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Prevalence of Physical Activity with Mobility Disabilities among Senior Citizens in a Selected Old Home

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ABSTRACT

The purpose of the study was to identify the mobility problem of aged people in selected old homes. The ages of the respondents are 60 plus age, which is clustered into 3 age groups 60-69 years, 70-79 years, and 80 plus age. This study established among 100% respondents 89.3% have self-bathing capacity, 89.3% have self-dressing capacity, 89.8% have self-toileting capacity, 93.3% have self-teeth washing capacity, 93.7% have self-eating capacity. For finding other problems of aged people set up among 206 participants of old home area, 35.0% are disability problem. Besides, in old homes 19.9% have suffered diabetic mellitus for a long time, 51.0% suffered from hypertension, 11.7% suffered from low blood pressure, 14.6% have heart problems, 64.6% have urine catching difficulty, 6.8% have kidney disease. Among 206 respondents of the old home, area were 44.2% abnormal posture and they having 36.9% kyphosis, 4.4% scoliosis 0.5% lordosis, and 2.4% another abnormal posture. For the finding of aged people, we have asked some questions to identify pain severity and several labels found that among 206 participants of the old home area were 52.4% have pain during straight walking, 36.9% have neck pain, 56.3% have hip pain or lower back pain, 28.6% have thoraco-lumber pain and 34.0% have pain during sleeping time. Besides on these area respondents there was pain severity 21.4% have mild pain, 22.3% have moderate pain and 24.8% have severe pain. In this paper among 206 respondents of the old home area was 10.7% having a stroke history. Here 3.4% right side, 4.4 left sides, both sides 2.9% paralyzes. In this study Right shoulder motion 56.8% of participants ROM under 150 degrees and Left shoulder motion 61.2% of participants ROM under 150 degrees. Conversely, Right hip motion was 27.7% of participants ROM under 60 degrees, and Left hip motion 30.6% of participants ROM fewer than 60 degrees. Besides, Right knee motion 56.8% of participants ROM under 120 degrees and Left knee motion 57.3% under 120 degrees. In the current study we think that everyone should take responsibility to survive the aged people for a long time.

Keywords: Physical activity, Mobility, Disabilities, Prevalence, ROM, Old home, and Senior citizen.

INTRODUCTION:

Aging with Disability rates are anticipate increasing with the human population (Seeman *et al.*, 2010). The prevalence of ADL in disability contributory activities and increase mobility for those 60-69 years aged people actually suggest data, recent National Health and Nut-

rition Examination Survey (NHANES) (Brault *et al.*, 2009). The healthcare process, public health authorities, rehabilitation, medicine dispensary could overcome of the future burden. Even though many physical activity researches has concentrate on old peoples who are free of illness, impairment and disability, the required con-

tinuously exists for a healthy ageing research agenda to old peoples with disability for purpose of prevention. Health promoting aging within senior citizen who has disabilities has been neglected. Senior citizens with disabilities can convenience from living in consequence model with a healthy ageing life that comprises “the maintenance and improvement of optimal physical, psychological and social well-being and function”. (Physical Activity Guidelines Advisory Committee Report, 2008) General physical, psychological health may be improved while the underlying disability cannot be reversible. The aim of the study is discuss to the physical activity with mobility among senior citizen in Bisia old home.

The UN with whole world celebrate International elderly day of aged person is on October 1 every year (Jason *et al.*, 2006). Like several numerous countries, Bangladesh also observed the day with different programs and activities with aged people Rimmer *et al.* (2010). But, thereat nothing internationally accepted age bracket for defining the senior citizens, people aged 60 years or above are considered as elderly in most erotological literature. Bunuales *et al.* (2002) Elderly population in the context of Bangladesh has been defined as who has reached 60 years of age. Prohaska *et al.* 2006) they establish rotary forward framework around four questions on physical activity and ageing to help feature the public health research agenda. The objective of the current study is promoting activity amid aged people with disability using a framework on a research agenda to organize. They describe four topic areas in that study, based on the framework of: Observation data on the prevalence of ADL within senior citizen with disability; Inspection of convenience the health in activity and the outcome of sedentary behavior in aged people with disability; Correspond and definitive of activity participated within senior citizen with mobility disability; and Auspicious intermediate obtainment for improving physical activity in ageing peoples with mobility disability.

Whilst are many grade of disability including mobility, sensory, behavioral, cognitive, or psychological disabilities (Aftab *et al.*, 1999) in this paper they concentrate on mobility disability. In this paper Mobility disability is defined by them as happen “whereas impairments in mobility limit the efficacy of individuals

to move in their natural environment in order to carrying out activities important to daily life.”The International Functional Classification (ICF) framework extensively defined health conditions that may lead to physical functions and structure, ADL, and participate changing as “disorders, injuries, aging, and birth abnormality” (Alan and Joga, 2009) consequently, while they used examples, they consider mobility disability to be causes into many several factors. So, individuals can be birth with or is revealed mobility disability earlier in life and are ageing with these conditions. Moreover, as like people age, chronic diseases such as cardiovascular, diabetes, stroke, arthritis may lead to disability. At last, functional disability may be caused by a unaccompanied, identifiable condition for example multiple sclerosis (MS) or a trauma which resulted in SCI (Field and Jette, 2007) but may also be diluted by development of chronic condition found in senior citizen (Arksey and Malley, 2005). Nevertheless of the etiology, there is a necessary to physical activity improvement for those with various types of disease that leading to mobility disability. They include in this review both aged persons with disable conditions, for example movement difficulty, and more general conditions that lead to disabilities. Though this paper concentrate on mobility disable person, this study will recapitulate research in the physical disable aged person, where data are lacking or when definition are unclear.

Mobility problem on insufficient functional activity is the commonest problem in senior citizens. Worldwide, 80% of population suffering more in mobility problem (Lollar, 2002). Many aged peoples are suffered many health related problem and worst complications like as respiratory illness, musculoskeletal pain, bony deformity, postural deformity, neurological problem, behavioral & cognitive problem, gait and ADL problem because of prolong inactivity (Roy *et al.*, 2020). Schneider and Meyer, (2015) the main purpose of therapeutic intervention is prevented the complications of ageing peoples and give a quality life (Garriga *et al.*, 2014). This study will also help to discover, especially about their posture before doing any activities. Beside this it will help to professional development which is mandatory for current situation. Also help Aged people to increase awareness maintain right position, lifestyle,

how to stay more active and they manage their ADL easily. In the study researcher can identify the risky factors of the work-place which are harmful. So investigators can help them to teach and give proper education about mobility and postural condition and preventive methods. By this there will develop a good relationship with Physiotherapist and as well as other medical professionals, which is very important in current study approach. And it will help to discover the importance of physiotherapy in every sector of Bangladesh. Physiotherapy focused on pain management with strength of muscle. Conventional exercise is helpful to reduce pain and increase the joint range.

Literature Review

In the year of February 2016 to conduct a study in Germany to find out the Outcomes of laboratory-based tests for mobility is often used performance in real life to infer about older peoples. Their presumption on capacity of mobility, as measurement in real life mobility performance. Total 84 aged peoples consists the sample and evaluation of capacity by gait parameters. All lab measurement was evaluated by the real-life measurement. All measurement calculated indicates for an important but ratio of variance are very low (within 5% and 21%) by the various regress analyses. In the year of 2006 in Finland, They observed as risks for institutionalization and find out the Mobility limitations and cognitive disorders. However primarily community-residency senior citizen has been low good reported in their collective effects on hazard of establishment. Their Study sample (n = 476) are consist community-residency 75- and 80-year- aged peoples participated for experiments on cadence, walking speed and brain capacity on the center. Mobility is measure on 10-m distance in walking speed. Monopolistic distribution based study were made by cut-offs the lesser as follows: small movement limitation, solely psychological deficits, and ADL limitation. Institutionalized participants were 11% during surveillance in the 10-year. There was 4.9 times greater risk (95% dependence interval: 2.1–11.2) for who had accompany movement limitation and psychological deficits than. In the year of 2015 to conduct a study in Finland towards discover the Mobility and activity problem as Predictors of fatality and increase dependency in the Community Living Older Population. Peoples were 1109

living independently, selected people at 65 to 84 year old in Finland. The comparative risk of mortality was double large time in Impaired Active and triple large times in Impaired Sedentary community group than hazard of mortality in Mobile Active population groups. The unusual proportion for dependability (95% dependence interval) in Impaired Sedentary men and women ratio was 5.21 (1.44–18.70) and 2.92 (1.52–5.60) compared to Mobile Active population. The hazard of confidence is not different significantly among Mobile Active, Mobile Sedentary, and Impaired Active groups. In the year of 2004 to conduct a study in Birmingham to find out Association within ocular observation and activity in senior citizens. Their study had Three hundred forty two older adults (aged 55–85) living independently in social recruited from health with ADL information on mobility: a test of visual attention/processing speed; Function and self reported measures of falls, falls efficacy, mobility/balance, performance measure by mobility assessment. Poorer scores on visual attention/processing speed were significantly involved to the mobility assessment performance for age, sex, race, education, number of chronic disease, psychological status, depression, visual defect, and sensory contrast (P=.04) after coordination.

Iris *et al.* (2015) conducts a study in England towards discover functional activity is the basis for participation and social life. They assess ADL activity with functional status are prone to decline the older hospitalized patients (Rana *et al.*, 2021). All admitted to residential care older patients are mandatory and avoid decrease dependency of mobilization and activation. In the year of November, 2011 to conduct a study in New Zealand to find out A literature of evidence on functional activity for ageing people and a reconsideration of existing contributors Senior Researcher New Zealand they show strongest evidence for the benefits of physical activity related heart disease, stroke, degenerative disease, depression, obesity for older people in the management of health and disability. They show to strong records exists to The importance of functional activity for aging people in enhancing physical fitness, wellbeing, cognitive function, and physical function. In the year of November, 2018 to conduct a study in Zambia to find out a community-based physical activity intervention to prevent mobility-related disability for

retired older people. The aim of systematic review was to examine of senior citizen on their functional mobility with ADL and effects of functional training on muscle strength. Aims to test the effectiveness in senior citizen and cost-effectiveness of a social group-wise ADL activity interfere for decreasing who are at large hazard of mobility related disability of their development of ADL limitations.

Research Question

Are the statuses of senior citizens activity related disabilities in old home?

Study Objectives

General Objective - To find out the mobility with activity related disabilities of senior citizen in selected old home.

Specific Objectives

- a) To find out the socio-demographic factors of the respondents.
- b) To analyze the deformity of the respondents.
- c) To find out health related problem of the respondents.
- d) To find out the psychological problem of the respondents.

Limitations of the Study

There were some limitation and barriers during conducting the study project. They are as mention below:

- 1) Number of question was selected.
- 2) Sample size is small but chosen purposively.

METHODOLOGY:

Conceptual Framework

Independent Variable	Dependent Variable
<p>Socio-Demographic Factors Sex, Religion, Age, Education, Occupation, Monthly Income, Children, Stay old home</p> <p>Activity Related Variables Bathing, Dressing, Toileting, Teeth washing, Taking food, Spend maximum time.</p> <p>Health Problem factor related Deformity, Device use, Diabetics, Blood pressure, Heart problem, Urine catching difficulty, Kidney disease, Stroke History.</p> <p>Pain Related Posture, Pain history, Pain severity.</p> <p>Measurement of ROM Shoulder joint, Elbow joint, Hip joint, Knee joint.</p>	<p>Physical Activity with Mobility Disabilities</p>

Study Plan and Area - This is an Experimental study. The study was conducted at Hotapara old home in Gazipur district.

Target Respondent and Study Period - Respondent of this study is people, whose ages are 60+ (above 60) agreeing to give information of their own accord. The study population will consist of both Male and Female in selected old home. January 1, 2020 to May 30, 2020.

Sample Size - 206 subjects selected by maintenance of exclusion and inclusion criteria.

Inclusion criteria

- a) Subjects who are above 60 years old.
- b) Both sexes are involved.
- c) Subject who have functional difficulties
- d) Who are willing to give consent and participate?

Exclusion Criteria

- a) Subject who are not stay on old home.
- b) Subject who are under 60 years old.
- c) Subject who are not willing to give consent and participate.

Sampling Technique - Purposive random sampling technique was applied.

Data collection tools - A structured questionnaire was developed for the research purpose, then an orientation was conducted among collectors with field test and finally the data was collected by going door to door of aged people on that questionnaire. In old home area we take their permission and measure some main joints motion by goniometry. The current studies we measure on differentiate various level of all motion.

Data Management & Analysis Plan - The respondents were organized of data after collection. After collection data was entered into the computer in a data base software package. SPSS 23.0 version use for narrative statistics for example frequency, ordination, mean and percentage. All scores and percentages were computed and presented in tabular form, charts and graphs as appropriate. Chi-square test and P-value will help further it was analyzed. Finally, interpreted the data on the basis of study findings.

Quality Control & Quality Assurance - This preliminary study has a numeral limitation. The experimental study was risk for the respondents. The population size was comparatively small due to financial constraints in this study period and thus the result is not being generalized.

Ethical consideration - The motive and goals toward with its benefits, risks and procedure were explained of the study to the respondents in easily. Information was accepted from every respondents by use perceive native language. The researcher first introduced himself with respondents. Then the researchers will give them the assurance that the information of the responders will be usage just for the research purpose. The researchers tell

them that their name will be hidden secret. All kind of privacy is confirmed and any resections from the respondent are first priority. They also told this information will only use for benefit of Physiotherapy profession and the improve health with decrease occupational hazard.

RESULTS:

The Following **Table 1** explained about the ratio of sex of respondent in selected Old home. Here among the 206 respondents in this place. In this place the ratio is 51.5% and 48.5% male female respectively. The **Table 2** shows the distribution of religion of respondent in Selected Old home. It shows that all respondent are Muslim 87.9%, Christian 1.5% and Hindu 10.7%. The **Table 3** explained the distribution of respondents by age in year. Here we have seen that most respondents in selected old home are 60-69 years in 47.1%, 36.9% are 70-79 years and 16% respondents are above 80 years old. **Table 4** explained the distribution of respondents by occupation in selected old home in my study. Among 206 respondents in old home area there were 11.7% businessman, 28.6% were job holder, 7.3% were farmer, 1.9% were day labor and other occupation were 50.5%.

Table 1: Distribution of respondents by sex.

Sex		Number	Percentage
Valid	Male	106	51.5
	Female	100	48.5
	Total	206	100.0

Table 3: Distribution of respondents by Age in year.

Age		Number	Percentage
Valid	60-69 years	97	47.1
	70-79 years	76	36.9
	80+	33	16.0
	Total	206	100.0

Table 4: Distribution of respondents by Occupation.

Occupation		Number	Percentage
Valid	Business	24	11.7
	Job	59	28.6
	Farmer	15	7.3
	Day labor	4	1.9
	Others	104	50.5
	Total	206	100.0

Table 2: Distribution of respondents by Religion.

Religion		Number	Percentage
Valid	Islam	181	87.9
	Christian	3	1.5
	Hindu	22	10.7
	Total	206	100.0

Table 5: Distribution of respondents by Educational level.

Educational level		Number	Percentage
Valid	Primary	41	19.9
	SSC	37	18.0
	HSC	9	4.4
	College Graduate	11	5.3
	University	4	1.9
	Vocational Education	3	1.5
	No Education	101	49.0
Total	206	100.0	

In addition 19.9% respondents were primary level, 18% SSC level, 4.4% HSC level, 5.3% college level, 1.9% University level, 1.5% vocational education level and 49% respondents were no education level (**Table 5**).

Table 6: Distribution of respondents by Income.

Income		Number	Percentage
Valid	Yes	18	8.7
	No	188	91.3
	Total	206	100.0

Table 7: Distribution of respondents by Children.

Children		Number	Percentage
Valid	Yes	153	74.3
	No	53	25.7
	Total	206	100.0

Table 8: Distribution of respondents by Stay in the old home.

Stay in old home		Number	Percentage
Valid	Under 1 year	55	26.7
	1-2 years	58	28.2
	3 years or above	93	45.1
	Total	206	100.0

Table 9: Distribution of respondents by Take bath regular independently.

Self-bathing capacity		Number	Percentage
Valid	Yes	184	89.3
	No	22	10.7
	Total	206	100.0

Table 10: Distribution of respondents by wearing Dress independently.

Self-dressing capacity		Number	Percentage
Valid	Yes	184	89.3
	No	22	10.7
	Total	206	100.0

Table 11: Distribution of respondents by use toilet independently.

Self-toileting capacity		Number	Percentage
Valid	Yes	185	89.8
	No	21	10.2
	Total	206	100.0

Table 12: Distribution of respondents by washes teeth regular independently.

Self-teeth cleaning capacity		Number	Percentage
Valid	Yes	192	93.2
	No	14	6.8
	Total	206	100.0

Table 13: Distribution of respondents by Take food himself.

Self-eating capacity		Number	Percentage
Valid	Yes	193	93.7
	No	13	6.3
	Total	206	100.0

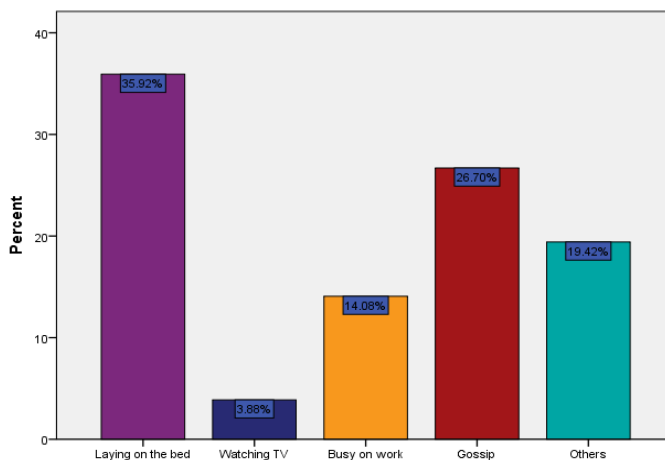


Fig 1: Distribution of respondents by Spend maximum time in a day.

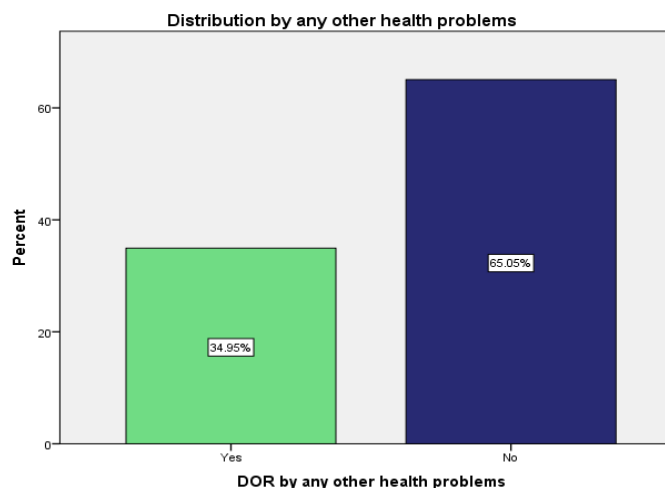


Fig 2: Distribution of respondents by has another health problem.

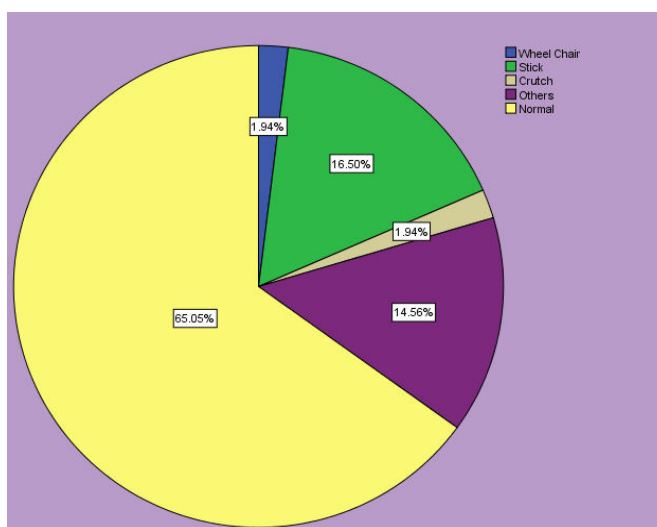


Fig 3: Distribution of respondents by Use mobility aid for health problem.

The following **Table 6** explained the distribution of respondents by personal income in selected old home. Among 206 respondents in old home area were 8.7% income yes and 91.3% were no income.

The following **Table 7** explained the distribution of respondents by children in our study. Among 206 respondents in old home area were 74.3% having children yes and 25.7% haven't any children.

The following **Table 8** explained the distribution of respondents by stay in the old home (year) in our study. Among 206 respondents in old home area were 26.7% stay under 1 year, 28.2% were stay 1-2 years and 45.1% were stay in 3 years or above.

The following **Table 9** explained the distribution of respondents by take bath independently and regularly. Among 206 respondents in old home area were 89.3% taken bath regular independently and 10.7% nothing take bathing regular independently.

The following **Table 10** explained the distribution of respondents by wearing dress independently. Among 206 respondents in old home area were 89.3% wearing dress independently and 10.7% nothing to wearing dress independently.

The following **Table 11** explained the distribution of respondents by use toilet independently. Among 206 respondents in old home area were 89.8% use toilet

independently and 10.2% nothing to use toilet independently.

The following **Table 12** explained the distribution of respondents by wash teeth regular independently. Among 206 respondents in old home area were 93.2% wash teeth regular independently and 6.8% nothing wash teeth regular independently.

The following **Table 13** explained the distribution of respondents by Take food himself independently. Among 206 respondents in old home area were 93.7% taken food himself regularly and 6.3% nothing take food himself regularly.

From the above **Fig 1** explained the distribution of respondents by spend maximum time in a day. Among 206 respondents in old home area were 35.9% laying on the bed, 3.9% watching TV, 14.1% busy on work, 26.7% gossip and 19.4% others activities.

From the above **Fig 2** explained the distribution of respondents by have any other health problem in our study. Among 206 respondents in old home area were 35% having another health problem and 65% haven't any other health problem.

From the above **Fig 3** explained the distribution of respondents by use device for health problem in our study. Among 206 respondents in old home area were 1.9% use wheel chair, 16.5% use stick, 1.9% crutch and 14.6% use another device for health problem.

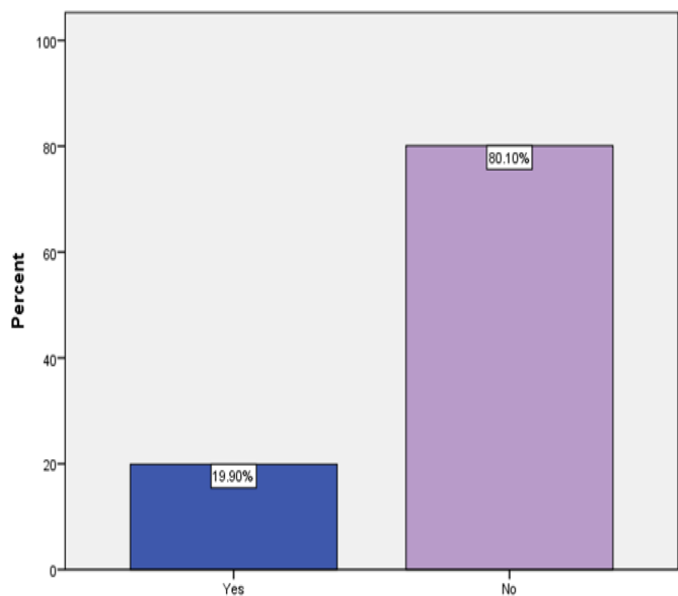


Fig 4: Distribution of respondents by you have or haven't Diabetics.

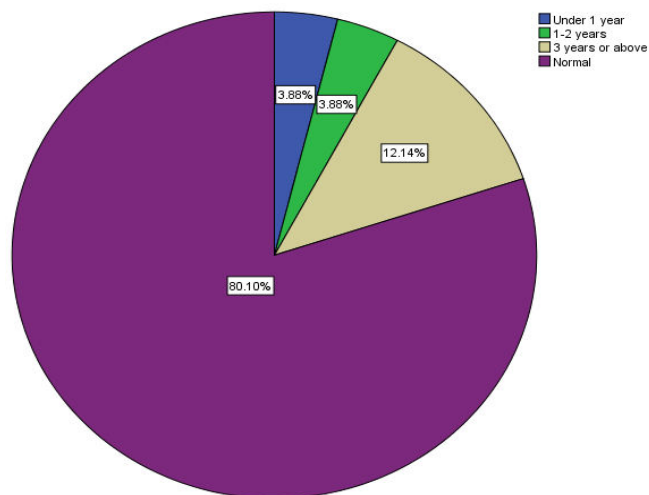


Fig 5: Ordination of respondents by present Diabetes, how long.

From the above **Fig 4** explained the distribution of respondents by have or haven't Diabetics in our study. Among 206 respondents in old home area were 19.9% having Diabetics and 80.1% haven't Diabetics.

From the above **Fig 5** explained by present Diabetes or not. If present, how long pass away. Among 206 respondents in old home area were 3.88% have under 1 year, 3.88% have 1-2 years, 12.14% have 3 years or above and 80.1% haven't Diabetics.

From the above **Fig 6** explained by present Blood pressure in the study. Among 206 respondents in old

home area were 37.4% normal blood pressure, 51.0% have hypertension and 11.7% have low blood pressure.

From the above **Fig 7** explained by Heart problem in this study. Among 206 respondents in old home area were 14.6% having heart problem and 85.4% haven't heart problem.

From the above **Fig 8** explained by Urine catching difficulty in our study. Among 206 respondents in old home area were 64.6% have Urine catching difficulty 35.4% haven't Urine catching difficulties.

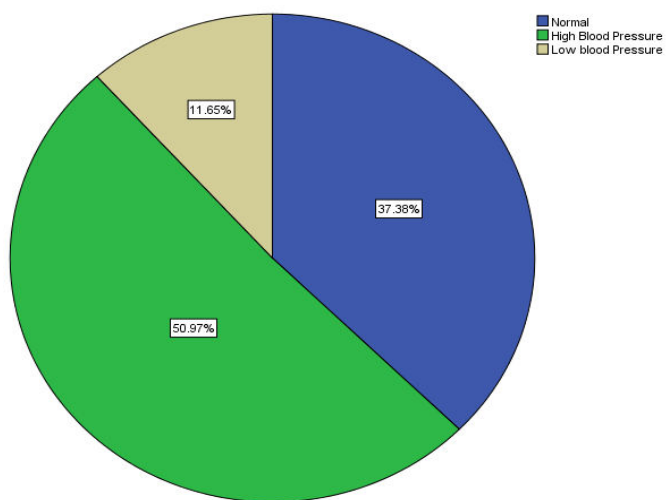


Fig 6: Ordination of respondents by Blood Pressure.

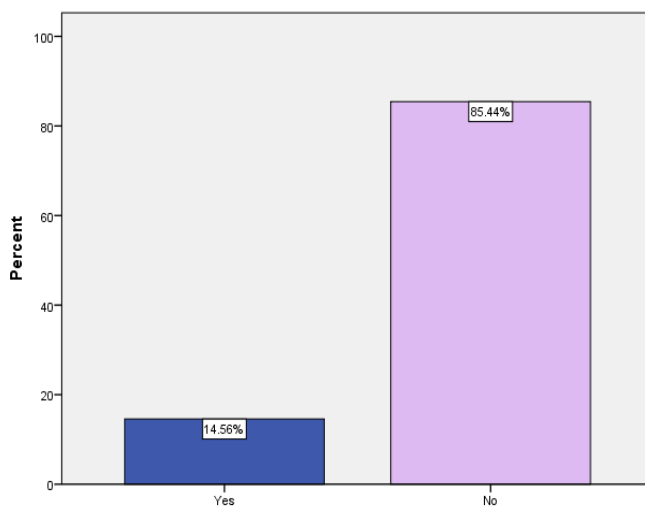


Fig 7: Respondents ordination by Heart problem.

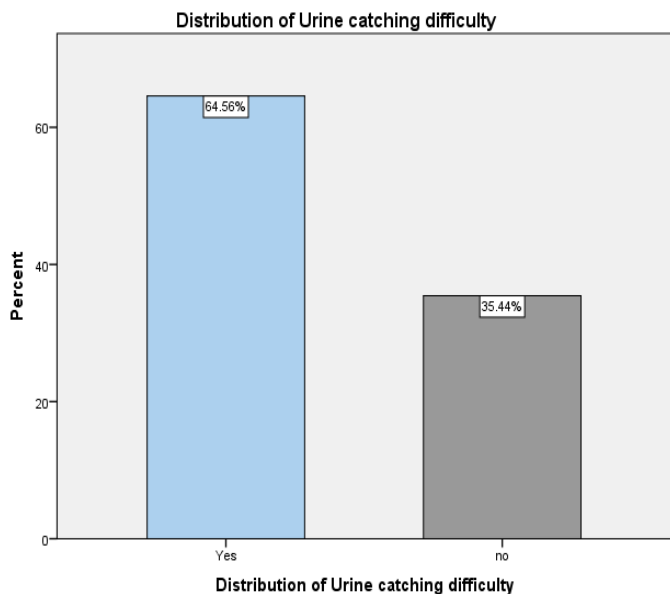


Fig 8: Respondents distribute by Urine catching difficulty.

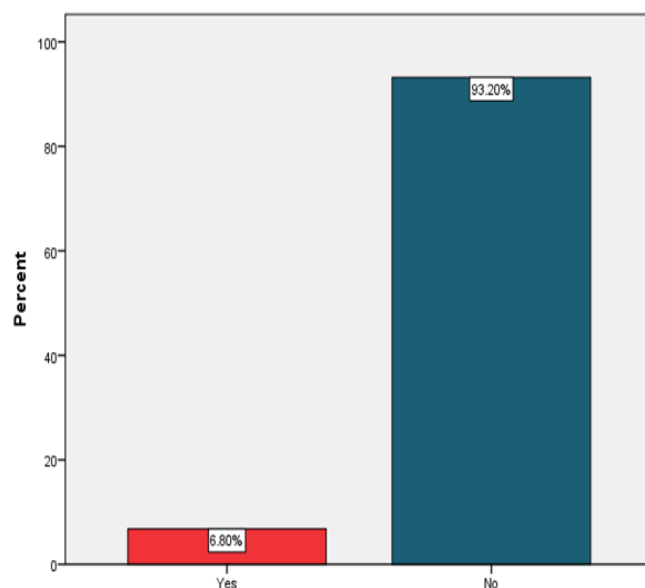


Fig 9: Respondents ordinate by Kidney Disease.

From the above **Fig 9** explained about Kidney disease. Among 206 respondents in old home area were 6.8% having kidney disease and 93.2% haven't kidney disease.

From the above **Fig 10** explained by Posture in current study. Among 206 respondents in old home area were 55.8% having normal posture and 44.2% abnormal posture.

From the above **Fig 11** explained the variety of postural abnormality in our study. Among 206 respondents in old home area were 36.9% Kyphosis, 4.4% Scoliosis, 0.5% Lordosis, 2.4% others and 55.8% haven't any postural abnormality.

From the above **Fig 12** explained the distribution of respondents by felling any pain when walking in straight line. Among 206 respondents in old home area were 52.4% having pain and 47.6% haven't felling any pain when walking.

From the above **Fig 13** explained the Lower back pain in our study. Among 206 respondents in old home area were 56.3% having lower pain and 43.7% haven't Hip pain.

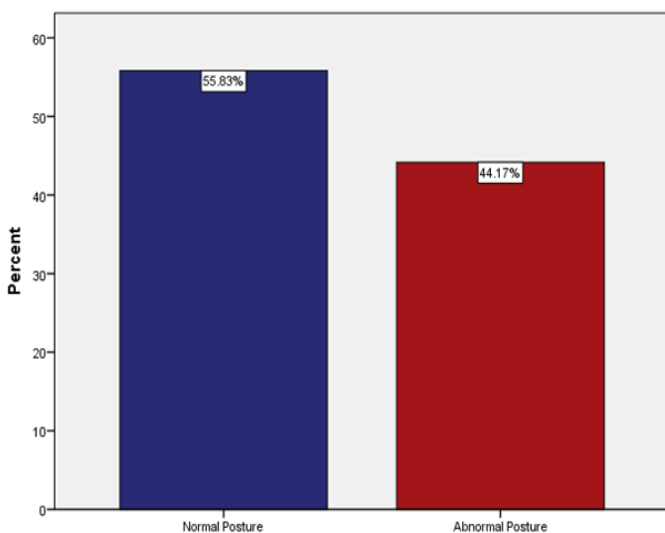


Fig 10: Ordination of respondents by Posture.

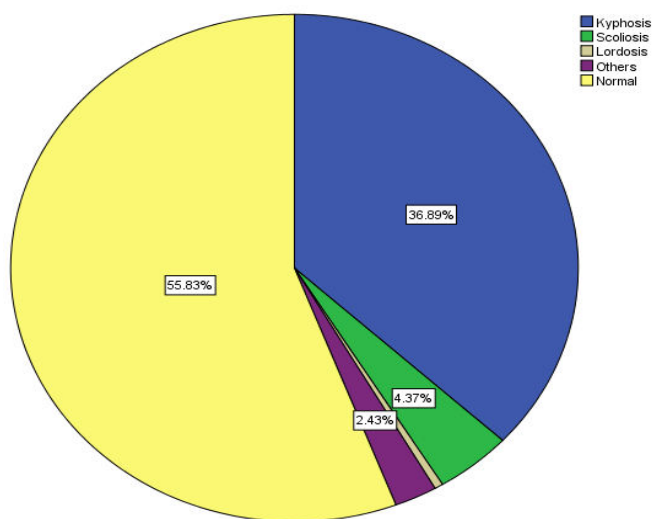


Fig 11: Respondents distributed by Variety of postural abnormality.

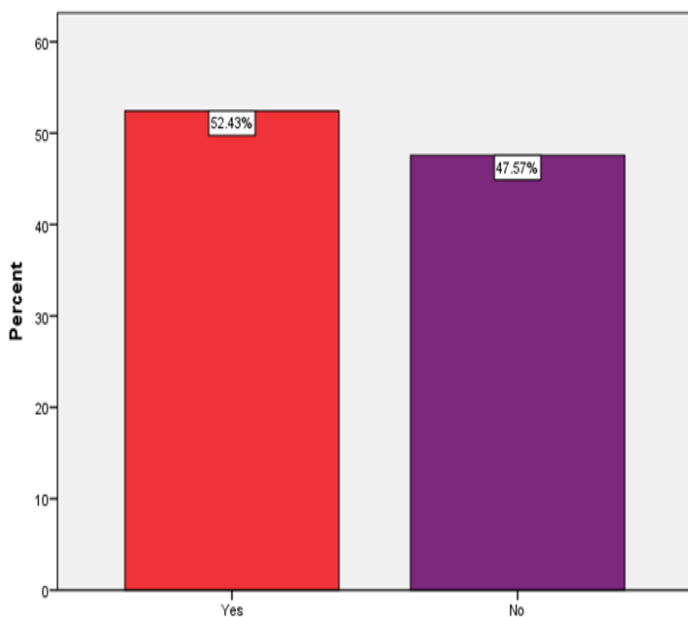


Fig 12: Distribution of respondents by felling any pain during walking.

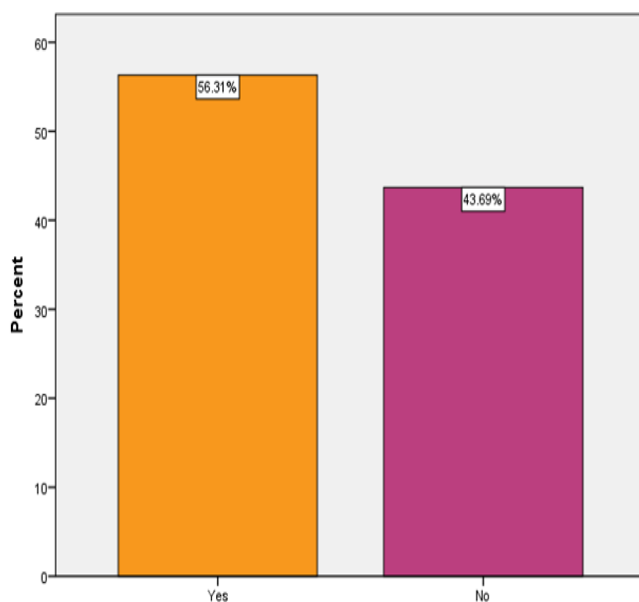


Fig 13: Ordination of respondents by Lower Back Pain.

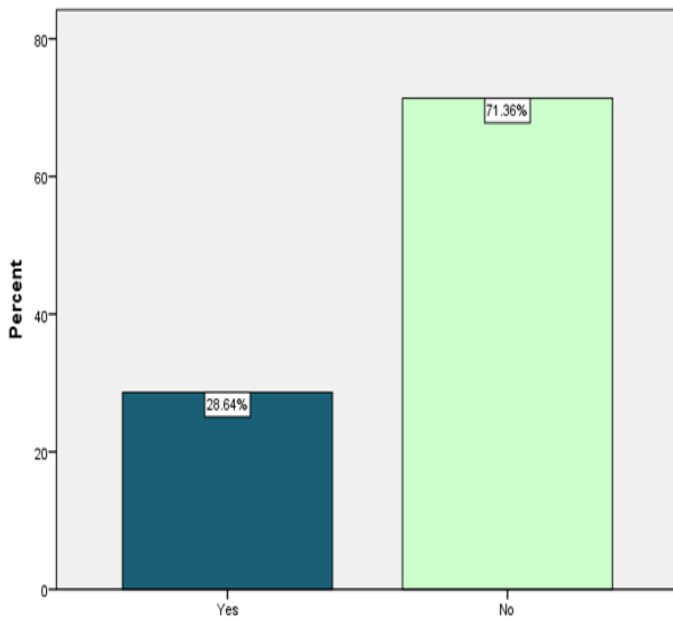


Fig 14: Respondents distribute by Upper back pain.

From the above **Fig 14** explained in the upper back pain in our study. Among 206 respondents in old home area were 28.6% having pain and 71.4% have no pain.

From the above **Fig 15** explained pain during sleeping time in this study. Among 206 respondents in old home area were 34% pain and 66% haven't pain during sleeping time.

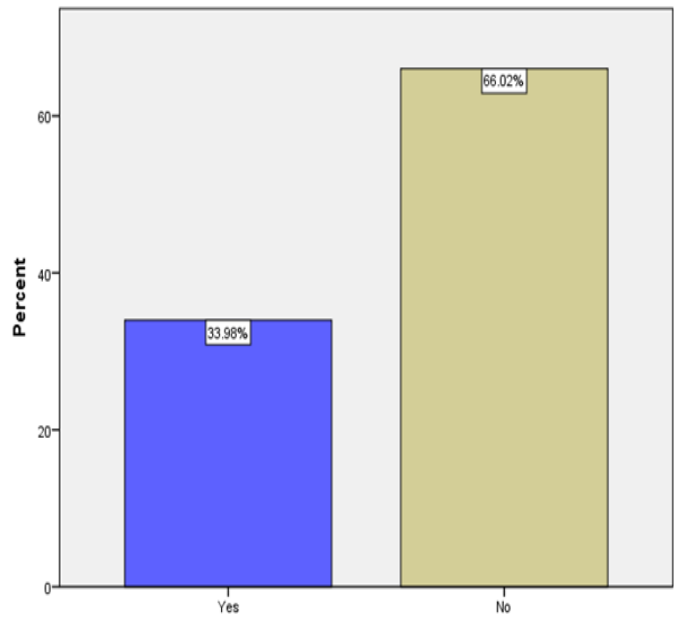


Fig 15: Respondents ordinate by Pain during sleeping time.

From the above **Fig 16** explained about Pain severity in current study. Among 206 respondents in old home area were 21.36% mild, 22.33% moderate, 24.76% severe pain and 31.55% respondents have no pain.

From the above **Fig 17** explained by the Stroke history in current paper. Among 206 respondents in old home area were 3.40% Right side, 4.37% left side, 2.91% both side and 89.32% have no stroke history.

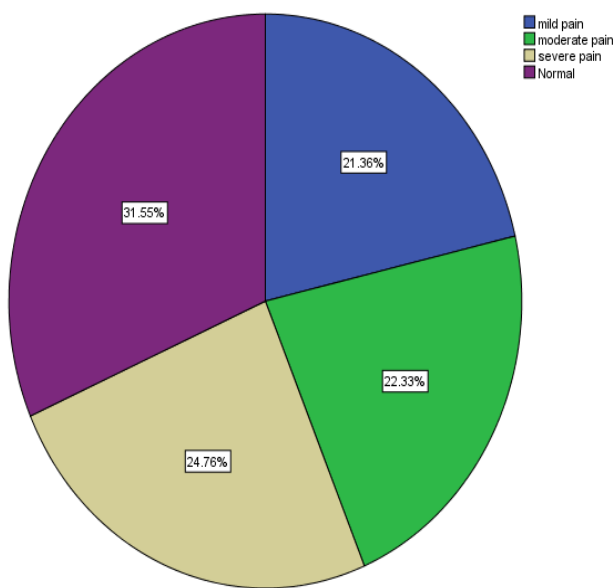


Fig 16: Distributed of respondents by Pain severity.

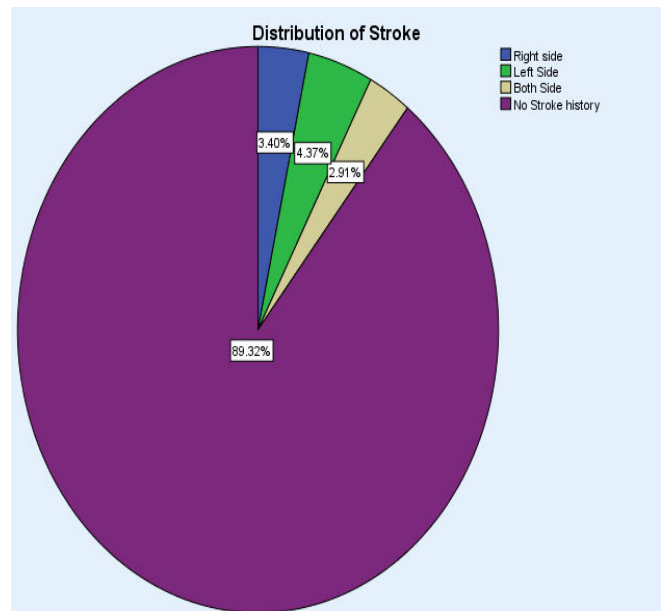


Fig 17: Ordination of respondents by Stroke history.

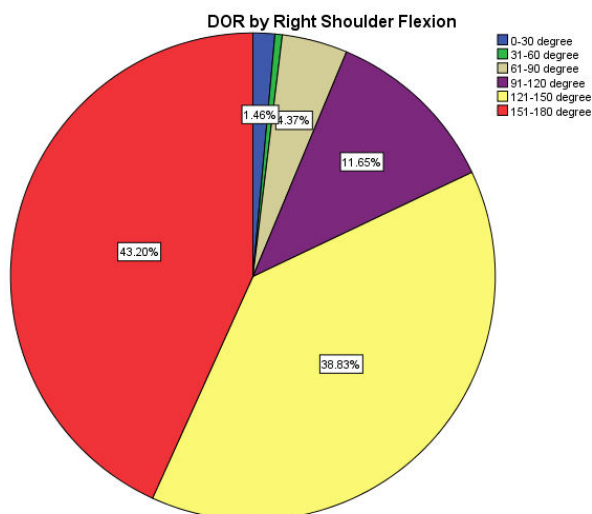


Fig 18: Distributed of respondents by Right Shoulder Flexion.

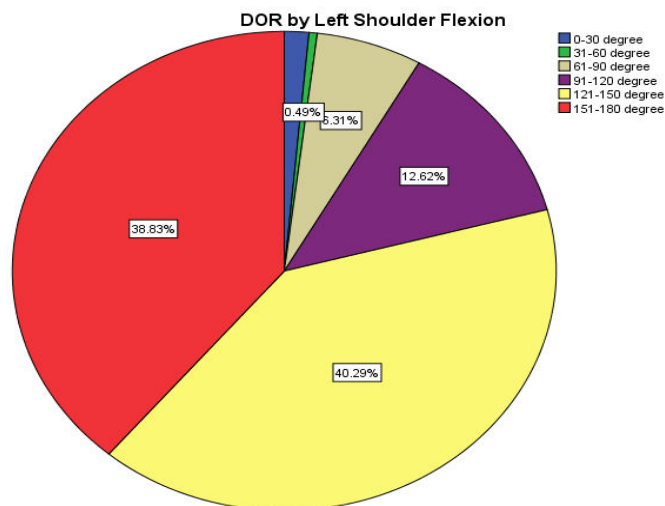


Fig 19: Respondents distribute by Left Shoulder Flexion.

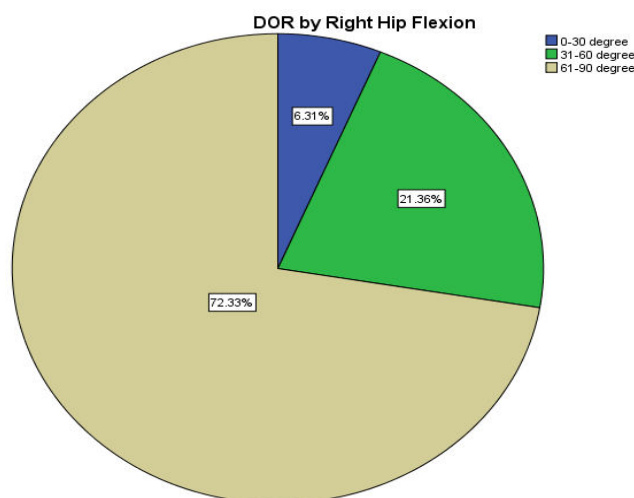


Fig 20: Distributed of respondents by Right Hip Flexion.

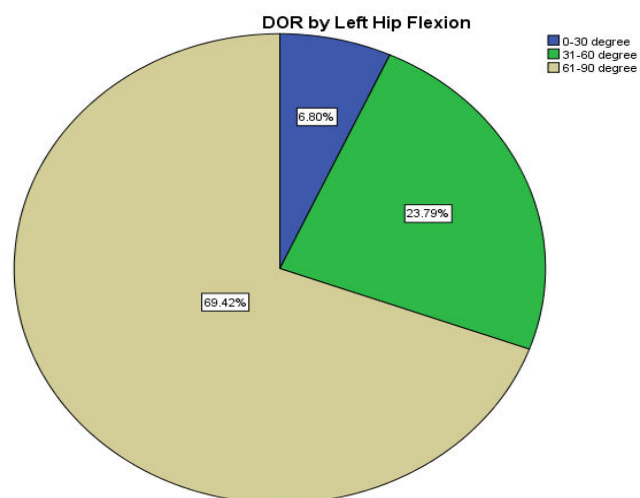


Fig 21: Ordination of respondents by Left Hip Flexion.

From the above **Fig 18** explained the Range of motion of Right shoulder joint flexion in our study. Among 206 respondents in old home area were 1.5% have 0⁰-30⁰, 0.5% have 31⁰-60⁰, 4.4% have 61⁰-90⁰, 11.7% have 91⁰-120⁰, 38.8% have 121⁰-150⁰ and 43.2% have 151⁰-180⁰ ROM.

From the above **Fig 19** explained in the Range of motion of Left shoulder joint flexion in our study. Among 206 respondents in old home area were 1.5% have 0⁰-30⁰, 0.5% have 31⁰-60⁰, 6.3% have 61⁰-90⁰, 12.6% have 91⁰-120⁰, 40.3% have 121⁰-150⁰ and 38.8% have 151⁰-180⁰ ROM.

From the above **Fig 20** explained to the Range of motion in Right Hip joint flexion in our study. Among

206 respondents in old home area were 6.3% have 0⁰-30⁰, 21.4% have 31⁰-60⁰ and 72.3% have 61⁰-90⁰ ROM.²⁹

From the above **Fig 21** explained by the Range of motion of Left Hip joint flexion. Among 206 respondents in old home area were 6.8% have 0⁰-30⁰, 23.8% have 31⁰-60⁰ and 69.4% have 61⁰-90⁰ ROM.³⁰

From the above **Fig 22** explained the ROM of Right Knee joint flexion in our study. Among 206 respondents in old home area were 3.4% have 0⁰-30⁰, 1.9% have 31⁰-60⁰, 7.3% have 61⁰-90⁰, 44.2% have 91⁰-120⁰ and 43.2% have 121⁰-150⁰ ROM.

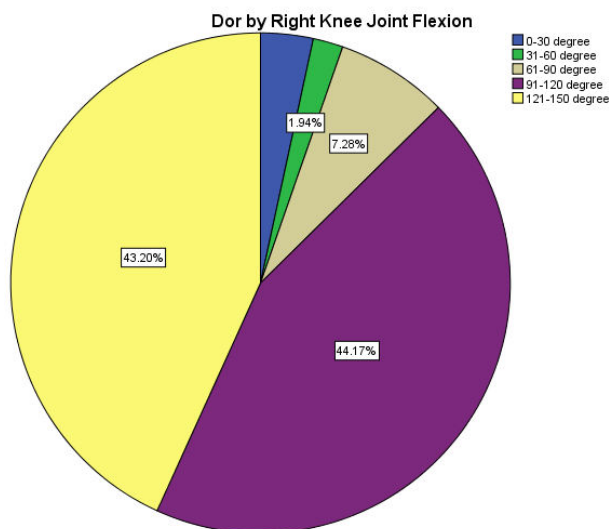


Fig 22: Distributed of respondents by Right Knee Joint Flexion.

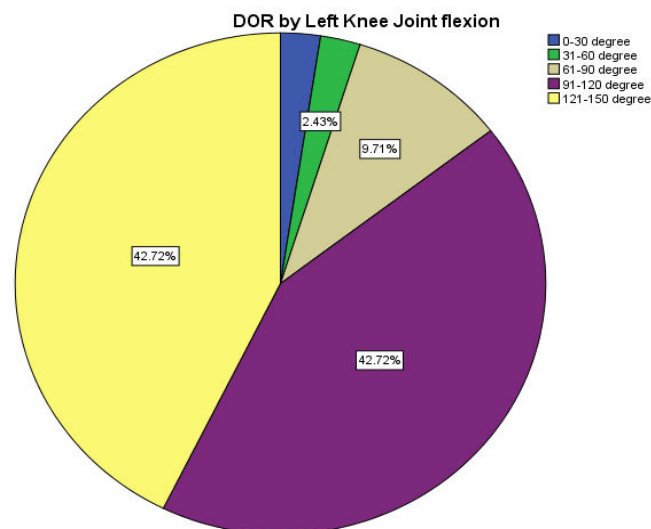


Fig 23: Ordination of respondents by Left Knee Joint Flexion.

From the above **Fig 23** explained the Range of motion of Left Knee joint flexion in our study. Among 206 respondents in old home area were 2.4% have 0⁰-30⁰, 2.4% have 31⁰-60⁰, 9.7% have 61⁰-90⁰, 42.7% have 91⁰-120⁰ and 42.7% have 121⁰-150⁰ ROM.

DISCUSSION:

In this paper data was collected to search the factors which are related to functional mobility to senior citizen in selected old home area in a small part in Bangladesh. This is essential to observe present situation and find out the mobility problem of aged population in selected old home. Purpose of the study is to discover the current functional status, responsible factors, activity in regular life, Health problem related factor, economical condition, functional mobility related factor, pain related factor, etc. This current paper a lot of information was presented. Here, the total 206 participants, 106 were male and 100 were female in the old home. In old home respondents are 87.9% Islam, 1.5% Christian and 10.7% Hindu. Senior citizen age group sequentially 47.1% were 60 to 69 years old, 36.9% were 70 to 79 years old. Only 16% were above 80 years old. Their level education, we found that 19.9% were primary level, 18.0% were SSC level, 4.4% were HSC level, 5.3% were college graduate level, 1.9% were university level, 1.5% were vocational education level and 49.0% were no education. Among 206 respondents in old home area there were 11.7% Businessman, 28.6% job holder, 7.3% farmer, 1.9% day labor and 50.5%

was house worker and other occupation. Here 8.7% had income and 91.3% had no any income. Among 206 participants in our study were 74.3% have children and 25.7% have no children. Respondents reside in the old home are 26.7% live in under 1 year, 28.8% stay 1to 2 years and 45.1% above 3 years.

Among 206 respondents of old home area, 89.3% have self-bathing capacity and 10.7% have no capacity of self-bathing. Besides in this field 89.3% have self-dressing capacity and 10.7% have no capacity of self-dressing up. In case of toileting seen that among 206 respondents of old home area 89.8% have self-toileting capacity and 10.2% have no capacity of self-toileting. These studies among 206 respondents of old home area 93.2% have self-washing teeth capacity and 6.8% have no capacity of self-teeth washing. Besides, in old home area 93.7% have self-eating capacity and 6.3% have no capacity of self-eating. Among 206 respondents of old home area were spend maximum time in 35.9% laying on the bed, 3.9% watching TV, 14.1% busy on work, 26.7% gossip and 19.4% spend their maximum time other works such as walking, prayer, newspaper reading, etc.

We have also obtained that among 206 respondents of old home area, 35.0% disable persons and 65.0% have no disability problem. Besides On this area respondents were use devices for disability 1.9% wheel chair, 16.5% stick, 1.9% crutch, 14.6% are use another de-vices. Several peoples are very sick they could not walking or

standing. For finding out disease pattern of aged people we have asked some question and discover that among 206 participants of old home area 19.9% have diabetic mellitus and they suffered from 3.9% under 1 year, 3.9% 1 to 2 years, 12.1% 3 years or above. Besides, in the old home area, 51.0% respondents suffered from hypertension and 11.7% respondents suffered from low blood pressure. For finding, we are also asked some more disease related questions of all 206 participants in old home area they were 14.6% have heart problem, 64.6% have urine catching difficulty, 6.8% have kidney disease. Our review among 206 respondents of old home area were 44.2% abnormal posture and they have 36.9% Kyphosis, 4.4% Scoliosis 0.5% Lordosis and 2.4% another abnormal posture.

For finding of aged people we have asked some question for identify various pain label and its severity found that among 206 participants of old home area were 52.4% have pain during straight walking, 36.9% have neck pain, 56.3% have lower back pain, 28.6% have pain in upper back and 34.0% have pain during sleeping time. Besides On this area respondents there were pain severity 21.4% have mild pain, 22.3% have moderate pain and 24.8% have severe pain. Our research among 206 respondents of old home area was 10.7% have stroke history. Here 3.4% right side, 4.4 left side, both side 2.9% paralyse. Among 206 respondents of old home area we take their permission and measure some main joints motion by goniometry. Our findings we measure on differentiate various level of all motion. In shoulder flexion right side 1.5% was 0 to 30 degree, 0.5% was 31 to 60 degree, 4.4% were 61 to 90 degree, 11.7% were 91 to 120 degree, 38.8% were 121 to 150 degree and 43.2% were 151 to 180 degree. As opposed to shoulder flexion left side 1.5% were 0 to 30 degree, 0.5% were 31 to 60 degree, 6.3% were 61 to 90 degree, 12.6% were 91 to 120 degree, 40.3% were 121 to 150 degree and 38.8% were 151 to 180 degree.

Next we measure hip flexion right side 6.3% were 0 to 30 degree, 21.4% were 31 to 60 degree and 72.3% were 61 to 90 degree. On the other side hip flexion left side 6.8% were 0 to 30 degree, 23.8% were 31 to 60 degree and 69.4% were 61 to 90 degree.

We also measure knee flexion right side, 3.4% were 0 to 30 degree, 1.9% were 31 to 60 degree, 7.3% were 61 to 90 degree, 44.2% were 91 to 120 degree, 43.2%

were 121 to 150 degree. Contrariwise knee flexion left side, 2.4% were 0 to 30 degree, 2.4% were 31 to 60 degree, 9.7% were 61 to 90 degree, 42.7% were 91 to 120 degree, 42.7% were 121 to 150 degree. So, from this study it may be discover that more old aged people in old home area suffered from mobility problem. On this study Right shoulder motion 56.8% participants ROM under 150 degree and Left shoulder motion 61.2% participants ROM under 150 degree. Also Right hip motion 27.7% participants ROM under 60 degree and Left hip motion 30.6% participants ROM under 60 degree. Besides, Right knee motion 56.8% participants ROM under 120 degree and Left knee motion 57.3% participants ROM under 120 degree. So, from this investigation majority person were suffered from postural and mobility problem.

CONCLUSION AND RECOMMENDATIONS:

To assessment on functional Activity related Disabilities among older peoples we wished to make a proposal. Than we modified and finalized our title “Prevalence of functional Activity related Mobility problem among senior citizen in selected Old Home. We selected our study area is Hotapara old home at Gazipur. It was fully for the research purpose. So we made proposal, made questionnaire, data collection directly from participants, checking, entering into computer by using SPSS 23 software, analysis and prepared result. We have finding age, educational level, daily living activities, and various disease patterns, spend time and specially try to discover the all joints ROM, Functional mobility with Disabilities. Finally overall this study it may be expressed that more old people in Gazipur old home are suffered from diabetes mellitus, HTN, movement difficulty, postural deformity, paralysis, postural deformity, mental disorder, psychological patients, back pain, muscle spasm, muscle tightness, OA etc.

To lead healthier and comfortable life for the aged people, there should be:

- 1) Provision for some form of physically active life according to their physiological capability, e.g. walking, swimming, going to gymnasium and mosque.
- 2) Provision for correction of abnormal posture.
- 3) Provision for amusement for them.

- 4) Provision of pain alleviation on the degenerative disease.
- 5) Provision of improve ROM.
- 6) Provision for health education.

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CONFLICTS OF INTEREST:

We can represent our-self and our workplace. We also want positional promotion with professional background. No potential conflicts of interest to publish it.

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