aging is a biological process that continues throughout life, and humans have no control over that the elderly population is generally defined as people over 65 years of age (Alam et al., 2021). Old age is usually discussed in connection with the different types of problems encountered by the aged and the welfare measures associated with providing them a better quality of life.

Depression is a serious mental issues that has been overlooked while it is about elderly people, it should be a topic of concerning about mental health of elderly people. Routinely check up should be done for better assessment and to ensure better quality of life. Among 70 participants male were 48.1% in depression, female were 62.8% in depression.

Majority of the subjects experienced some level of depression. Among them highest percentage belonged to mild depression, whereas moderate & severe category were following respectively. However just above one third belonged to the category of no depression. The mean depression score was 6.39 ±3.965, revealing that elderly regarding depression in old age homes is mild that can be managed appropriately

6.1 Recommendation

Depression is an inevitable consequence after being old and has negative influence ondaily, physical, cognitive functioning among elderly people. So, the necessity is to give more attention to this psychological aspect which is linked to aging. There are so many studies based on elderly people but there are few amount of studies related to the concept of this patient's psychology such as depression in Bangladesh. If other authors want to do further related study, they are recommended to do their study in whole country perspective with increased sample size.

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Appendix

Informed Consent (English)

Assalamualaikum,

Thanks in advance for being a part of my study. My name is kamrujjaman Sajib, I am a student of Bangladesh Health Professions Institute (BHPI), CRP. As a part of my academic course requirement I need to conduct a research work. The aim of my research topic is to find out the "**Level of depression among the elderly people at old home**". This will be a Cross sectional type of study and will helpful for elderly people.
I assure you that all data will be kept confidential. In report information will be presented in the form of group. No name will be mentioned. For your information Bangladesh Health Professions Institute (BHPI), CRP has permitted me to do the research. Your co-operation in answering a few questions will be highly appreciated. If you kindly permitted then only shall I start.

Shall I start?

Yes……

No……

With Thanks

Name of the Interviewer……..

Signature of the Researcher……..

Name of the attendance……

PART- A (SOCIO-DEMOGRAPHIC QUESTIONS)

Participants name	
Age	
Address	
Phone number	
Gender	
What is your marital status?	0 = Married 1 = Unmarried 2 = Widow 3 = Divorced 4 = Widower
What is your educational qualification?	0 = No formal schooling 1 = less than primary 2 = Primary completed 3 = S.S.C completed 4 = H.S.C completed 5 = ≥ Graduation
What is your religion?	0 = Muslim 1 = Hindu 2 = Christian 3 = Buddhist 4 = Others
Type of family?	1= nuclear 2= joint 3= extended
Reasons to join old age homes?	1= nobody to look after in the family 2= Does not wish to stay with the family
Duration of stay in old age homes?	1= Less than 6 months 2= 6 to 12 months 3= 1 to 2 years 4 = More than 2 years

Where you spent most of the time in your life?	0 = Urban area 1 = Semi urban area 2 = Rural area
Do you have childrens ?	1. Yes 2. NO
How many members in your family ?	1. 2 2. 3 3. 4 4. 5 5. 7

PART- B Geriatric Depression Scale (short form)

1	Are you basically satisfied with your life?	1= yes 2= no
2	Have you dropped many of your activities and interests?	1= yes 2= no
3	Do you feel that your life is empty?	1= yes 2= no
4	Do you often get bored?	1= yes
5	Are you in good spirits most of the time?	2= no
6	Are you afraid that something bad is going to happen to you?	1=yes 2=no
7	Do you feel happy most of the time?	1=yes 2=no
8	Do you often feel helpless?	1= yes 2=no
9	Do you prefer to stay at home, rather than going out and doing things?	1=yes 2=no
10	Do you feel that you have more problems with memory than most?	1=yes 2=no
11	Do you think it is wonderful to be alive now?	1=yes 2= no
12	Do you feel worthless the way you are now?	1= yes

		2=no
13	Do you feel full of energy?	1=yes 2= no
14	Do you feel that your situation is hopeless?	1=yes 2= no
15	Do you think that most people are better off than you are?	1=yes 2= no

সম্মতিপত্র

আসসালামুয়ালাইকুম,

আমার নাম কাম্‌রুজ্জামান সজিব। আমি এই গবেষণাটি বাংলাদেশ হেলথ প্রফেশনাল ইন্সিটিউট (বি এইচ পি আই) এ করছি যা আমার অধিভুক্ত। যার শিরোনাম হল "**বৃদ্ধাশ্রমে থাকা বয়োজ্যেষ্ঠদের বিষণ্নতার মাত্রা নিরুপণ।** আমি এই ক্ষেত্রে কিছু ব্যক্তিগত এবং বিষণ্নতার উপর প্রশ্ন করে বিষণ্নতার মাত্রা নিরুপণ করছি। যা আনুমানিক ২০-৩০ মিনিট সময় নিবে।

আমি আপনাকে অবগত করছি যে, এই গবেষণা আমার অধ্যায়নের অংশ এবং অন্য কোন উদ্দেশ্যে এটা ব্যবহিত হবে না। তাই এই গবেষণায় অংশগ্রহণ আপনার বর্তমান ও ভবিষ্যৎ জীবনে কোন প্রভাব ফেলবে না । আপনি যে সব তথ্য দিবেন তার গোপনীয়তা বজায় থাকবে এবং এই তথ্যের উৎস গোপন থাকবে।

এই অদ্ধায়নে আপনার অংশগ্রহণ স্বেচ্ছাপ্রণোদিত এবং আপনি যে কোন সময় এই অদ্ধায়ন থেকে কোন নেতিবাচক ফলাফল ছাড়াই নিজেকে প্রত্যাহার করতে পারবেন। এছাড়াও কোন নির্দিষ্ট প্রশ্ন অপছন্দ হলে উত্তর না দেয়ার এবং সাক্ষাৎকারের সময় কোন উত্তর না দেয়ার অধিকার আপনার আছে।

শুরু করার আগে আপনার কোন প্রশ্ন আছে ?

আমি আপনার অনুমতি নিয়ে শুরু করতে যাচ্ছি ?

হ্যাঁ ……. না……..

উত্তরদাতার স্বাক্ষর…….

গবেষকের স্বাক্ষর……..

সাক্ষীর স্বাক্ষর……

পর্ব -১ আর্থ-সামাজিক তথ্য

প্রশ্ন	উত্তর
অংশগ্রহণকারীর নাম	
বয়স	
ঠিকানা	
মোবাইল নাম্বার	
লিঙ্গ	১. পুরুষ ২. মহিলা
বৈবাহিক সম্পর্ক	১. বিবাহিত ২. অবিবাহিত
আপনার শিক্ষাগত যোগ্যতা কি ?	১. নিরক্ষর ২. প্রাথমিক ৩. মাধ্যমিক ৪. উচ্চ মাধ্যমিক ৫. স্নাতক ৬. স্নাতকোত্তর
আপনার পেশা কি ছিল ?	১. কৃষক ২. গার্মেন্টস শ্রমিক ৩. ড্রাইভার ৪. দিন মজুর ৫. চাকুরিজীবি ৬. ব্যাবসায়ী ৭. অবসরপ্রাপ্ত ৮. শিক্ষার্থী ৯. অন্যান্য
পরিবারের ধরন?	১. একক ২. জোথ ৩. বর্ধিত
আপনার জীবনের বেশীরভাগ সময় কোথায় বাস করেছেন ?	১. গ্রাম ২. মফস্বল ৩. শহর
আপনার ধর্ম কি ?	১. মুসলমান ২. হিন্দু ৩. খ্রিষ্টান ৪. বুদ্ধ

	৫. অন্যান্য
আপনার কি সন্তানসন্ততি আছে ?	১. হ্যাঁ ২. না
আপনার পরিবারে কয়জন সদস্য ?	১. ২ ২. ৩ ৩. ৪ ৪. ৫ ৫. ৭
বৃদ্ধাশ্রমে থাকার কারণ কি?	১. পরিবারে কেউ নেই দেখাশোনার জন্য ২. পরিবারের সাথে থাকতে চাই না
কত দিন ধরে আছেন?	১. ৬ মাসের কম ২. ৬-১২ মাস ৩. ১-২ বছর ৪. ২ বছরের বেশি

পর্ব – ২ জেরিয়াট্রিক ডিপ্রেশন স্কেল

	আপনি কি মূলত আপনার জীবন নিয়ে সন্তুষ্ট?	হ্যাঁ না
	আপনি আপনার কার্যকলাপ এবং আগ্রহ অনেক সময় বাদ দিয়েছেন?	হ্যাঁ না
	আপনার জীবন কি শূন্য মনে হয় ?	হ্যাঁ না
	আপনি কি প্রায়ই বিরক্ত হন ?	হ্যাঁ না
	নি কি বেশিরভাগ সময় উৎফুল্ল থাকেন ?	হ্যাঁ না
	নি কি ভয় পান যে আপনার সাথে খারাপ কিছু হতে চলেছে ?	হ্যাঁ না
	নি কি বেশিরভাগ সময় খুশি থাকেন?	হ্যাঁ না
	আপনি কি প্রায়ই অসহায় বোধ করেন?	হ্যাঁ না

	বাইরে গিয়ে কোন কিছু করার চেয়ে আপনি ঘরে থাকতেই স্বাচ্ছন্দ্য বোধ করেন?	হ্যাঁ না
	আপনি কি অনুভব করেন আপনার স্মৃতি শক্তি কমে আসছে ?	হ্যাঁ না
	আপনি কি মনে করেন যে এখন বেঁচে থাকাটা চমৎকার?	হ্যাঁ না
	আপনি এখন যেমন আছেন নিজেকে কি অসহায় মনে হয়?	হ্যাঁ না
	আপনি কি পুরোদমে শক্তি পান?	হ্যাঁ না
	আপনি কি আপনার অবস্থা নিয়ে হতাশ ?	হ্যাঁ না
	আপনার কি মনে হয় বেশিরভাগ মানুষই আপনার চেয়ে ভাল আছে?	হ্যাঁ না