

Utilisation of Health Care Facilities by Geriatric Population: A Study from Rural India.

Shalender Bali, MD¹; Saima Nazir, MD¹; M Rafiq Mir, MD²;
Sameena Yousuf, MD³

1. Senior Resident, Department of Community Medicine, SKIMS Medical College, Bemina, Srinagar - 190018. (Current Affiliation)
Post-graduate Scholar, Department of Community Medicine, MMIMSR, Mullana, Ambala – 133203. (At the time of study)
 2. Professor & I/C Head, Department of Community Medicine, SKIMS Medical College, Bemina, Srinagar - 190018.
 3. Senior Resident, Department of Community Medicine, SKIMS Medical College, Bemina, Srinagar - 190018.
- Corresponding Author: Dr Saima Nazir

Abstract

Background: Elderly people are more vulnerable to diseases and are likely to utilize a significant proportion of health care facilities. This study examines the pattern of utilization of health care facilities by the elderly people of rural India.

Methods: The observational cross-sectional study was carried out in the rural field practice areas of a medical college hospital over a period of one year on 660 individuals using a pre-tested questionnaire administered in their own language which was administered by the first author during a face-to-face interview.

Results: There were 336 (50.91%) males in our study. The most common ailment that the subjects were suffering from was dental issues. Around 92% subjects availed the non-government facilities for their health issues, and most of them (52%) utilized services of unqualified professionals.

Conclusion: Our study depicts that maximum number of subjects did not avail proper medical care and most preferred non-governmental services to government health care facilities.

Key Words: Geriatric; Elderly; Utilization; Health care; Rural.

Date of Submission: 28-03-2018

Date of acceptance: 12-04-2018

I. Introduction

A major component of the burden of illness for the elderly derives from prevalent chronic disabling conditions that often accompany aging. The foremost challenge of 21st century is to delay the onset of disability and ensure optimal quality of life for older people. This can be done, not only by medical but also by social, economical and environmental interventions [1-3]. Extending the duration of life alone may not be a sufficient goal particularly when the extended survival is painful, handicapped or deprived of basic bodily functions. Remaining healthy is a precondition for elderly to continue to make a positive contribution to the society [4]. Accessibility, availability and utilization of health care facilities are important for ensuring a community's general health status. The aim of this study was to study the pattern of health services utilization among elderly population in rural India.

II. Materials And Methods

The observational cross-sectional study was carried out in the rural (Barara, Mullana & Nahoni) field practice areas of the department of Community Medicine of MM Institute of Medical Sciences & Research, Mullana, district Ambala, Haryana from January 2012 to December 2012. The three rural health centers of Department of community medicine cater to a population 1,36,178. As per the 2011 census, there are 9436 elderly in the study area with 3,324 in Barara, 3,107 in Mullana and 3005 in Nahoni. The literature review revealed that the prevalence of various health problems in elderly varies from 8% to 80% [1-12]. The sample size was calculated by presuming the prevalence of the health problems in this age group to be 40%. The sample size was calculated by the formula $n = Z^2 P(1-P)/e^2$, where, z = Level of confidence at 95% (1.96); p = Proportion of prevalence and e = Margin of error taken (absolute error of 1.5%). Taking margin of error as 10% the sample size came out to be 600. Assuming non-response rate to be 10%, 660 individuals was taken up for the study. All individuals more than or equal to 60 years of age were included in the study. Those participants who were not

willing to participate were excluded from the study.

Simplerandom sampling technique was used for sample collection. This was done by random number table method. A list of all the elderly residing in the study area was procured from survey register of all the three rural health centers. All the households with elderly were separately allotted a serial number. Random number generator on computer with the help of program Stat-trek generated a list of random numbers. This table of 660 random numbers was produced by randomly selecting numbers from within the range of 1 to 9436. Duplicate numbers were allowed. All the elderly living in the selected house were included in the study.

A self-designed, semi-structured pretested proforma was used to assess the pattern of healthservices utilization. The data was collected by house-to-house visit. A written and informed consent was obtained from the participants before proceeding to a formal interview. Data was collected using a pre-tested questionnaire, which was administered by the first author during a face-to-face interview. Hindi version of the proforma was also prepared to facilitate the study. The questionnaire was asked in the local language understood to them. If any of the selected person was not found during the first visit, a second visit was given at some other time. Before the study was formally conducted, this questionnaire was translated into local language and was tested on 30 elderly individuals in Mullana village for reliability and consistency as part of a pilot project.

The data thus collected was compiled and analyzed using SPSS version 21 for Mac (IBM Corporation, 2012). Qualitative variables were expressed as proportions in percentages. The association between variables was calculated for 95% confidence intervals by using "Chi square test". "Unpaired t – test" was used to compare the means. A P-value < 0.05 was taken as significant. For quantitative data, mean and standard deviation was calculated. An approval for this study was obtained from the Institutional Ethical Committee.

III. Results

A total of 660 people [males = 336 (50.91%)] were included in the study. The demographic profile of the subjects is shown in table 1. The most common morbidity seen in both the sexes was dental issues. Table 2 lists the morbidity pattern of the subjects. Maximum number of subjects (92.7%) was utilizing non-government health care facility as main source of health care. Out of the subjects using non-government facility as source of health care, 52.7% were going to unqualified doctors for health care whereas 46.1% were using services of qualified doctors of nursing homes. Around 0.11% of subjects availed the services of faith healers.

IV. Discussion

Elderly people are more vulnerable to diseases and are likely to utilize a significant proportion of health care facilities [6]. In the absence of dedicated geriatric health care units in most parts of the country, they are left with no option than to visit the existing government health centers/ hospitals or private practitioners. This study examines the pattern of utilization of health care facilities by the elderly people of rural India.

It was observed that majority (92.7%) of subjects do not generally seek health care from government source. Of those using non-government facility 52.9% went to unqualified practitioners. The most common reason for not utilizing government facility was long distance (38%). Other reasons were lack of medicine (23%), non-cooperative nature of staff (15%), unawareness (4%), time consuming (9%) and lack of doctors (8%). The data were similar to NFHS-3 survey [9].

It was observed that 88.2% of subjects were having medical expense of less than Rs 500 per month where as 5% were having no medical expense. Regarding source of medical expense it was observed that in majority (70.8%) of subjects family provided medical expense. Surprisingly only one male subject was having health insurance.

As far as system of medicine is concerned 93.6% preferred modern medicine as system of choice. Joshi K [9] observed similar findings in his study in urban and rural area of Chandigarh, and reported that most preferred system of medicine was allopathic system in 92.2% of elderly and the rest 7.7% relied on either ayurvedic or homeopathic system of medicine.

It was observed in present study that 10.5% of subjects were hospitalized in last one year. Swami HM reported similar findings in their study on elderly population of Chandigarh [12].

In the present study it was observed that 35.9% of elderly were taking some type of prescribed medicine. Significantly more number of females (64.6%) as compared to males (35.4%) was taking prescribed medicine ($p=0.001$). Among those on prescription medicine 39.2% were adherent to pharmacological intervention. The most common reason for non-adherence was dependence on others to bring medicine (35.4%); other reasons being ignorance (31.3%), cost of medicine (27%) and supply not adequate at source (6.3%).

We acknowledge the fact that our study may have been affected due to recall bias; as happens with all self- reported data. This study highlights the urgent need of public education regarding seeking proper medical care, by mass media and local government authorities. Information, education and communication activities should be strengthened to encourage public to avail health services from qualified professionals.

V. Conclusion

Our study depicts that maximum number of subjects did not avail proper medical care and most preferred non-governmental services to government health care facilities.

ACKNOWLEDGEMENTS: None

References

- [1]. Lena A, Ashok K, Padma M, Kamath V, Kamath A. Health and social problems of the elderly: A cross-sectional study in UdupiTaluk, Karnataka. *Indian J Comm Med* 2009; 34:131-4.
- [2]. Jamuna D. Issues of elder care and elder abuse in the Indian context. *J Aging Soc Policy* 2003; 152: 125-131.
- [3]. Howell TH. Avicenna and the care of the aged. *Gerontologist*. 1972;12(4):424-6.
- [4]. Kinsella K, Phillips DR. Global Aging: The Challenge of Success. *Popul Bull*. 2005;60(1):18-19.
- [5]. Guralnik JM, Fried LP, Salive ME. Disability as a Public Health Outcome in Ageing Population. *Annu Rev Public Health*. 1996;17:25-46.
- [6]. Bhatia SPS, SwamiHM, Thakur JS, Bhatia V; A Study of Health Problems and Loneliness among the Elderly in Chandigarh. *Indian J Comm Med*. 2007;32(4):255-8.
- [7]. Kant S, Mishra P, Goswami A. Morbidity among Elderly Persons Residing in a Resettlement Colony of Delhi. *Indian J Prev Soc Med*. 2004;1:34-36.
- [8]. Singh C, Mathur VN, Singh JV, Singh BB, Garg BS, Kumar A. Social Problems of Aged in a Rural Population. *Indian J Comm Med*. 1995;20(1-4):24-27.
- [9]. Joshi K. Assessment of health related quality of life (HRQOL) among elderly more than 60 years of age. [Dissertation]. Chandigarh: Baba Farid University of Health Sciences, Faridkot; 2000.
- [10]. Jacob A P, Bazroy J, Vasudevan K, Veliath A, Panda P. Morbidity Pattern Among the Elderly Population in Rural Area of Tamil Nadu, India. *Turk J Med Sci*. 2006;36:45-50.
- [11]. Prakash R, Choudhary SK, Singh US. A Study of Morbidity Pattern Among Geriatric. Population in an Urban Area of Udaipur Rajasthan. *Indian J Comm Med*. 2004;29(1):35-39.
- [12]. Swami HM, Bhatia V, Dutt R, Bhatia SPS. A community based study of the morbidity profile among the elderly in Chandigarh. *Bahrain Med Bull*. 2002;24(1):13-16.

Table 1: Demographic profile of the subjects

| VARIABLE | MALE (n =336) | FEMALE (n=324) |
|------------------------|--------------------|--------------------|
| Mean Age | 65.23 + 2.12 years | 66.51 + 2.43 years |
| Hindu Religion | 302 (90%) | 292 (90%) |
| Currently Married | 240 (71%) | 228 (70%) |
| Illiterate | 165(49%) | 257(79%) |
| Mean Per capita Income | Rs 2345 | Rs 2326 |

Table 2: Morbidity profile of the subjects

| Morbidity | Male N= 336 | Female N= 324 | Total N= 660 | Significance |
|---------------------|-------------|---------------|--------------|---------------------------------|
| Anemia | 186(55.4) | 240(74.1) | 426(64.5) | $\chi^2= 8.417$, df=1, p=0.004 |
| Dental problem | 207(61.6) | 204(63.0) | 411(62.2) | $\chi^2=0.043$, df=1, p=0.836 |
| Joint pain | 126(37.5) | 213(65.7) | 339(51.4) | $\chi^2=17.55$, df=1, p=0.00 |
| Cataract | 156(46.4) | 153(47.2) | 309(46.8) | $\chi^2=0.014$, df=1, p=0.906 |
| Hypertension | 135(40.2) | 159(49.1) | 294(44.5) | $\chi^2=1.761$, df=1, p=0.184 |
| Senile deafness | 84(25.0) | 84(25.9) | 168(25.4) | $\chi^2=0.025$, df=1, p=0.875 |
| Acid peptic disease | 51(15.2) | 96(29.6) | 147(22.2) | $\chi^2=6.632$, df=1, p=0.010 |
| Chronic bronchitis | 60(17.9) | 30(9.3) | 90(13.6) | $\chi^2=3.451$, df=1, p=0.063 |
| Diabetes mellitus | 33(9.8) | 27(8.3) | 60(9.0) | $\chi^2=0.147$, df=1, p=0.701 |

Dr Saima Nazir "Utilisation of Health Care Facilities by Geriatric Population: A Study from Rural India." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 4, 2018, pp 71-73.