

## Challenges in Treatment of Geriatric Patients in Rajendra Institute of Medical Sciences, Ranchi, Jharkhand.

Vidya Sagar<sup>1</sup>, Dilip Kumar Paswan<sup>2\*</sup>, Surendra Singh<sup>3</sup>, Anit Kujur<sup>4</sup>

Professor<sup>1</sup>, Department of Community Medicine, Rajendra Institute of Medical Sciences, Ranchi, India

Post-graduate Student<sup>2,3</sup>, Department of Community Medicine, Rajendra Institute of Medical Sciences, Ranchi, India

Tutor<sup>4</sup>, Department of Community Medicine, Rajendra Institute of Medical Sciences, Ranchi, India

Corresponding Author:

Dr. Dilip Kumar Paswan, Post-graduate student, Department of Community Medicine, Rajendra Institute of Medical Sciences, Ranchi, India- 834009

### Abstract

**Background:** India is in a phase of demographic transition and trends reveal that population of elderly is growing faster than general population. It is estimated that the proportion of Indians aged 60 and older will rise from 7.5% in 2010 to 11.1% in 2025. The overall objectives of this study were to evaluate socio-demographic data, problems faced by them, factors affecting their health and to find out healthcare requirements of geriatric patients in RIMS, Ranchi.

**Materials and Methods:** Hospital based cross sectional study was carried out in various OPDs and indoor wards of Rajendra Institute of Medical Sciences, Ranchi, Jharkhand. A total of 130 geriatric patients were interviewed using pre-tested semi-structured questionnaire. Findings were described in terms of percentages and health problems were correlated.

**Results:** Around 64.6% of the interviewed geriatric patients were male of age-group 60-65years (39.8%). Nearly 1/3<sup>rd</sup> of them were illiterate. . Most of them were living with their children (61.5%) followed by spouse (27.7%). that majority of geriatric patients were facing health problems related to cardiovascular (27%) followed by respiratory (22%), skeletal and excretory systems (18% each).

**Conclusion:** The results of the study showed that there is a need for geriatric patient treatment and counseling centers at utmost priority that can take care of their physical and psychological needs. Launch various schemes to provide social security and financial support with flexibility to cover larger population of elderly

**Keywords:** Geriatrics, Elderly, Challenges, Health problems

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### I. Introduction:

Geriatrics<sup>1</sup> is the branch of medicine dealing with the physiologic characteristics of ageing and the diagnosis and treatment of diseases affecting the aged. The cut-off point for geriatric age is 65 years in most of the countries including India<sup>[2]</sup>. The geriatric age group is further categorized as - Young old(65-74 years), Middle old(75-84 years), Old old(85-100 years) and Elite old(over 100 years).

Ageing in India is exponentially increasing due to the impressive gains that society has made in terms of increased life expectancy. Since the population of the elderly is increasing, the demand for holistic care tends to grow as well. By 2025, the geriatric population is expected to be 840 million in the developing countries<sup>[3]</sup>. It is estimated that the proportion of Indians aged 60 and older will rise from 7.5% in 2010 to 11.1% in 2025<sup>[4]</sup>. In 2010, India had more than 91.6 million elderly and the number of elderly in India is estimated to reach 158.7 million in 2025<sup>[4]</sup>. According to 2011 census of India, the prevalence of geriatric patients in India is 8.6%.

An ageing population increases the burden on the resources of a country and has raised concerns at many levels for the government in India. The ageing population is both, a medical and sociological problem. The elderly population suffers high rates of morbidity and mortality due to various non-communicable diseases. The demographic transition in India shows unevenness and complexities within different states. This has been attributed to the different levels of socio economic development, cultural norms, and political contexts. Hence it will be a herculean task for policy makers to address the geriatric care that will take into account all these determinants. Care for the elderly is fast emerging as a critical element of both the public and private concern.

The elderly tend to be cared for in a variety of settings: home, nursing home, day-care centre, geriatric out-patient department, medical units or intensive care unit depending on the nature of the clinical problem. Care of elderly necessitates addressing several social issues. The needs and problems of the elderly vary

significantly according to their age, socioeconomic status, health, living status and other such as background characteristics. Their social rights are neglected and they are profusely abused which goes unreported.

Geriatric care management is necessary to improve their quality of life and to maintain their independence for as long as possible.

In Jharkhand nearly 68% of rural households and 71% of urban households do not have any aged person. Around 22% have one aged person and 9% have 2 aged members in the household. Only 0.5% households have 3 or more aged members. The Old age dependency ratio shows an increasing trend and the ratio has risen from 10.9% in 1961 to 14.2% in 2011. The gap between female and male old-age dependency ratio also has an increasing trend and the two assumed the values 14.9 and 13.6 respectively in 2011.

Challenges faced by geriatric patients are lack of infrastructure; Changing family structure<sup>1</sup>; Lack of Social Support; Social Inequality ; Availability, accessibility and affordability of health care; Economic Dependency.

Rajendra Institute of Medical Sciences, Ranchi is one of the elite medical colleges in Jharkhand which provides free medical services to the patients along with essential drugs. Additional facilities like a separate ticket counter in the OPD and a Geriatric Ward in the Department of Medicine are provided for the geriatric patients. Still, this ageing population face many challenges in their treatment in this institute.

But the increasing mass in the hospital affects the staff efficiency and becomes a leading cause of the negligence towards the geriatric patients, and decreases the patient's satisfaction. The overall objectives of this study were to evaluate socio-demographic data, problems faced by them, factors affecting their health and to find out healthcare requirements of geriatric patients in RIMS, Ranchi.

## **II. Materials and Methods:**

This hospital based cross sectional study was carried out in various OPDs and indoor wards of Rajendra Institute of Medical Sciences, Ranchi, Jharkhand. The duration of the study was three months from September 2019 to November 2019. Patients aged 60 years and above who gave their consent for taking part in the study were included and others were excluded who did not fulfil our criteria.

Sample size was calculated by using 2011 census of India, the prevalence of geriatric patients in India is 8.6%. Then taking prevalence(P) as 0.086 and Q(=1-P) as 0.914 and absolute precision of study(d) as 5%, the sample size was calculated as follows

$$\text{Sample size} = 4PQ/d^2$$

On putting the values, we get 125.8. So it was rounded to a total of 130 patients who were to be interrogated.

A pre-tested semi-structured questionnaire was used for data collection from the consented geriatric patients after establishing a rapport. Consecutive sampling technique was used to meet the sample size. Templates were generated in MS-Excel sheet and collected data were entered and analyzed by using appropriate statistical methods and SPSS software v.20.

## **III. Observations and Results:**

In this hospital based cross-sectional study conducted most (64.6%) of the interviewed participants were male of age-group 60-65years(39.8%) and almost 1/3<sup>rd</sup> (33.8%) were illiterate by education. Most of them were living with their children (61.5%) followed by spouse (27.7%). About more than 1/3<sup>rd</sup> (39.2%) were previously self employed and belonged to middle class (33.1%) [Table 1]. This study shown that majority of the geriatric patients was accompanied by either by their sons (44.6%) or by their wives (17.7%). [Fig 1] That's why it clearly depicted that most of them had no difficulties or problems in finding the ticket counter (87.7%) and reaching the respective departments (58%) [Fig 2]. During this study we found that majority of geriatric patients were facing health problems related to cardiovascular (27%) followed by respiratory (22%), skeletal and excretory systems (18% each) [Fig:3]. Majority of them claimed that they were satisfied with treatment by doctors (97%) and facilities (94%) provided at RIMS, Ranchi. Almost overall of the admitted geriatric patients were undergo timely routine check-ups for their illness and diet according to their needs. We found that more than half (55%) of the geriatric patients were satisfied with overall quality of care provided at our hospital.

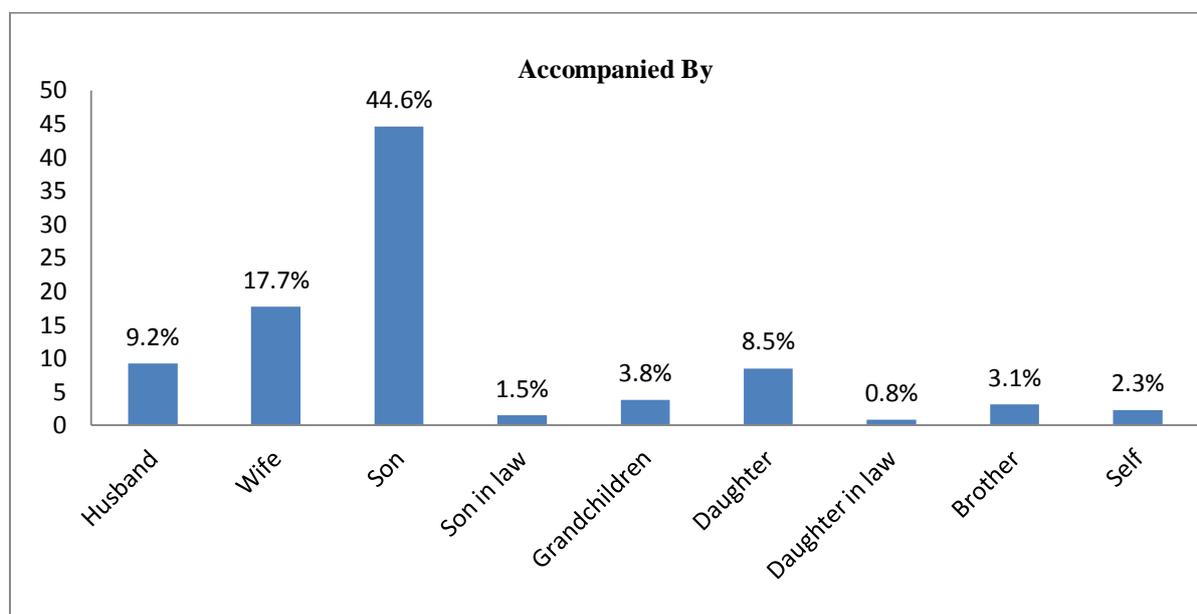
Further in our study we tried to find out any physical or fitness activity which alleviates towards reaching to good health and habit. We found that half (50%) of them were involved in regular physical activities to maintain their health. Out of those half participants mostly did morning walk (32.3%) followed by yoga (3.8%) and sports activity (1%) [Fig:4]. Less than half (47%) of the geriatric patients had some forms of addiction, out of those majority were addicted to alcohol (26.2%) followed by tobacco (9.2%) and smoking (7.7%). [Fig:5] Among these study participants, majority (61%) were not taken any alternative therapy while

less than half took ayurvedic (15%) treatment followed by homeopathic (13%) and home based remedies (11%) as a alternative therapy. [Fig:6]

In this conducted study we interviewed with patients regarding healthcare requirements of geriatric patients and majority of them demanded for regular and daily functional geriatric OPD with proper trained staff nurses and other hospital staff in geriatrics care.

**Table 1: Socio-demographic profile of study participants (n=130)**

CHARACTERISTICS		PERCENTAGE
SEX	MALE	64.6
	FEMALE	35.4
AGE GROUP(YEARS)	60-65	39.8
	66-70	37.4
	71-75	15.3
	76-80	4.6
	>81	3.0
EDUCAION	ILLITRATE	33.8
	PRIMARY	19.3
	SECONDARY	28.5
	HIGHER SECONDARY	14.6
	GRADUATION AND ABOVE	3.8
PRESENT MRITAL STATUS	DIVORCED	3.8
	SEPERATED	10.8
	LIVING TOGETHER	56.2
	WIDOW	26.9
	SINGLE/NEVER MARRIED	2.3
LIVING WITH	ALONE	3.8
	SPOUSE	27.7
	CHILDREN	61.5
	RELATIVES	5.5
	OLDAGE HOMES	1.5
PREVIOUS OCCUPATION	HOMEMAKER	25.4
	SELF EMPLOYED	39.2
	GOVT. SERVICE	11.5
	DAILYWAGE WORKER	15.4
	OTHERS	8.5
SOCIO-ECONOMIC STATUS	UPPER CLASS	5.4
	UPPER MIDDLE CLASS	23.8
	MIDDLE CLASS	33.1
	LOWER MIDDLE CLASS	20
	LOWER CLASS	17.7



**Figure 1: Graph depicting who accompanied the geriatric patient**

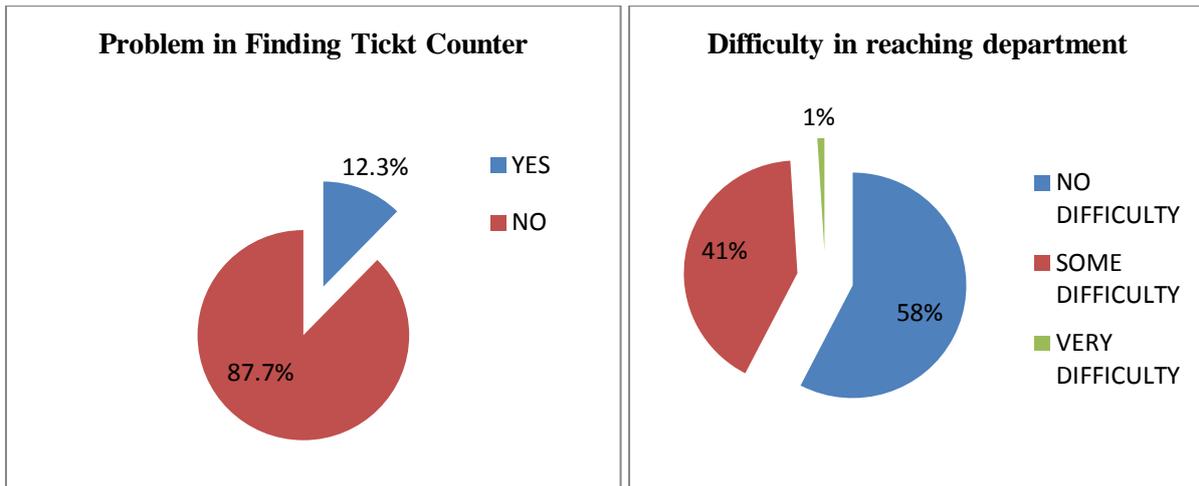


Figure 2. Pie-chart depicting the problems faced by geriatrics in finding ticket counter and difficulties in reaching various department

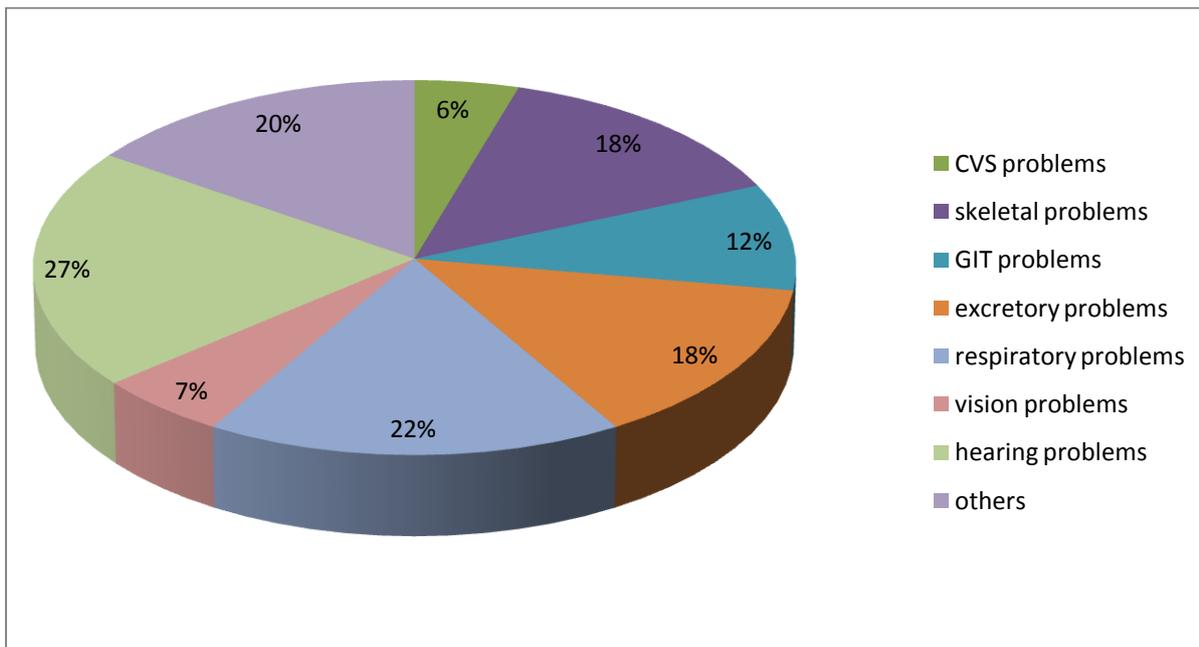


Figure 3: Pie-chart depicting the health problems more among the geriatric patients

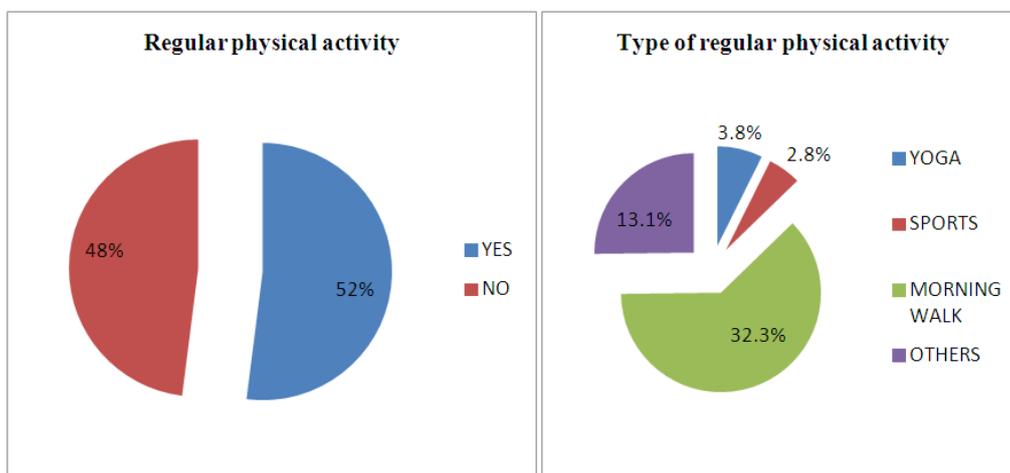


Figure 4. Pie-chart depicting involvement of geriatric patients in regular physical activity and its type

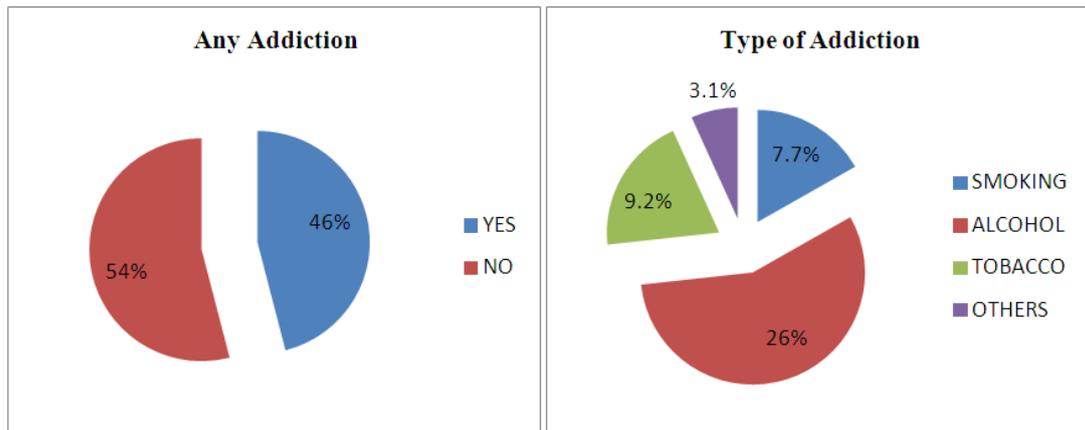


Figure 5: Pie-charts depicting addiction and its pattern among geriatric patients

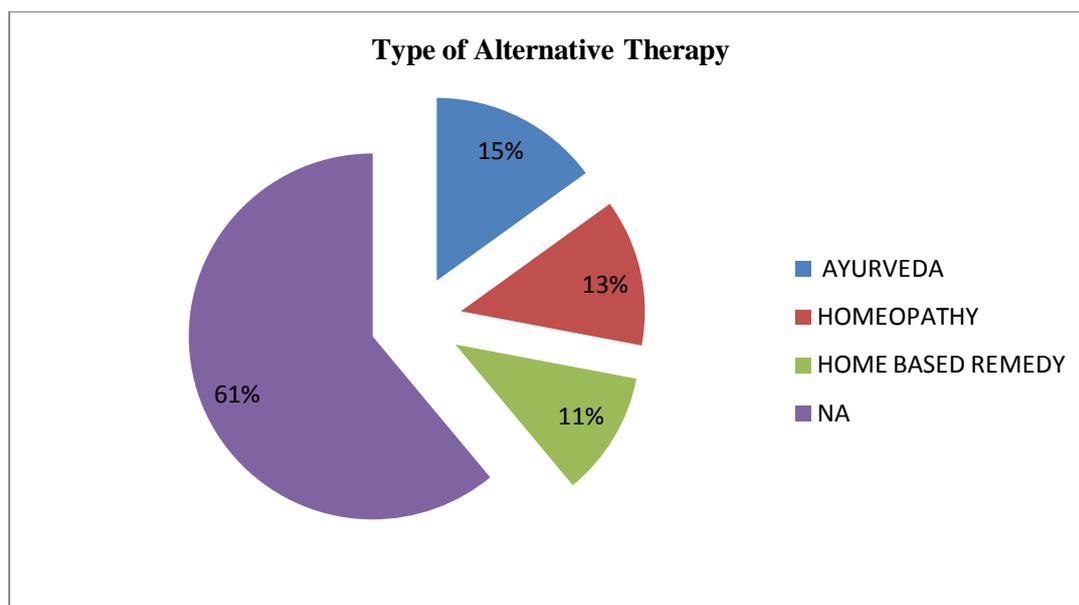


Figure 6: Pie-charts depicting various types of alternative therapy taken by geriatrics patients

#### IV. Discussion

The present study entitled “Challenges in Treatment of Geriatric Patients in Rajendra Institute of Medical Sciences, Ranchi, Jharkhand” was carried out in one of the excellent tertiary centre of Jharkhand. The total geriatric patients interviewed were 130 who fulfilled the criteria.

In this hospital based cross-sectional study conducted most of the interviewed participants were male (64.6%) of age-group 60-65years (39.8%) and almost 1/4<sup>th</sup> were illiterate by education(33.8%). Most of them were living with their children (61.5%) followed by spouse (27.7%). Various studies by Abhay B mane et al<sup>6</sup>, UNFPA, New Delhi<sup>7</sup>, Lena A et al<sup>8</sup> have brought out similar finding in their study. Higher number of participants is living with their children may be because of loss or death of spouse.

About 39.2% of the elderly were self-employed, i.e., they have no regular source of income. Similar finding was reported by UNFPA, New Delhi<sup>7</sup> and Lena A et al<sup>8</sup>. Financial dependency are one of the giant problems in geriatric population. That’s why they cannot lead an independent life beyond age of 60-65 years. In our study 1/3<sup>rd</sup> of the participants were of middle class according to Modified B G Prasad classification 2019<sup>13</sup>. Similar results was report by the study done by Abhay B mane et al<sup>6</sup>, UNFPA, New Delhi<sup>7</sup>. Majority (44.6%) of the geriatric patients were accompanied to the hospital by their sons, which led to daily wage loss. Similar results were obtained in study by, UNFPA, New Delhi<sup>7</sup>, Lena A et al<sup>8</sup>. Majority (44.6%) of the geriatric patients were accompanied to the hospital by their sons, which led to daily wage loss. Similar results were obtained in study done by UNFPA, New Delhi<sup>7</sup> and Lena A et al<sup>8</sup>.

Majority of patients (96.9%) were satisfied with the treatment of their doctors. While a minor 3.1% claimed their treatment to be poor or unsatisfactory. This result contradicted with the study of National Sample Survey Organisation (1998)<sup>11</sup>. Majority (93.8%) of the patients were satisfied with the facilities provided in

RIMS. Rest 6.2% were unsatisfied because of the long queues in the counters and the longer time duration taken for the reports to arrive. The results seem to contradict with the studies of GOI (2011) Situation Analysis of the Elderly in India<sup>12</sup> and Lena A et al<sup>8</sup>. According to our study, majority(96.9%) of the study population got proper visits by the doctors in various indoor wards in which they were admitted, and only a minor 3.1% of the patients did not receive proper visits by the doctors. Quite similar results were found in other studies done by Abhay B mane et al<sup>6</sup>, UNFPA, New Delhi<sup>7</sup>, Lena A et al<sup>8</sup>. Though many of the study participants were not very happy in life but still staying together with their children and preferred to die in presence of loving one as compared to old age home.

## V. Conclusions

The results obtained in this study showed that majority of the geriatric patients were self employed, partially or totally dependent on others and suffering from health problems like cardiovascular or respiratory diseases which may be neglected by family members most of the time. The long time queue at the hospital counter break them by consuming time. Most of the geriatric patients did not get any privilege either in treatment or purchase of medicines. Most of the young nursing staff are not as much trained of caring elderly or needs of the them. Further more research is needed to explore the depth of health problems and quality of life of the elderly.

The authors accept the limitations of this conducted study. In severely ill or bed ridden patient were not interrogated while their attendants were interviewed, some information bias may be there. Small sample size is small so the study findings cannot be generalized to the community at large.

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## Source of support

Nil

## Conflict of interest

No

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