

The Health seeking behaviour of Elderly Population in a poor-urban community of Karachi, Pakistan

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Abstract

Objectives: To presents socio-demographic characteristics and health seeking behaviour of elderly and to determine frequency of Diabetes Mellitus and Hypertension in elderly population of a poor peri-urban community in Karachi, Pakistan.

Methods: A cross-sectional study was conducted, targeting population aged 65 or above. A total of 438 respondents were interviewed after taking informed consent, between November 2005 and December 2005. Frequencies and Chi square values were calculated for different variables using SPSS 13.0.

Results: Total population surveyed comprised of 438 elderly, 158 (36%) women and 280 (63.9%) men. Mean age for the population was 71.44 ± 7.74 . A total of 238 (54.3%) elderly were found to be economically active. More than half (n=269, 61.4%) of the elderly were found to be illiterate. Only 72 (16.4%) of the elderly population were Diabetic and 132 (30.1%) were Hypertensive. Common symptoms that prompted elderly of Azam Basti to seek health care were fever (61.2%), generalized body aches (43.4%) and cough (40.4%). Over half of the (n=269, 61.4%) responders reported factors which deterred them from seeking health care, out of which 62% reported financial constraint as the commonest factor. Deterrence from seeking health care was associated with illiteracy (p=0.001) and living alone (p=0.06).

Conclusion: The elderly population of this peri-urban community has financial constraints in seeking health care. Hypertension was found to be more prevalent among women as compared to men, ratio being 1:2. Less number of people knew they were diabetics; this might be attributed to ignorance and non-availability of investigations and screening (JPMA 59:89; 2009).

Introduction

World population ageing is enduring, the proportion of older persons has been rising steadily, from 8 per cent in 1950 to 11 per cent in 2007, with an expected rise to reach 22 percent in 2050.¹ Globally the population of older persons is growing at a rate of 2.6 per cent per year, considerably faster than the population as a whole which is increasing at 1.1 percent annually.¹ Underdeveloped nations are aging faster; Asia in particular is facing accelerated aging. It is estimated that by 2040, the number of people in Asia aged above 60 years will surpass number of children.² Therefore implications of population aging in developing nations is enormous and permeates every aspect of human development. Census of Pakistan 1998 estimated that about

3.5% of Pakistani population was aged 65 years and above.³ Pakistan being a developing country is currently facing demographic transition and increasing life expectancy. It is thus likely to face-increased burden of chronic non-communicable diseases like Diabetes Mellitus and Hypertension. National health survey of Pakistan 1990-1994 revealed that one in five people aged 15 or older in the country had hypertension.⁴ Several investigations have emphasized hypertension and diabetes as major public health problems in developing nations,^{5,6} but few have focused exclusively on the elderly population.

Therefore, the aim of this study was to present socio-demographic characteristics and health seeking behaviour of elderly and to determine frequency of Diabetes Mellitus

and Hypertension in elderly population of a poor peri-urban community in Karachi, Pakistan.

Subjects and Methods

A cross-sectional house to house survey was conducted, targeting the geriatric population of a lower socio-economic class of Karachi, the largest city in Pakistan. A team of eight medical students from fourth year of Aga Khan University voluntarily participated in the collection of data after being trained to fill survey questionnaire. The study was conducted at Azam Basti, because of its peri-urban location and easy accessibility. Every third house in a lane was approached to identify an individual of 65 year or older. The survey was completed in 6 weeks, between November and December 2005. A total of 438 respondents were interviewed after taking written informed consent. Sample size was calculated using Epi Info Version 6, based on previous reported prevalence of Diabetes Mellitus and Hypertension in elderly population.

The survey questionnaire gleaned information on variables like age, gender, occupation, income, educational level, chronic illnesses, health seeking symptoms, factors deterring them from seeking health care. Individuals who gave history of high blood pressure, diagnosis of hypertension by health care provider and use of anti-hypertensive medications were recorded as hypertensive. Individuals who gave history of diagnosis of diabetes by health care provider and were using hypoglycaemic agents were recorded to be diabetics.

Data entry and analysis was done on SPSS 13.0. Frequencies were calculated for the variables and chi-square test was used to determine association between the different variables.

Results

Total population surveyed comprised of 438 elderly, 158 (36%) women and 280 (63.9%) men with a mean age of 71.44 ± 7.74 years. Almost one third ($n=150$, 34.2%) elderly reported monthly income of less than Rs5000, 143 (32.6%) reported it to be in the range of Rs5000 to Rs10,000 and 145 (33.1%) more than Rs10,000. Socio-demographic data (Table I) shows that 238 (54.3%) responders were economically active. 269 (61.4%) elderly were illiterate and did not have any formal education. More women (75.9%) were not educated as compared to men (53.2%) ($p<0.01$). Majority ($n=404$, 92.2%) were living with their family while only 34 (7.8%) were living alone. The frequency of Diabetes and Hypertension was (16.4%) and (30.1%) respectively as shown in Table 1. Common symptoms that prompted the elderly population of Azam Basti to seek healthcare (Table II) were fever (61.2%), generalized body aches (43.4%) and cough (40.4%). More than half ($n=269$,

Table I: Socio-demographic variables and disease frequency.

| | Men n=280 | Women n=158 | Total n=438 |
|-------------------|--------------|----------------|----------------|
| Mean Age (years) | 71.44±7.74 | 69.67±7.37 | 70.80±7.65 |
| Livelihood | | | |
| Earning | 225 (80.3%) | 13 (8.2%) | 238 (54.3%) |
| Non-earning | 55 (19.6%) | 145 (91.8%) | 200 (45.7%) |
| Education | | | |
| Illiterate | 149 (53.2%) | 120 (75.9%) | 269 (61.4%) |
| Primary education | 61 (21.8%) | 23 (14.6%) | 84 (19.2%) |
| Secondary | 39 (13.9%) | 10 (6.3%) | 49 (11.2%) |
| Higher secondary | 8 (2.9%) | 3 (1.9%) | 11 (2.5%) |
| Graduate | 23 (8.2%) | 2 (1.3%) | 25 (5.7%) |
| Living status | | | |
| Alone | 31 (11.1%) | 3 (1.9%) | 34 (7.8%) |
| With family | 249 (88.9%) | 155 (98.1%) | 404 (92.2%) |
| Disease frequency | | | |
| Diabetes Mellitus | 42 (15.0%) | 30 (19%) | 72 (16.4%) |
| Hypertension | 61 (21.8%) | 71 (44.9%) | 132 (30.1%) |

Table II: Common symptoms that prompted elderly to seek healthcare.

| Symptoms | Total n=438 | Males n=280 | Females n=158 |
|-----------------------------|----------------|----------------|------------------|
| Fever | 268 (61.2%) | 183 (65.4%) | 85 (53.8%) |
| Generalized body aches | 190 (43.4%) | 113 (40.4%) | 77 (48.7%) |
| Cough | 177 (40.4%) | 130 (46.4%) | 47 (29.7%) |
| Gastrointestinal complaints | 172 (39.3%) | 114 (40.7%) | 58 (36.7%) |
| Impaired vision | 117 (26.7%) | 95 (33.9%) | 22 (13.9%) |
| Shortness of breath | 103 (23.5%) | 78 (27.9%) | 25 (15.8%) |
| Dizziness | 96 (21.9%) | 68 (24.3%) | 28 (17.7%) |
| Chest pain | 84 (19.2%) | 64 (22.9%) | 20 (12.7%) |
| Difficulty in hearing | 55 (12.6%) | 46 (16.4%) | 9 (5.7%) |

Table III: Common factors that deterred elderly population from seeking health care.

| Deterring | Frequency | % |
|-----------------------------|-----------|--------|
| Finance | 167 | (62) |
| Self lack of care | 63 | (23.4) |
| Lack of accessibility | 16 | (5.9) |
| Lack of family support | 8 | (2.9) |
| Practicing quacks | 7 | (2.6) |
| Being female | 4 | (1.4) |
| Does not like to take drugs | 4 | (1.4) |

61.4%) reported factors deterring them from seeking health care. Deterrence from seeking health care was associated with illiteracy ($p=0.001$) and living alone ($p = 0.06$). When asked the single most important deterring factor (Table III) 62% reported financial constraint as the commonest.

Discussion

An increasing proportion of population in the western world can expect to spend 10 to 20 years after retirement from paid employment in reasonable health and

comparative affluence⁷ which is certainly not the same in underdeveloped nations. In Azam basti, 54.3% of elderly were earning their own livelihood, which is comparable to a previous study done in peri-urban community of Karachi showing 56% of elderly had some source of regular income.⁸ In less developed countries, 39% men and 15% women aged 65 years and more are economically active.¹ A study done in Kerala, India, where population is facing demographic transition, showed that around 27.2% of the elderly men and 11.6% of the elderly women were economically active.⁹ In comparison to this, the present study sample showed 80.3% of elderly men and only 8.2% of elderly women were economically active.

Majority of elderly population of Azam Basti was living with family members, which is similar to a previous study done in peri-urban Karachi,⁸ indicating that many elderly contribute towards income generation of a household even in old age. Most of elderly females in the studied sample were illiterate i.e. they did not get any formal schooling as compared to men. Illiteracy might be one of the reasons for women to lag behind in income generation and become financially dependent on families.

In the current study, the overall prevalence of self-reported Diabetes Mellitus in Azam Basti was found to be 16.4%. Diabetes Mellitus is slightly higher in women (19%) than in men (15%). Previous study has reported prevalence of self-reported diabetes mellitus in elderly population of peri-urban community of Karachi to be 11.1% in the year 2000.⁸ The prevalence of diagnosed diabetes based on data from 1999-2002 United States national health and nutrition examination survey was 15.3% among adults aged 65 and above.¹⁰ which is comparable to this study findings.

The prevalence of Hypertension in the sample was 30.1%, with a male to female ratio of 1:2. One explanation for increased prevalence in women might be the increased frequency of screening for hypertension in Pakistani women than in men, because women have more opportunity to get blood pressure checked and screened during pregnancy and child bearing age.¹¹ It has also been shown that women in Pakistan have greater risk for cardio-vascular diseases as compared to men and this difference increases in magnitude with advancing age.¹²

One study conducted in Mmankodi village, Botswana reported that musculoskeletal problems were very frequent among elderly and accounted for almost half of the self reported symptoms.¹³ The same tendency is seen in studies from other African countries, indicating it to be a common problem among elderly people of Africa. This study also found generalized body aches and pain (43.4%) to be the second most common among the symptoms for which elderly in Azam basti would seek health care, the

most common being fever (61.2%).

The major deterring factor which provided hindrance in seeking health care was financial constraint, as is shown that for health expenditure in Pakistan, 76% goes out of pocket.¹⁴ This makes elderly women, the most vulnerable group as they have less financial autonomy as compared to elderly men. Lack of self care was the second most common deterring factor, this might reflect that in face of limited financial resources and expensive health care elderly give health of younger in family a priority and do not seek health for themselves. Surprisingly being an elderly female was not a prominent deterring factor and this contradicts usual patterns in Pakistan, where men play a paramount role in determining the health needs of a woman.

Conclusion

In conclusion the elderly residents of Azam Basti are economically active and unlike the western population of the similar age bracket do not have perks of a retirement. Elderly women, mostly illiterate and economically deprived, are the most dependent and thus vulnerable population. The elderly population of this peri-urban community has financial constraints in seeking health care. Hypertension was found to be more prevalent among women as compared to men, ratio being 1:2. Less number of people knew they were diabetics; this might be attributed to ignorance and non-availability of investigations and screening.

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