Quality of Services in a Tertiary Care Hospital of Northern India: Geriatric Patient Perspective

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Abstract

This study was planned with the objectives of studying the bio-social and morbidity pattern of elderly and to assess the quality of medical and non-medical services as perceived by elderly patients along with the health worker-patient relation.A Cross-Sectional Descriptive Study was conducted on elderly patients (>60 years) attending outpatient department of a tertiary hospital and residing in Lucknow. Total 242 subjects were selected from the entry gate of outpatient department. Most common morbidity in this age group is hypertension and eye related morbidity in urban area, while in rural area it was musculoskeletal and eye related morbidity. Elderly from Non Peri-urban area mostly perceived that the services rendered were average while majority of those living in Peri-urban area (51.5%) opined that the services rendered were good. Nearly half (44%) of urban elderly patients rated quality of services as average. While among rural elderly patients 42.6% rated quality of services as poor. However those from peri-urban area, 57.1% rated it as poor. Relation of quality of services of hospital with residence of elderly patients was statistically significant (p <0.05).Among elderly of urban area, most frequent morbidity was hypertension. total elderly patient from urban area one third perceived poor quality of services. While elderly patient of rural areas, majority had felt poor quality of service. About 57.1 percent of elderly patient of non peri-urban area had perceived poor quality of service followed by 28.6 percent of very poor quality of services. While of peri-urban area 40.9 percent had felt average quality of services followed by 34.8 percent with poor quality of services.

Keywords- Geriatric patient, Quality of care, Hospital Services

Introduction

According to United Nations Department of Economic and Social Affairs/Population Division New York, 2004 world's 65+ populations in 1950 was 5.2 %, in 2000 it was 6.9% and it is projected that it will be 15.9 % of total population by the year 2050. Similarly 65+ population of Asia will be 16.8 % by the year

2050.The number of the elderly in India is also growing. The population above 65 years was 4.8 percent of total population in the year 2001 and it is projected that it will be 22.1 percent of total population by the year 2051. [1]

Government of India adopted 'National Policy on Older Persons' in January, 1999. The policy defines 'senior citizen' or 'elderly' as a person who is of age 60 years or above. [1]

The success or failure of any hospital largely depends on the satisfaction of the patients on various services offered. With the various changes and developments that take place in health care related environment, patients place more importance on the quality of services offered than before. In recent days patients emphasize not only the environment in the hospitals, but also various services offered in the hospitals. [2] Patient satisfaction measurement adds important information on system performance, thus contributing to the organization's total quality management. [3]

As the elderly population increases, different morbidities and problem related to old age is now becoming a challenge for hospitals. Resources like hospital staff, waiting place, place for parking, cafeteria etc. are limited especially in government hospitals. Elderly people, children and females are vulnerable section of the society so they need special attention when they are attending any hospital. For children (under 13yr) and females different departments and specialists are there but for elderly patients no such separate provisions exist in most of the hospitals and hence they are forced to compete with adult age group for their health related problems and needs in such hospitals. Also, as this population is economically dependent and more vulnerable to health related problems, the need for separate provisions for them in hospitals becomes even more imperative. Very few studies have been done with regards to this issue especially in Northern India. Primarily focussing on this issue, this study was planned with the **objectives** of studying the morbidity pattern of elderly and to assess the quality of medical and non-medical services as perceived by elderly patients along with the health worker-patient relation.

Methodology

A cross-sectional descriptive study was conducted on elderly patients ($\geq$ 60 years) [1], residing in Lucknow and attending an outpatient clinic in a tertiary care hospital of Lucknow. The entire study period was of six months duration starting from December 2012. However total stipulated time for data collection was only three months. In this period, out of the six OPD working days, two days were selected for data collection, Monday and Saturday. Monday being the first working day of the week was the busiest day and Saturday being a weekend had the lightest workload in the OPD. In order to nullify the workload bias on health worker's attitude, these two days were selected.

Thus in three months' time, data was collected on 24 working days. In each of this day all the elderly who visited the OPD from 8:00 a.m. to 2:00 p.m. and fulfilled the inclusion criteria were included in the study. This way, total 242 subjects were finally selected.

All the elderly patients, residing in Lucknow, attending Out Patient Department of a Tertiary Health Centre Lucknow, UP and had given verbal consent were included in the study. Permission was taken from the concerned authorities regarding the study. Elderly patients were asked to participate in the study at the exit of Out Patient Department. Response regarding quality of care was taken on a five point Likert scale.

Mini mental state examination (MMSE)[4,5] instrument was applied to each respondent and if the score of this instrument was ≥ 20 then only he/she was included to participate in the study. On the basis of MMSE score 20 elderly were excluded.

Subjects with systemic chronic/serious/longterm illness were considered as diagnosed case of > 6 months duration and if they were able to show OPD slip of Hospital. Elderly belonging to Lucknow, who received OPD based treatment, with MMSE score > 20 points [4] and were able to answer the interview were included in the study. Non responsive, uncooperative elderly with speech problem, MMSE score of< 20 points, those who were suffering from severe and life threatening disease were excluded from the study.

The variables studied were as under:

Dependent variables: Quality of medical service, Quality of non-medical service, Health worker-patient communication. **Medical Service** (included registration procedure related, pharmacy services, lab and investigation related services, medical documentation and certification related services). While **Non-Medical Services** (included cafeteria service, parking, waiting room, toilet and drinking water facility). **Health worker** included Doctor, nurse, ward-boy, pharmacist or lab technician

Independent variables: Age, Sex, Marital status, Family structure, Unemployed/ Retired, Socio-economic status, caste, which is the local social structure prevalent in which SC/ST forms economically & socially the most backward communities, followed by OBC and then the highest among this are General category people, place of residence (urban/peri-urban/non peri-urban).

Peri-urban areas comprise of those rural areas which would be converted to urban areas in the coming master plan of the Municipal Corporation.

The tools used for assessing these variables are Mini-mental state examination (MMSE), Socioeconomic Status tool [6]. Data was analysed using the SPSS, version 17.0. Descriptive statistics such as frequency percentage for categorical variables were determined. Chi-square, was used to show the relation between independent and dependent variables. The level of significance was set at <0.05.

Results

Maximum percentage (44.7) of urban elderly as well as peri-urban elderly (60.6) came from class III SES while 71.4 percent of non peri-urban elderly belonged to class V SES. [Table 1]

Elderly belonging to urban area had hypertension as the most common morbidity (17.7%) while only 41.1 percent elderly patient had non diagnosed morbidity. Among elderly from rural area, out of total morbidities musculoskeletal morbidity (33.7%) was most frequent and 18.8 percent had non diagnosed morbidity. [Table 2]

About 77.1 percent of elderly patients staying in non peri-urbanrural area perceived that the non-medical services rendered were average while majority of those (51.5%) in peri-urban RURAL opined that the non-medical services rendered were good. Out of total elderly patient from non peri-urban area 11.4 percent perceived that quality of non-medical services were poor. [Table 3]

Among elderly patients living in urban locality, 27.7 percent who had rated poor and very poor quality of services. While among elderly patients living in rural area, majority had rated poor and very poor quality of services (53.5%). Relation of quality of services of hospital with residence of elderly patients was statistically significant (p <0.05). [Table 4]

Out of total 38.0 percent of elderly patients were equivocal in their response followed by 27.0 percent who thought that their quality of services was poor. [Fig.1] Majority (33.0%) of elderly patient were equivocal in their response, followed by 30.0 percent who were dissatisfied with communication between health-worker and patient. [Fig.2]

Discussion

About 77.2 percent of those staying in Non Peri-urban area perceived that the services rendered were average while majority of those living in Peri-urban area (51.5%) opined that the services rendered were good. In the present study it was found that out of total elderly patients from urban, a maximum of 44.0 percent had perceived average quality of service followed by 27.0 percent who had perceived poor quality of service. While amongst elderly patients of rural areas, majority had felt poor quality of service (42.6%). About 57.1 percent of elderly patients of non peri-urban area had perceived poor quality of service followed by 28.6 percent of very poor quality of services. While of peri-urban area, 40.9 percent had felt average quality of services followed by 34.8 percent with poor quality of services. Similar result was found in other studies. [3, 7].

Majority (33.0%) of elderly patients were equivocal in their response, followed by 30.0 percent who were dissatisfied with communication with health-worker including doctors. One of the studies showed that the overall satisfaction regarding the doctor-patient communication was more than 60% at all level of health care facilities. [8] This difference in satisfaction level from the present study may be due to different age groups and different level of health care.

Conclusions

Among elderly of urban area, most frequent morbidity was hypertension followed by eye related morbidity. Among elderly of rural area, musculoskeletal morbidity was most frequent followed by eye related morbidity hypertension.

About majority of elderly patients staying in non peri-urban rural area perceived that the non-medical services rendered were average quality. Out of total elderly patient from urban area one third perceived poor quality of services. While elderly patient of rural areas, majority had felt poor quality of service.

About 57.1 percent of elderly patient of non peri-urban area had perceived poor quality of service followed by 28.6 percent of very poor quality of services. While of peri-urban area 40.9 percent had felt average quality of services followed by 34.8 percent with poor quality of services.

Suggestions and recommendations

Capacity building scheme must be created to prepare suitable human resource that can play role of good mentor. This opens a new opportunity in private sector. There need to be separate queue for elderly patients in registration counter and pharmacy so as to reduce the waiting time. The study recommends the need to conduct various studies in similar settings involving certain care interventions and their impact on elderly health.

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Table 1:   Biosocial characteristics of elderly patient

Characteristics	Urban (n=141)		Rural					
			Non Peri-urban area (n=35)		Peri-urban area (n=66)		Total (n=101)	
	n	%	n	%	n	%	n	%
Age Group (years)								
60 - <70	82	58.2	11	31.4	18	27.3	29	28.7
70 - <80	46	32.6	16	45.7	22	33.3	38	37.6
≥ 80	13	9.2	08	22.9	26	39.4	34	33.7
Sex								
Male	100	70.9	17	48.6	37	56.1	54	53.5
Female	41	29.1	18	51.4	29	43.9	47	46.5
Religion								
Hindu	114	80.9	35	100.0	65	98.5	100	99.0
Muslim	16	11.3	00	00	01	1.5	01	1.0
Sikh	11	7.8	00	00	00	00	00	00
Caste								
SC/ST	15	10.6	10	28.6	00	00	10	9.9
OBC	32	22.7	11	31.4	07	10.6	18	17.8
General	94	66.7	14	40.0	59	89.4	73	72.3
Marital Status								
Unmarried	02	1.4	03	8.6	03	4.5	06	5.9
Married	111	78.7	09	25.7	23	34.8	32	31.7
Widow/Widower	26	18.4	20	57.1	35	53.0	55	54.5
Divorce/Separated	02	1.4	03	8.6	05	7.6	08	7.9
Socio-Economic Status								
Class I	06	4.3	00	00	01	1.5	01	1.0
Class II	39	27.7	00	00	06	9.1	06	5.9
Class III	63	44.7	00	00	40	60.6	40	39.6
Class IV	32	22.7	10	28.6	16	24.2	26	25.7
Class V	01	0.7	25	71.4	03	4.5	28	27.7

Table 2:   Morbidity profile of elderly patient by their living place

Type of Morbidity[#]	Urban (n=141)		Rural				Total(n=101)	
			Non Peri-urban area (n=35)		Peri-urban area (n=66)			
	n	%	n	%	n	%	n	%
Diabetes mellitus	12	8.5	02	5.7	06	9.1	08	7.9
Hypertension	25	17.7	04	11.4	20	30.3	24	23.8
Musculoskeletal	14	9.9	17	48.6	17	25.8	34	33.7
Cerebrovascular	05	3.5	00	0.0	02	3.0	02	2.0
Respiratory	07	5.0	06	17.1	07	10.6	13	12.9
Cardiovascular	06	4.3	02	5.7	08	12.1	10	9.9
Gastrointestinal	05	3.5	03	8.6	05	7.6	08	7.9
Renal	07	5.0	00	0.0	02	3.0	02	2.0
Psychiatric	07	5.0	03	8.6	00	0.0	03	3.0
Ear related	02	1.4	05	14.3	03	4.5	08	7.9
Eye related	21	14.9	13	37.1	12	18.2	25	24.8
Malignancy	05	3.5	01	2.9	00	0.0	01	1.0
Others	06	4.3	02	5.7	04	6.1	06	5.9
Non diagnosed morbidity	58	41.1	05	14.3	14	21.2	19	18.8

Multiple responses

Table 3: Perception of elderly patients from rural area about non-medical services rendered by Hospital

Type of Rural area (n = 101)	Perception about non-medical services[@]									
	Very Poor		Poor		Average		Good		Very Good	
	n	%	n	%	n	%	n	%	n	%
Non peri-urban area (n=35)	00	0.0	04	11.4	27	77.2	04	11.4	00	0.0
Peri-urban area (n=66)	00	0.0	00	0.0	28	42.4	34	51.5	04	6.1

@ Drinking water, toilet, restaurant, cafeterias, parking

Table 4:   Relation of quality of services rendered to elderly patients with their place of residence.

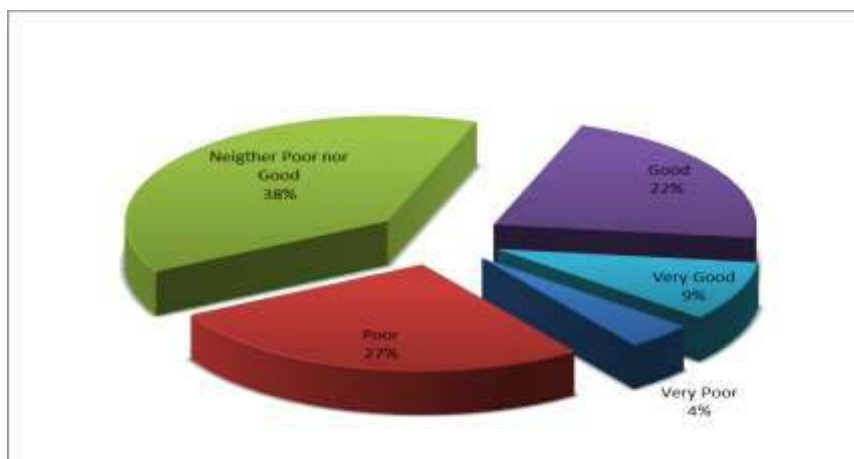| Overall quality of Services (n = 242)	Urban		Rural						x^2	p value
			Non Peri-urban area		Peri-urban area		Total			
	n	%	n	%	n	%	n	%		
Very poor	01	0.7	10	28.6	01	1.5	11	10.9	70.27	0.000
Poor	38	27.0	20	57.1	23	34.8	43	42.6		
Average	62	44.0	04	11.4	27	40.9	31	30.7		
Good	34	24.1	01	2.9	14	21.2	15	14.9		
Very Good	06	4.3	00	00.0	01	1.5	01	1.0		
Total	141	100.0	35	100.0	66	100.0	101	100.0		

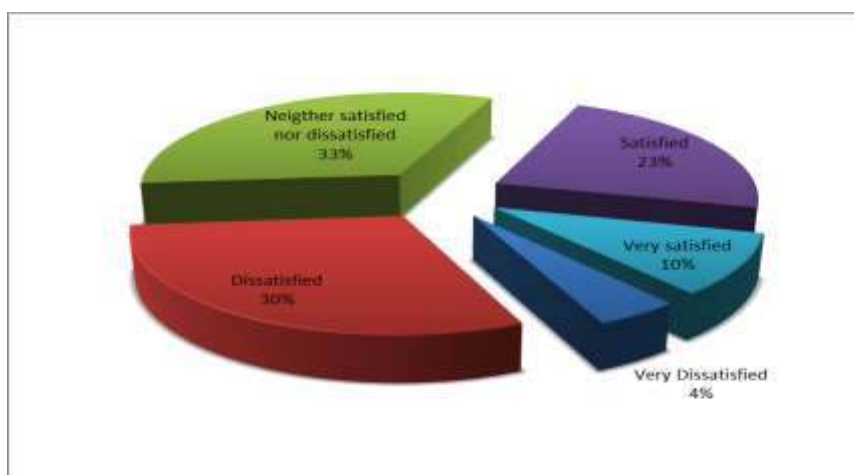**Fig 1: Overall Perception about Quality of medical services**

Fig 2:   Overall Perception about health worker-patient communication