Geriatric Services at a Community Health Centre- A Cross Sectional Study

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Abstract: The increase in the population size of aged above 60 years is great concern in the world since more people are living for long years and increase in the prevalence of the non-communicable diseases in this age group causing burden to the nation. So with objective of assessment of availability of the existing geriatric health services and felt needs of the geriatric population at community health center this study was undertaken. This was a cross sectional study carried out in Community Health Centre- Pinarayi, Kannur between 1st August 2015 to 31st August 2015. Those who aged 60 years and above were included in the study, sampling method used was convenient sampling. The data collected by interview method using pre-tested questionnaire. In results a total of 160 geriatric population was interviewed, 77 (48.1%) were males and 83 (51.9%) were females. The mean age was 70.79 (+6.67) years. The commonest morbidity reported were hypertension (53.8%), diabetes mellitus (46.3%), dyslipidemia (35%), arthritis (33.1%) and known coronary artery disease was 12%. The study shows that conclusion there was increasing burden of Non-communicable disease morbidity. The present study shown that there is a need to strengthen the existing geriatric health services at community level at the earliest in view of rapidly increasing greying population and high rate of non-communicable diseases among them to decrease the burden on themselves and also on health care.

Keywords: Geriatric, Health services, Community Health Centre, Old age people.

INTRODUCTION:
Geriatrics is the branch of the health care dealing with the problems of AGING and diseases of the AGE, that include persons above the age of 60 years in India and above 65 according to WHO [1]. Gerontology is the study of the aging process in all its aspects, social as well as biological [1].

The unprecedented increase in human longevity in 20th century has resulted in the phenomenon of population ageing all over the world. Countries with large population such as India have large number of people now aged 60 years or more. The population over the age of 60 years has tripl ed in last 50 years in India and will relentlessly increase in near future [2]. According to 2011 census, 8.7% of the total Indian population is above the age of sixty years; of them 7.7% are males and 8.4% are females. The projections for next four censuses till the year 2051 are: 133.32 million (2021), 178.59 (2031), 236.01 million (2041) and 300.96 million (2051). Comparing to all other Indian states Kerala has more number of elder populations [3, 4].

Along with rising numbers, the expectancy of life at birth is also consistently increasing indicating that a large number of people are likely to live longer than before. Non-communicable diseases requiring large quantum of health and social care are extremely common in old age, irrespective of socio-economic status. Disabilities resulting from these non-communicable diseases are very frequent which affect functionality compromising the ability to pursue the activities of daily living [3].

Presently elderly are provided health care by the general health care delivery system in the country. Elderly suffer from multiple and chronic diseases for which they need long term and constant care. Their health problems also need specialist care from various disciplines e.g. ophthalmology, orthopedics, psychiatry, cardiovascular, dental, urology to name a few. Thus a model of care providing comprehensive health services to elderly at all levels of health care delivery is imperative to meet the growing health need of elderly.
Moreover, the immobile and disabled elderly need care close to their homes [3].

The treatment/management of these chronic diseases is also costly, especially for cancer treatment, joint replacements, heart surgery, neurosurgical procedures etc thereby making it out of bound for elderly whose income decreases post retirement and more so for the elderly in the unorganized sector and dependent elderly women.

The National Sample Surveys of 1986-87, 1995-1996, and 2004 have shown that

- The burden of morbidity in old age is enormous.
- Non-communicable diseases (life style related & degenerative) are extremely common in older people irrespective of socio-economic status.
- Disabilities are very frequent which affect the functionality in old age compromising the ability to pursue the activities of daily living.

As per the NPOP (National Programme for Older Population), Ministry of Health & Family Welfare was entrusted with the following agenda to attend to the health care needs of the elderly:

- Establishing Geriatric ward for elderly patients at all district level hospitals
- Expansion of treatment facilities for chronic, terminal and degenerative diseases
- Providing Improved medical facilities to those not able to attend medical centers
- Strengthening of CHCs / PHCs / Mobile Clinics
- Inclusion of geriatric care in the syllabus of medical courses including Nursing
- Reservation of beds for elderly in public hospitals
- Training of Geriatric Care Givers
- Setting up research institutes for chronic elderly diseases such as Dementia & Alzheimer [3].

So studying the services available to the geriatric population in the government set up and to estimate the percentage of people availing the facility will help us in understanding the actual needs of the services to them and improvement of existing services based on their needs.

**OBJECTIVES:**
1. To study the health services available to the geriatric population at Community Health Centre (Government health set up)
2. To study the needs of the geriatric population in improving the existing services at Community Health Centre (Government health set up).

**MATERIALS AND METHODS:**
This was a cross sectional study carried out in Community Health Centre - Pinarayi, Kannur. The study populations were the people attending the outpatient clinic at CHC- Pinarayi. Those who aged 60 years and above were included in the study after taking the verbal consent from them. The study was done over a period of one month (1st August 2015 to 31st August 2015). A total of 160 geriatric patients were participated in the study and the sampling method used was convenient sampling. The data collected by interview method using pre-tested questionnaire which included socio-demographic details, lifestyle diseases, information about utilization of health services provided and their suggestions to improve these services. Data was entered onto a computerized Excel (Microsoft Excel 2007) spread sheet and analyzed using Epiinfo version 3.4.1.

**RESULTS:**
A total of 160 people aged above 60 years were involved in the study, out of which 77 (48.1%) were males and 83 (51.9%) were females. All the subjects were from the same rural area. The mean age of the study population was 70.79 (+6.67) years. 66 (41.2%) persons were in the age group between 60 to 69 years, 71 (44.4%) between 70 to 79 years, 23 (14.4%) were above 80 years old.

Among the study subjects 77% of them were unemployed, remaining 33% include, in order of decreasing frequency as retired government employees, farmers, business man, 107 (66.9%) of them comes under BPL category and 53 (33.1%) had income above Rs.5000 per month. Frequency of non-communicable diseases and their follow up statistics were presented in Table 1.

**Table 1:** Frequency of Non Communicable Diseases & their Follow-up statistics

<table>
<thead>
<tr>
<th>Morbidity</th>
<th>Frequency (N=160)</th>
<th>Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>86 (53.8%)</td>
<td>N=86</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>74 (46.3%)</td>
<td>N=74</td>
</tr>
<tr>
<td>Dyslipidemia</td>
<td>56 (35.0%)</td>
<td>N=56</td>
</tr>
<tr>
<td>Arthritis</td>
<td>53 (33.1%)</td>
<td>N=53</td>
</tr>
<tr>
<td>Cataract</td>
<td>51 (31.9%)</td>
<td>N=51</td>
</tr>
<tr>
<td>Asthma</td>
<td>24 (15.0%)</td>
<td>N=24</td>
</tr>
<tr>
<td>Coronary Artery Disease</td>
<td>19 (11.9%)</td>
<td>N=19</td>
</tr>
<tr>
<td>Stroke</td>
<td>04 (2.5%)</td>
<td>N=04</td>
</tr>
</tbody>
</table>

**The burden of morbidity in old age is enormous.**

**Non-communicable diseases (life style related & degenerative) are extremely common in older people irrespective of socio-economic status.**

**Disabilities are very frequent which affect the functionality in old age compromising the ability to pursue the activities of daily living.**

As per the NPOP (National Programme for Older Population), Ministry of Health & Family Welfare was entrusted with the following agenda to attend to the health care needs of the elderly:

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So studying the services available to the geriatric population in the government set up and to estimate the percentage of people availing the facility will help us in understanding the actual needs of the services to them and improvement of existing services based on their needs.
Out of the 160 subjects, 87% were taking regular medication, of which 83.8% were depending on CHC & 13.2% from other clinics, they come for follow-up on an average once in 2 months for life-style diseases (Diabetes, Hypertension, Dyslipidemia, Stroke, CAD, Asthma) 6 monthly once for senile diseases (Cataract, Arthritis). The rest 13% were not on regular follow-up and the reasons they quote were 11.2% as ignorance and 6.88% as helplessness.

About 5.6% (9) study subjects gave history of cancer such as carcinoma of thyroid, breast, lung, stomach & prostrate for which they underwent various treatment modalities like surgery and chemotherapy.

93.8% of the study population was availing free medication from this government setup while 6.2% were not. About 62.5% had received home visit services from CHC, out of which 46.9% were counseled regarding general health and care of bedridden patients.

There were no provisions for special appliances like wheel chair or waterbed or any transportation facility while referring to higher centre. Various Social security schemes of the government are being availed by 57 persons i.e. 35.6%. Pension schemes and the pension amount are tabulated in Table 2.

Table 2: Social Security Schemes and the Amount of the schemes availed

<table>
<thead>
<tr>
<th>Social Security Scheme</th>
<th>Basic Payment (Rs Per Month)</th>
<th>No. Of Persons Availing</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Age Pension</td>
<td>500-1000</td>
<td>12</td>
<td>7.5%</td>
</tr>
<tr>
<td>Widow Pension</td>
<td>500 – 1000</td>
<td>16</td>
<td>10.0%</td>
</tr>
<tr>
<td>Karshakasree Pension</td>
<td>1000 - 2000</td>
<td>3</td>
<td>1.9%</td>
</tr>
<tr>
<td>Govt. Servicemen Pension</td>
<td>&gt;3500</td>
<td>16</td>
<td>10.0%</td>
</tr>
<tr>
<td>Ex-Servicemen Pension</td>
<td>&gt;5000</td>
<td>10</td>
<td>6.3%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>47</td>
<td></td>
</tr>
</tbody>
</table>

Fig-1: Financial Dependency of the Study Population (N= 160)

Fig-2: Follow-Up Status
From this survey 74.4% have remarked that they were satisfied with the geriatric services provided at this rural CHC, but there were suggestions also to improve the existing facilities and they are as follows

- Provision for more range of free medicines (48.1%)
- Special geriatric OP days (22.5%)
- Specialty OP clinics (21.3%)
- 24 hr improved laboratory & pharmacy facilities (10.0%)
- Provision for transportation facility (9.3%)
- More number of doctors & staff (6.3%)
- Palliative care centre expansion (0.05%)
- No suggestions (8.1%)

DISCUSSION:

According to the study conducted by Anil JP et al.; at rural Tamil Nadu the commonest morbidity was arthritis and cataract (43.4% and 32.1% respectively), diabetes and cardiac illness was found to be 8.1% and 8.4% [5]. In our study, the commonest morbidity reported were hypertension (53.8%), diabetes mellitus (46.3%), dyslipidemia (35%), arthritis (33.1%) and known coronary artery disease was 12%. This shows there is increasing burden of the Non communicable diseases in this study population which is increasing the burden on the existing health care facilities.

Most of the study population (94%) were availing the services from the CHC and 75% were satisfied with the services available. Only 29% of the study population were availing any of the social security schemes. 61% were completely dependent on their children for the financial needs. This was in contrast to the study by Anil JP et al.; at rural Tamil Nadu where 28.3% were dependent on their children for the financial needs [5]. About 50% of the study population suggested providing more range of free medicines and 25% suggested conducting special geriatric OPD and specialty clinic.

CONCLUSIONS:

The study shows that there was increasing burden of Non- communicable disease morbidity. The present study shown that there is a need to strengthen the existing geriatric health services at community level at the earliest in view of rapidly increasing greying population and high rate of non- communicable diseases among them to decrease the burden on themselves and also on health care.

RECOMMENDATIONS:

The primary health care should be adequately staffed by doctors, nurses and health care workers for the implementation of more range of geriatric services at the grass root level. This include special geriatric Out patient days, more free medicines, improved laboratory facilities, special appliances for elderly, transportation while referring to higher centers, specialty clinic (ophthalmology and orthopedic), equipped inpatient facility.

Health education should be provided and geriatric population should be made aware of the available geriatric health services. Government should take steps to provide pensions and other social security schemes to cover most of the people. Financial support to care-givers, who are unable to go for their daily work due to more pressing needs of the elderly, needs serious consideration. The concept of Primary Geriatric Health Care should be adopted in the community for the better health care services of the elderly in terms of Primary Health Care.

ACKNOWLEDGEMENT:

We are highly thankful to Dr P P Venugopalan Dean, Staff of Department of Community Medicine, faculties at CHC for their support in this work. We immensely thank the people who participated in this study for their valuable time and co-operation.

REFERENCES: