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Community Medicine

CROSS-SECTIONAL STUDY OF SOCIO-DEMOGRAPHIC DETERMINANTS OF ELDERLY POPULATION IN RURAL INDIA

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ABSTRACT The present cross-sectional study is planned in rural area to find out the social, economic & demographic determinants among 431 elderly population. Study carried out with the help of pre-designed, semi-structured questionnaire which included information about age, gender, marital status, literacy status, economic dependency, social class etc. The study result showed maximum population were in 60-64 years of age group and illiterate, maximum population were female and muslim by religion. The study also showed maximum elderly belonged to poor socio-economic class, were living in kaccha house and were dependent on younger population. The study concludes that there is need to address the social, economic and physical health of elderly.

KEYWORDS : Elderly, Socio-demographic determinants, Rural, India

INTRODUCTION:

The phenomenon of aging has always fascinated mankind. However, concern for aging of population is a relatively new phenomenon, which has risen due to significantly large increase in the number and proportions of aged persons in the society. World is aging and the world population is also been experiencing significant ageing. This is primarily due to lower fertility in one side and on the other side it also reflects a human success story in the form of a better way of living, between control of communicable and non-communicable diseases, emergence and acceptance of newer devices, drugs and interventions, all these resulting outcome of increased longevity of human being.

Globally 10% of the world population is elderly & it is expected to increase to 21% in the year 2051.[1] In absolute numbers, it is likely to increase from current 600 million to 1.97 billion in 2051.[2]

According to the 2017 revision of the world population prospects is the twenty-fifth round of official United Nations population, which estimates that the world's population numbered approximately 7.6 billion in the middle of 2017. It represents that the world has added approximately one billion in habitants over the last twelve years. Sixty percent (60%) of the world's people live in Asia (4.5 billion), seventeen percent in Africa (1.3 billion), 10 percent in Europe (742 million), 9 percent in Latin America and the Caribbean (646 million), and the remaining 6 percent in northern America and (361 million) and Oceania (41 million) and India (1.3 billion) remain the to most populous countries of the world, comprising 19 and 18 percent of the global total, recpectivley.[3] According to the absolute size of elderly population, India is the second largest country in the world. As per available data, the elderly population is 76.2 million compared to 57 million in 1991. It constitutes 7.7% of its population. It has been projected that there will be 177 million elderly which constitute 14% of whole population in the year of 2025.[4] This profound shift in the share of older Indians, taken place in the context of changing family relationship and severe old age financial constraints,

bringing them vulnerable to the variety of challenges like economic, social, physical, mental, recreational, personal health care, transportation, and so on. They needs some shelters, support and deserve our empathetic consideration.

Hence, timely assessment of socio-demographic factors among elderly is needed to formulate the health policies and provide the most appropriate help needed in the form of medical, social, and legal perspectives.

The present study is planned with objective 'to study the socio-demographic determinants of elderly population'.

MATERIALS & METHODS:

Types of study: A descriptive epidemiological study

Study design: A community based cross sectional study

Study period: The duration of the study was one year from September 2016 to August 2017

Study area: The present study was conducted in the rural field practice area of Kishanganj at MGM medical collage with an approximate population of 1, 00,000.

Study population & sample: All the geriatric population aged 60 years & above residing permanently in the rural field practice area available during the period of the study.

Sample Size:
A total of 442 geriatric subjects were approached for the conduction of the present study, of which 431 were interviewed & were selected for the study as the remaining 11 patients did not turn-up. So the total study population was 431 patients. The non-response rate was thus 3.58 %.

Eligibility of study population:
INCLUSION CRITERIA:
1. Geriatric populations aged 60 years & above of both sexes were included in this study.
2. Only permanent resident with names in voter list were included.

Exclusion criteria:
1. Geriatric population who are seriously ill.
2. Those who could not be contacted in three visits.

Study tools:
Pre-designed and pre-tested questionnaire
Study was approved by Institutional ethics committee and informed verbal consent was obtained from all participants. The health workers informed and motivated the families to participate in the study along with the scope of future intervention, if necessary. All the caregivers of participants were explained about the purpose of the study and were ensured strict confidentiality, and then informed consent was taken from each of them before the total procedure

Analysis:
Data regarding family and personal characteristics were recorded by personal interview technique from the care givers of the participants.

The data collected were thoroughly cleaned and entered into MS-Excel spread sheets and analysis was carried out. Mean, proportion and standard deviation were used as tools of descriptive statistics to describe the data.

RESULTS & DISCUSSION:
Total 431 subjects were participated in the study.
Table No. 1:

Distribution of demographic determinants of study population (N=431)

Sr. No.	Demographic determinants	Total (%)	
1.	Age group	60-64	187 (43.39%)
		65-69	102(23.67%)
		70-74	77 (17.87%)
		75-79	40 (9.28%)
		80 yrs & above	25 (5.80%)
2.	Gender	Male	196 (45.47%)
		Female	235 (54.52%)
3.	Religion	Muslim	398 (92.34%)
		Hindu	23 (5.34%)
		Other	10 (2.32%)
4.	Marital status	Married	352 (81.67%)
		Unmarried	12 (2.78 %)
5.	Literacy status	Illiterate	258 (59.86%)
		Just literate	108 (25.06%)
		Primary school	43 (9.97%)
		Middle school	12 (2.78%)
		High school & above	10 (2.32%)

Table No. 2: Distribution of social determinants of study population (N=431)

Sr.No.	Social determinants		Total (%)
1.	Social Class (Modified B.G. Prasad classification)	Class1(rs 2700 & above)	12 (2.75%)
		Class2(rs 1350- 2699)	57(13.33%)
		Class3(rs 810-1349)	86(20.78%)
		Class4(rs 405-809)	138(32.16%)
		Class5(below rs 405)	134(30.98%)
2.	Financial dependency	Dependent	267 (61.94%)
		Partially dependent	118 (27.38%)
		Independent	46 (10.67%)
3.	Type of housing	Kuccha	275 (64.31%)
		Mixed	99 (23.92%)
		Pucca	57 (11.76%)
		Just literate	108 (25.06%)
		Primary school	43 (9.97%)
		Middle school	12 (2.78%)
		High school & above	10 (2.32%)

The present study (table no. 1) shows that most of the study population belonged to age group of 60-64 years. The table in general shows declining in no. of participant as age is increases. This findings of the present study were in accordance with the study conducted by Charan Singh et al.[5] on rural aged population of Meerut in 1989-1990 in which Maximum study population was seen in the age group of 60-64 years at 43.1% whereas study conducted by Goel P K et al.[6] in 2001-2002 majorities of the elderly were aged 65-69 years at 29.4%. This pattern shows increase in longevity of the elderly probably due to awareness of health & health related services. The accelerated growth within the elderly population of those age 85 and over has shifted attention to this subgroup and its unique set of needs. The oldest-old are at risk for chronic illness, tend to be functionally dependent, and have greater needs for medical, social, and support services.[7]

The present study clearly shows that female dominated over male in sex composition of study population which is in accordance with the study conducted by Sharma M K et al.[8] in Chandigarh where female formed 57.5 % compared to 42.3% of their male counterpart and in a study conducted by Padda A S et al.[9] among elderly in Amritsar it was seen that 60.6% of the study population were males compared to 39.4% who were female. Since the vast majority of the oldest-old are female, many of the health, social, and economic problems of this group are those of women.[7]

Majority of the present study populations were Muslims which constitute 92.34% of the total study population. 5.34 % population was Hindu & 2.32% belonged to other religion. This finding was not inconsistence with study conducted by Charan Singh et al.[5] in which hindu religion was in predominance.

Also, majority of the present study population were married which was 81.67% of total study population. This was similar to the study conducted by Sashi K et al.[10] Among the most important social characteristics affecting the welfare of the elderly are those that pertain to their marital status and living arrangements. Elderly men are most likely to be married; elderly women are most likely to be widowed. This trend has important implications for housing needs and the demand for institutional care. With the decline in the proportion of the elderly living with relatives likely to continue, there will probably be a greater need for the provision of social support and health services by the community or other public sources.[7] The overall educational status of the study population was poor. 59.86 % of study population were illiterate. This finding was similar to the study conducted by Charan Singh et al.[5] and Shasi K et al.[10]. The greater education of the future elderly population implies a change in demand for services: combined with rising income, they may seek and demand more and better health care and other programs for their needs.[7]

The table no. 2 shows that majority of the study population belonged to social class 4 & 5 which constitute 32.16% & 30.98% of total study population whereas study conducted by Niranjan G V 39et al. in 1996 it was seen Majority belonged to class III which was 46.2% followed by 36.9% class II, 8.8% class IV, 7.8% class I & least in class V which constituted 0.3% of total population. the difference in result may be due to the difference in time frame & place of conduction of the study. In the present study majority of the houses of the rural study population was kuccha which is similar to the study conducted by Purohit C K & Sharma R[11] in 1974, it was found that 93.4% of the housing was kuccha. This study also shows majority of the study population were completely dependent which constitute 61.94% which is similar to the study conducted by Goel P K[8] et al.

The income of the elderly has improved over time. Current expenditures by the elderly are highest for shelter, followed by

food, transportation, and health care, which, surprisingly, uses less of the budget than transportation. These expenditures must be considered along with available economic resources in planning and developing public policies for the elderly.[7]

CONCLUSION:

Ageing is a natural process & old age should be considered as a normal, inevitable biological phenomenon. It is associated with a longer life & must be accompanied with continuous opportunities for health, participation in social activities & the aged must be provided with social security.

The present study conducted in 2017 and compared with different studies in different timelines concludes that there is no difference in socio-demographic determinants of elderly which indicates elderly population in community is a great responsibility of community and major challenge to the health and health related facilities including social security.

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