A STUDY ON UTILIZATION OF HEALTH CARE FACILITIES AMONG RURAL ELDERLY IN KANYAKUMARI DISTRICT

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ABSTRACT

The study explains about the "Utilization of Health Care Facilities among Rural Elderly in Kanyakumari District". Rapidly progressing population ageing in India translates into more chronic diseases and healthcare expenditure among the elderly. But inadequate geriatric centred services in rural areas may hinder the health seeking behavior among rural elderly. Hence, this study was done to assess utilization of healthcare facilities by elderly in rural Kanyakumari and to identify factors associated with it. Elderly people above 60 years of age were selected from rural Kanyakumari by multi-stage random sampling. 250 subjects for the cross-sectional study were finalized after excluding debilitated elderly. Mean age of the study group was 70.12 years. 60% of elderly were currently married while 70.8% elderly were unemployed. More than half of the elderly population (57.6%) claimed to avoid healthcare facilities in times of need, citing cost of hospital care (27.6%) and perceived triviality of illness as the most common reasons. More than 75% elderly used out of pocket expenditure to meet healthcare expenses. Most of them (96%) did not have health insurance. Elderly people with education beyond primary school level and belonging to upper socioeconomic status had a statistically significant association with better healthcare utilization. Perception of disease as an age-related phenomenon has to be negated in order to improve healthcare utilization. Also, the importance of healthcare in improving functionality has to be conveyed to the community. Affordable and universal healthcare suited to geriatric needs have to be made available to the rural elderly population.

Key words: Factors, Healthcare Facilities, Rural Elderly, Utilization

INTRODUCTION

Utilization of healthcare facilities is determined by the need for care, by whether people know that they need care, by whether they want to obtain care and by whether care can be accessed. Quality is a construct separate from access and is related to the achievement of favorable outcomes associated with utilization, not to whether utilization of healthcare occurs at all or to difficulties in obtaining care. In theory, utilization of healthcare should correlate highly with the need, however defined, for services. India is experiencing demographic transition at such alarming rates that it will soon be home to the world's second-largest population of elderly people above 60 years. While the increased life expectancy is indeed a public health success, this ageing of the population poses a challenge to the healthcare systems, questioning their ability to deal with felt needs of the elderly population. The ageing process in itself results in an increased susceptibility to diseases, co-morbidity, poly pharmacy, loss of personal autonomy and high rates of disability. In a developing country like India, this means the elderly are exposed to the double burden of communicable and non-communicable diseases. Chronic diseases and disability often lead to increased use of healthcare facilities and this in turn leads to increased healthcare expenditure. Moreover, latest innovations in medical technology and expensive medicines exert a greater influence on healthcare costs than population ageing itself. The exorbitant costs of healthcare services often result in impoverishment of the family rather than improvement in the health of the elderly. Daily functionality also follows a strong socio-economic gradient in India, revealing that the wealthy elderly have access to better healthcare facilities than the impoverished elderly.

Elderly people living in rural areas face a higher disadvantage of fewer geriatric care center health services. The morbidity profile and perception of health problems among rural elderly are very different from the urban elderly population. Lower socio-economic status and lower financial stability may also hinder health seeking behavior in rural elderly, unlike their urban counterparts. Such constraints are often magnified in rural elderly and the elderly women who are more likely to be unemployed or living alone. The new era of Sustainable Development Goals aims to bring about Universal health coverage, 'leaving no one behind'. The goals of 'No poverty', 'Good Health', 'Gender Equality', and 'Reduced Inequalities' are aimed at people of all ages, especially the rural elderly who are more vulnerable to these inequalities. In order to address the felt needs of the elderly and to improve healthcare service delivery in rural areas

disaggregated information regarding the utilization of available services by the elderly and the potential factors that may influence utilization patterns need to be obtained. Hence, this study was undertaken to assess the utilization of healthcare facilities by the elderly in the rural areas of Kanyakumari and to identify factors that are associated with healthcare utilization.

OBJECTIVE OF THE STUDY

1. To assess the socio economic status in rural elderly people.
2. To understand the reasons affecting utilization of healthcare facilities
3. To analyze the factors associated with utilization of healthcare facilities
4. To suggest ways and means to improve the public healthcare sector in rural areas.

METHODOLOGY OF THE STUDY

Multi-stage random sampling method use in the study, Agasteeswaram block was selected out of nine blocks in Kanyakumari district and three PHCs were selected. Elderly people more than 60 years of age and who were permanent residents were included in the study.

STATISTICAL METHODS USE OF THE STUDY

Descriptive statistics, Chi square test, Fisher's exact test and binomial logistic regression were used for data analysis with a predetermined statistical significance level of 5%.

SOCIO DEMOGRAPHIC PROFILE OF THE STUDY

The age distribution of the study group ranges from 60 to 90 years. Mean age of the study group was 70.12 years (95% CI 69.3, 70.9). About 130 out of the total 250 study population were women comprising 52%, while men formed 48% (120) of the population. Across the 250 elderly subjects, Hindus formed the majority at 56.8% (142), followed by Christians at 33.6% (84) and Muslims at 9.6% (24).

Among the 250 elderly people, 60% (150) of them were currently married (95% CI 54, 66%), while 36.8% (92) of them lost their spouses to death. One person was divorced and 1.2% (3) of them was separated from their spouses. Another 1.6% (4) of them was never married. About 68% (170) of the elderly have completed their education up to high school level (95% CI 62.2, 73.8%), while 14.4% (36) elderly were illiterate. 13.6% (34) of the elderly have a graduate degree. Of the 36 illiterate elderly, 66.7% were women.

About one fourth of the elderly were engaged in skilled and unskilled occupations previously, through the main course of life or before retiring (25.6% and 25.2%, respectively). About 34% elderly were unemployed throughout life. However, currently around 70.8% elderly

were unemployed. Among the elderly who were still working, majority were doing unskilled labour (15.6%). Among the female elderly population, 63.8% women were unemployed previously while 69.2% were currently unemployed.

More than half of the elderly people belonged to upper lower socio economic status (54%) while 30.4% elderly belonged to lower middle class. Only a small proportion of elderly belonged to Upper middle class and lower class at 9.6% and 5.6% respectively. Most of the elderly people lived in extended families (44%). About a quarter of elderly each claimed pension, remittances from children and jobs as a source of income while 18% elderly had no income at all. The baseline characteristics of the study population are described in detail in below Table 1.

Table1 Background characteristics of study participants

Characteristics	Male (n=120)	Female (n=130)	Total (N=250)
Marital status			
Currently married	93 (77.5)	57(43.8)	150 (60)
Widowed	23 (19.2)	69(53)	92 (36.8)
Separated/divorced	1 (0.8)	3(2.3)	4 (1.6)
Never married	3 (2.5)	1(0.7)	4 (1.6)
Type of family			
Nuclear	61 (50.8)	42(32.3)	103 (41.2)
Extended	44 (36.7)	66(50.7)	110 (44)
Joint	2 (1.7)	4(3)	6 (2.4)
Single member family	13 (10.8)	18(13.8)	31 (12.4)
Educational status			
Illiterate	12 (10)	24(18.4)	36 (14.4)
Primary school	39 (32.5)	54(41.5)	93 (37.2)
High school & Diploma	45 (37.5)	42(32.3)	87 (34.8)
Graduate & above	24 (20)	10(7.6)	34 (13.6)
Previous occupation			
Professional	14 (11.7)	4(3)	18 (7.2)
Clerical	14 (11.7)	6(4.6)	20(8)
Skilled	21 (17.5)	7(5.3)	63 (25.2)

Unskilled	34 (28.3)	30(23)	64 (25.6)
Unemployed	2 (1.7)	83(63.8)	85 (34)
Current occupation			
Semi Professional	5 (4.2)	1(0.7)	6(2.4)
Clerical	0	4(3)	4(1.6)
Skilled	1 (0.8)	5(3.8)	6(2.4)
Semi skilled	6 (5)	13(10)	19(7.6)
Unskilled	22 (18.3)	17(13)	39(15.6)
Unemployed	5 (4.2)	90(69.2)	177(70.8)
Source of income			
Pension	33 (27.5)	37(28.4)	70 (28)
Remittance by children	25 (20.8)	42(32.3)	67 (26.8)
Jobs	54 (45)	8(6.1)	62 (24.8)
Other sources	5 (4.2)	1(0.7)	6 (2.4)
No income	3 (2.5)	42(32.3)	45 (18)
Socio-economic status			
Upper middle class	13(10.8)	12(9.2)	24(9.6)
Lower middle class	37(30.8)	39(30)	76(30.4)
Upper lower class	67(55.8)	68(52.3)	135(54)
Lower class	3(2.5)	11(8.4)	14(5.6)

*Percentages in parentheses

HEALTHCARE UTILIZATION AMONG ELDERLY

More than half of the elderly population interviewed is 57.6% (95% CI 51.5, 63.7%) claimed to avoid going to or getting admitted in healthcare facilities in times of need. About 42.4% of the elderly stated that they would utilize healthcare facilities in case of need. The most commonly cited reasons for not utilizing health facilities are the cost of hospital care (27.6%) and that the elderly feel their illness is not important enough (26.4%). The other reasons cited were that their children did not allow them to get admitted in hospitals, they do not believe in allopathic drugs, etc and account for 0.8% of responses. The reasons cited by the elderly are as listed below in Table 2.

Table 2 Reasons affecting utilization of Healthcare Facilities (HCF) among elderly

Reasons	Frequency	Percent
Cost of Hospital care	69	27.6
Travel to HCF	11	4.4
No bystanders	25	10
Feel Illness not important	66	26.4
Do not want to be a burden	45	18
Other factors	2	0.8

*Multiple responses per subject

About 42% of the elderly population claimed they are on regular medication always (95% CI 35.9, 48.1%), while 38.4% elderly said they take regular medication sometimes as opposed to 17.2% who rarely take and 2.4% who never take any regular medicines. Only less than half of the elderly (46.8%) claimed compliance with regular medications. The remaining 53.2% elderly (95% CI 47.1, 59.3%) cited multiple reasons as listed below in Table 3, for not complying with medical treatment regimes. The most commonly cited reasons for avoiding medicines were that the elderly felt that their illness was not important enough (25.4%) and the high cost of medicines (21.8%).

Table 3 Reasons cited by elderly for not complying with medical treatment

Factors	Frequency	Percent
Forget about medicines	37	14.9
Feel Illness not important	63	25.4
No time for medicines	3	1.2
High cost	54	21.8
Side effects	7	2.8
Others	2	0.8

* Multiple responses per subject

The most common way of meeting the healthcare expenses among the elderly was through Out of Pocket expenditure in the case of 75.6% of the elderly (95% CI 70.3, 80.9%). Other ways of meeting medical expense included private health insurance (4.4%), state insurance (0.4%) or loans from others, as in 34.8% of the elderly. Almost all of the elderly subjects

interviewed (96%) did not have any health insurance policy or scheme in their name. Only 4% were enrolled in health insurance schemes. Among the 87 elderly persons with debt, personal expenses were cited as the most common reason for debt in 57.5% elderly. This was followed by medical expenses in almost one third of elderly (33.3%), and other reasons like loans taken for farming, businesses, etc in 9.2% of the elderly.

FACTORS ASSOCIATED WITH UTILIZATION OF HEALTHCARE FACILITIES (HCF)

Being younger than 75 years of age, education above primary school, being married, being currently unemployed and belonging to an upper socioeconomic status were the factors found to be significantly associated with better utilization of Healthcare Facilities (HCF) among the elderly on bivariate analysis. Gender, occupation before retirement or family type did not have a statistically significant association with better healthcare utilization. The statistically significant factors are described in detail below in Table 4.

Table 4 Factors associated with HCF utilization among the elderly

Variables		Utilize HCF N (%)	Avoid utilize HCF N (%)	p value	OR (+95% CI)
Age	<75 yrs	91(45.5)	109(54.5)	.047*	2(1.01,3.8)
	>75yrs	15(30)	35(70)		
Education	Above primary	67(55.4)	54(44.6)	.000*	2.8(1.7, 4.8)
	Primary	39(30.2)	90(69.8)		
Marital status	Married	75(50)	75(50)	.003*	2.2(1.3, 3.8)
	Single	31(31)	69(69)		
Presently employed	No	82(42.6)	94(53.4)	.039*	1.8(1.03, 3.2)
	Yes	24(32.4)	50(67.6)		
SES	Upper	56(55.4)	45(44.6)	.001*	2.5(1.5, 4.1)
	Lower	50(33.6)	99(66.4)		

*p<0.05 is considered to be statistically significant

Binomial logistic regression models were built for proper utilization of HCF against the associated independent variables from bivariate analysis. The final regression model for factors with a statistically significant association with utilizing healthcare included education above primary school level (p=0.02) and upper socioeconomic status (p=0.01). Factors like marital status, current unemployment and age less than 75 years were removed from regression model as they were not statistically significant. The elderly belonging to upper socio economic status were 2.2 times more likely to utilize healthcare than those belonging to lower socio economic status (OR 2.2, 95% CI 1.2, 4). Elderly people educated beyond primary school level were two times more likely to utilize healthcare properly than elderly educated up to primary level alone (OR 2, 95% CI 1.1, 3.5).

DISCUSSIONS

- In the present study 57.2% of elderly subjects belonged to the age group of 60- 69 years, 34% were aged from 70 to 80 years and 8.8% were above 80 years of age. Goel et al. in Meerut found 47.2%, 37.8% and 15% of elderly in young elderly, old elderly and the oldest elderly groups, respectively. Lena et al. had a higher proportion of elderly in the 60-69 age groups (72.3%) with a very small fraction of oldest elderly (2.8%) in their study in Udupi.
- Out of the 250 elderly subjects studied, 70.8% of the elderly were currently unemployed, which is higher than NSSO findings of 64% and other Government of India figures of 52.9% unemployment among rural elderly. About 29.2% of the elderly in our study were working currently of whom 54.1% were women and 45.9% were men. The proportion of elderly who were unemployed for most part of their life in our study was 34% while 66% elderly had worked in some sort of employment for most part of their life. The ageing report found a similar percentage of 64.4% elderly who had ever worked at all in their life.
- Extended family was the most common type of family in our study at 44% with nuclear families also predominant at 41.2%. However, Sharma et al. found 89.5% of elderly belonging to joint families. This may be due to the differences in the definition used for joint and extended families in our study.
- As per our study, more than half of the elderly population (58%) in rural areas of Kanyakumari district avoid utilization of healthcare facilities due to the high cost of

healthcare (27.6%) and because they perceive their illness to be trivial (26.4%). Similar patterns of reasons for avoiding healthcare facilities were seen in other studies though healthcare utilization was much better among their elderly. In a study by Sharma et al, 84% of the rural and urban elderly in Shimla were suffering from at least one medical problem and two thirds of the elderly (65.8%) were seeking treatment for their problems. This projects a higher utilization of healthcare facilities among the Shimla elderly but area of residence may be a potential confounding factor. Elderly living in urban areas of Shimla were significantly more likely to access health services than the rural elderly, because they lived closer to these services. Among the reasons cited by Shimla elderly for not seeking treatment, most common reason reported was that 'morbidities were part of old age', followed by perceived distance to the healthcare facilities. This is similar to the elderly in our study not utilizing healthcare because they feel their illness is not important.

- Another study by Nipun et al in Bareilly, Uttar Pradesh also found a higher health seeking behaviour (65%) among elderly. Among the reasons cited by the elderly in Bareilly for not seeking treatment, the most common was affordability, followed by long waiting time and long distances. In our study also, travel to healthcare facilities was cited as a reason for avoiding hospitals, though by fewer elderly. Health seeking behavior of rural elderly in Mangalore was much better with 97.4% elderly seeking treatment for their health problems but even less aged people (72%) visiting a health facility for checkups for their chronic conditions.
- In the context of current trends of increasing dependence on investigations, unregulated cost of medicines and profit based healthcare provision; an exorbitant increase in healthcare expenditure is to be expected. This may have the disastrous effect of putting affordable healthcare out of reach of elderly population. Improved coverage of health insurance schemes and better geriatric or palliative care facilities in rural areas are thus the need of the hour in improving cover and reach of healthcare facilities. Involving community members or local self help groups in providing assistance to households with elderly people will reduce the burden on the family and improve healthcare utilization. Organizing mobile health camps, providing home delivery of regular medications and subsidizing healthcare for the elderly will also improve medical compliance and

treatment outcome in elderly with chronic diseases. Special attention has to be paid to those elderly who belong to lower socio economic status and those with only primary school education as they have been identified as being more likely to avoid healthcare utilization.

CONCLUSIONS

Healthy ageing is the emerging challenge faced by health system and policy makers in India. Seeking healthcare services earlier will help to reduce morbidity and mortality among the elderly. The importance of healthcare in improving functionality has to be conveyed to the older persons and their family members who are the primary caregivers. Affordable and universal healthcare suited to geriatric needs has to be made available to the rural elderly population. Health insurance coverage among the elderly was very poor. Financial protection through better insurance coverage and provision of good quality public health facilities will go a long way in improving healthcare utilization by the rural elderly.

IMPLICATIONS

This study has identified that more than half the rural elderly population avoid utilizing healthcare facilities in times of need claiming high cost and perception that illness is part of old age. Perception of disease as an age-related phenomenon has to be negated. Factors like lack of insurance coverage, low educational status and low income have been identified as factors having an impact on healthcare utilization. This evidence will guide policy makers in drafting public health reforms that will ensure equitable and affordable healthcare to the rural elderly population of India.

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