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A STUDY ON MORBIDITY PATTERN & DEPRESSION AMONG GERIATRIC POPULATION IN THE FIELD PRACTICE AREA OF URBAN HEALTH CENTRE, GOVERNMENT MEDICAL COLLEGE, SRIKAKULAM

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ABSTRACT

Background: The elderly are the most vulnerable and high-risk groups in terms of health and their health seeking behavior is crucial in any society. Changes have been seen in the age structure of the population due to a steady rise in life expectancy and reduction in fertility. A major component of the burden of illness for the elderly derives from prevalent chronic diseases

aim & objectives: To assess morbidity pattern and depression among elderly population in urban area.

methodology: A community-based cross-sectional study was carried out at the field practice area of the urban health centre, Government Medical College, Srikakulam. The study population comprises all geriatric population aged 60 years and above. A total of 100 elderly were included. They were interviewed in their houses using a predesigned and pretested questionnaire. It includes sociodemographic details, morbidity patterns, and addiction habits. Depression was assessed based on Geriatric Depression Scale 5(GDS-5). Data was entered in MS Excel and analyzed by using SPSS software.

results: Out of 100 participants 52 were male and 48 were female. About 72% of the study population have morbidity. The common morbidity found was hypertension 65% followed by Musculoskeletal system 54%, diabetes 43%, cataract 41%, sleep disturbances 24%, injuries or falls 22%, hearing impairment 15%, Forgetfulness 12%, gastrointestinal 14%, respiratory 9%, Cardiovascular 8% and CNS 2% etc. Depression was found among 23% of the elderly population based on GDS-5 scale. 19% of the elderly were addicted to alcohol and 21% were addicted to tobacco chewing or smoking.

conclusion:

Awareness among elderly population should be created for regular medical check-ups to ensure early detection and prevention of diseases. Hence special geriatric clinics for elderly need to be organized and integrated services should be provided.

Keywords: Addiction, Depression, Elderly, Morbidity pattern, Urban area.

INTRODUCTION

The elderly population worldwide is expected to double over the next three decades, according to a report by the United Nations (UN). The elderly population will reach 1.6 billion in 2050.[1] According to the population census 2011,

there are nearly 104 million elderly persons (aged 60 years or above) in India; 53 million females and 51 million males. It is estimated that it will increase to 198 million by the year 2030.[1] Indian government adopted “National Policy on Older Persons” in January 1999. The policy defines “senior citizen” or “elderly” as a person who is of age 60 years or above.[2]. The needs and troubles of the elderly vary notably according to their age, socioeconomic status, health, living status, and other such background characteristics.[3]

The aged population has unique health problems that are different from those of adults or young. The majority of diseases in aged are chronic in nature such as cardiovascular diseases, arthritis, stroke, diabetes, cataract, deafness, cancer, and chronic infections. Most often, elderly may undergo from the multiple chronic situations, visual defects, hearing impairment, and deterioration of speech which can cause social isolation. In addition, because there is a growing body of evidence that older people are at risk for multiple, comorbid conditions, health-care seeking will probably also increase[4,5] . Hence the aim of the study was to assess the morbidity profile among the elderly aged 60 years and above.

Objectives:

- To study the morbidity pattern among geriatric population aged 60 years & above.
- To study the usage of tobacco and alcohol among elderly.
- To assess the prevalence of depression among elderly.

MATERIALS AND METHODS

Study design: A community based cross sectional study

Study population: Elderly persons 60 years and above.

Study period: February and March 2023.

Study settings: Field practice area of Urban Health Centre, Government Medical College, Srikakulam.

Inclusion criteria:

Elderly persons who gave consent to participate in the study

Exclusion criteria:

Elderly who were not present at home at the time of visit.

Sample size: Sample size calculation was done by using formula,

$n = \frac{4pq}{L}$ 2 $N = \frac{4 \times 64 \times 36}{100} = 92$; rounded as to 100

Taking $p = 64\%$ (prevalence of reference study i.e, 64% [6])

$q = 100 - p = 36\%$; $L = 10\%$

$n = 100$

Method of data collection: House to house survey was conducted using a pre designed and pre tested questionnaire. Depression was assessed based on Geriatric Depression Scale – 5 (GDS-5) [7]

Data analysis: Data was entered and analysed using Microsoft Excel and relevant tests of significance were applied.

Results:

A total of 100 study participants 52 were male and 48 were female. The mean age of the study population was 68

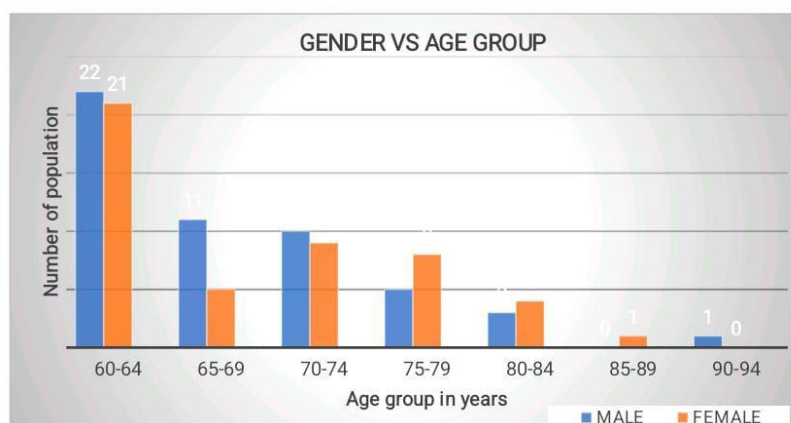


Figure1: Gender vs age group

From figure 1, Among the 100 study participants, 43% (22% males, 21% females) were in 60- 64 age group, 16% (11% males, 5% females) in 65-69 age group, 19% (10% males, 9% females) in 70-74 age group, 13% (5% males, 8% females) in 75-79 age group, 7% (3% males, 4% females) in 80-84 age group, 1% (0% males, 1% females) in 85-89 age group, 1% (1% males, 0% females) in 90-94 age group.

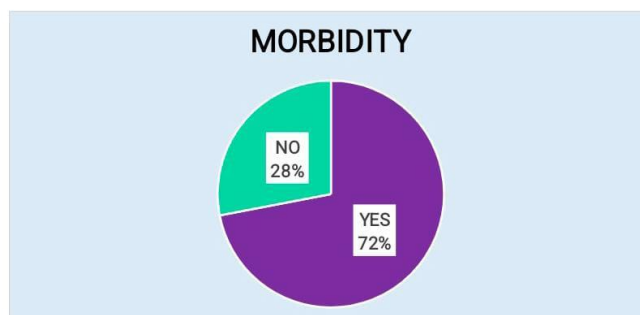


Figure 2: Distribution of study participants based on morbidity

From figure 2, Out of 100 study participants, 72% of study participants have morbidity and 28% having no morbidity.

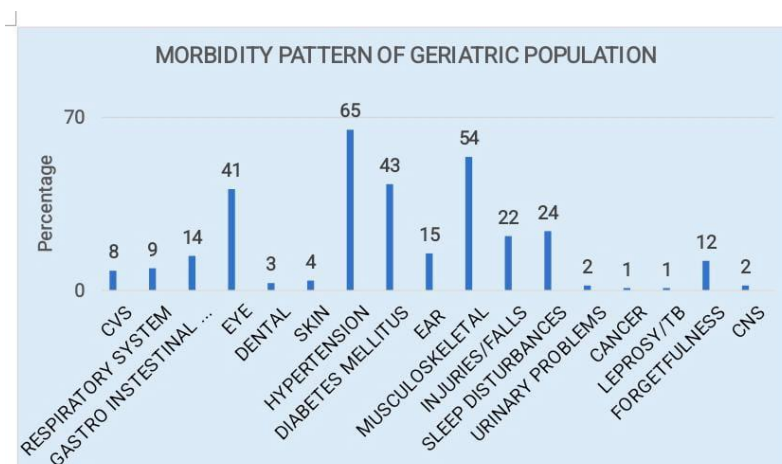


Figure 3: Distribution of study participants based on type of morbidity

From figure 3, About 72% of the study population have morbidity. The common morbidity found was hypertension 65% followed by Musculo skeletal system 54%, diabetes 43%, cataract 8 9 14 41 3 4 65 43 15 54 22 24 2 1 12 2 0 10 20 30 40 50 60 70 Percentage MORBIDITY PATTERN OF GERIATRIC POPULATION YES 72% NO 28% MORBIDITY 7 41%, sleep disturbances 24%, injuries or falls 22%, hearing impairment 15%, Forgetfulness 12%, gastrointestinal 14%, respiratory 9%, Cardiovascular 8% and CNS 2% etc.

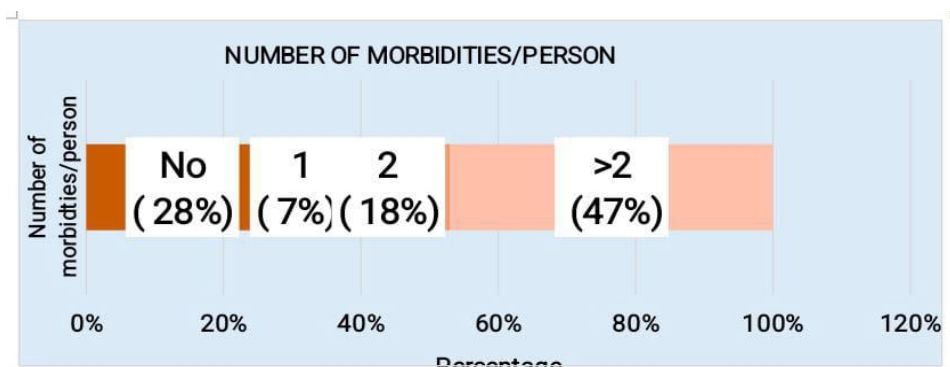


Figure 4: Distribution of study population based on number of morbidities/person

From figure 4, In the present study, 7% have one disease, 18% have two diseases and 47% have more than two diseases.

Table1: Distribution of study participants based on usage of tobacco and alcohol

| GENDER | USAGEOFTOBACCOANDALCOHOL | | TOTAL | Chi-Square(PVALUE) |
|--------|--------------------------|-----------|-----------|------------------------------------|
| | YES | NO | | |
| MALE | 24(46%) | 28(54%) | 52(100%) | 20.163 (<0.05) [*] |
| FEMALE | 3(6.2%) | 45(93.8%) | 48(100%) | |
| TOTAL | 27(27%) | 73(73%) | 100(100%) | |

From Table 1, In the present study, 27% having usage of tobacco and alcohol and 73% without any addictions

Table2: Distribution of study population according to various responses of GDS-5 scale

| Response | YES | NO |
|---|-----|-----|
| Are you basically satisfied with your life? | 100 | 0 |
| Do you often get bored? | 23 | 77 |
| Do you often feel helpless? | 17 | 83 |
| Do you prefer to stay at home rather than going out and doing new things? | 17 | 83 |
| Do you feel pretty worthless the way you are now? | 0 | 100 |

^{*}Multiple responses

A score of ≥ 2 is considered as positive

Table3: Distribution of study participants based on depression

| GENDER | DEPRESSION | | TOTAL | Chi-Square(PVALUE) |
|--------|------------|---------|-----------|------------------------|
| | YES | NO | | |
| MALE | 11(21%) | 41(79%) | 52(100%) | 0.206 (>0.05) |
| FEMALE | 12(25%) | 36(75%) | 48(100%) | |
| TOTAL | 23(23%) | 77(77%) | 100(100%) | |

From Table 3, Depression was found among 23% (21% males and 25% females) of the elderly population based on GDS-5 scale in the present study.

DISCUSSION

Prompt recognition and early treatment of mental, neurological, and substance use disorders in older adults are essential. Both psychosocial interventions and medicines are recommended simultaneously. The present study was conducted to assess the depression and morbidity profile of the elderly residing in urban health centres. In the present study out of 100 elderly persons, 52% were males and 48% were females. These findings were inconsistent with a study done by Vandana Nikumb et al. found 31.2% males and 68.8% females in the urban area of Navi Mumbai, Maharashtra [8] and 40% males and 60% females reported in the study by Srinivas P.J. et al. in Visakhapatnam district, Andhra Pradesh [9]. In the current study, 72% of the study population had morbidity. These findings were consistent with study done by Srinivas P.J. et al. reported that 64% of the study participants have morbidity [9]. Similarly 88.5% of elderly had morbidity in the study by Safaa Khamis et al. [10]

In the present study, the common morbidity found was hypertension 65% followed by Musculo skeletal system 54%, diabetes 43%, cataract 41%, sleep disturbances 24%, injuries or falls 22%, hearing impairment 15%, Forgetfulness 12%, gastrointestinal 14%, respiratory 9%, Cardiovascular 8% and CNS 2% etc. The current study findings were consistent with Vandana Nikumb et al., Stress was the common morbidity 59.4% followed by arthritis 55.6% cataracts 46.3%, hypertension 28.1%, dental problems 21.9%, respiratory 11.9%, hearing impairment 10.6%, diabetes 10%, [8] In the high range part of north India, most common morbidities among the geriatric age group were musculoskeletal problems. Also, in Gujarat, a study shows that 10 musculoskeletal problems are commonly reported problems followed by visual problems and hypertension. This can be attributed to the fact that the majority of the participants in our study belonged to the lower socioeconomic status who were primarily daily wage laborers.

In the current study, 7% of the study population have one disease, 18% have two diseases and 47% have more than two diseases. Similar findings were found in the study done by Srinivas P.J. et al, observed that 38.75% have one disease, 18% have two diseases and 7.25% have more than two diseases[9]. In the study by Safaa Khamis et al, 31.3% have one disease, 29.9% have two diseases and 27.3% have more than two diseases[10]. This observed difference in the finding could be attributed to different sampling techniques, sample sizes, study settings, and instruments used.

In the present study, 27% having usage of tobacco and alcohol and 73% without any addictions. In the study by Jadhav V.S. et al 65.92% having addiction habits while 34.08% were having no addiction[11]. In the present study, 21% contributes for cigarette smoking (males 19%, females 2%), alcohol 36.6% (males 36.6%, females 0) and tobacco chewing 19.16% (males 15%, females 4.16%). Similar findings were found in following studies, Safaa Khamis et al found 20.9% of elderly were smokers [10], Jadhav V.S. et al found 29.96% males were smoking, 18.18% were consuming alcohol, 29.29% males and 45.42% females were chewing tobacco[11].

Aging indeed may have a number of characteristics; to name a few- increased mortality with age after maturation, changes in the biochemical composition of tissues with age, a broad spectrum of progressive deteriorative physiologic changes with age, a decreased ability to respond adaptively to environmental changes with age and an increased vulnerability to various diseases. [12]

In this study Depression was found among 23% (21% males and 25% females) of the elderly population. Similar findings were found in a study done by Jadhav V.S. et al. who found that 10.72% of the study population had

depression[11] . A study conducted by Patil K, Kulkarni M, Dharmadhikari P [13] and Swarnalatha N [14] reported that the prevalence of depression increases with increasing age.

These comorbidities along with depression increase physical disability, poor compliance, and increased healthcare utilization leading to poor quality of life and further complicating the treatment of depression. [15]

The prevalence of morbidity among the elderly was 72%. The common morbidity found was hypertension 65%, followed by musculoskeletal system 54%, diabetes 43%, cataracts 41%, sleep disturbances 24%, injuries/falls 22%, etc. About 27% of the study participants have a habit of usage of tobacco and alcohol. About 23% of the geriatric population had depression. Awareness regarding regular medical checkups among the elderly and the need to develop geriatric health care services.

Such common co-morbidities need preventive, curative, and rehabilitative services. There is an urgent need to develop geriatric health care services in developing countries like India and provide training to health care providers to manage the commonly existing health problems in the community. Measures to enhance social support systems and social integration like guidance, counselling to the family members, and financial support to the elderly need to be provided through voluntary agencies and welfare associations.

Educating the family members and providing special training to the medical officers, auxiliary nurse midwife (ANM), and accredited social health activist (ASHA) for diagnosing psychiatric illness at the community level.

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