



Socio-economic determinants of cost sharing in tertiary level hospital of Bangladesh

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Abstract

This descriptive cross-sectional study was carried out with a view to assess the opinion and perception among the outdoor and the indoor (Admitted) patients of Chittagong Medical College Hospital from 01 April 2018 – 30 April 2019. The objective of this study was to find out or assess the opinion, attitude, perception of the patients regarding cost-sharing. A total of 5000 patients were interviewed. Among the respondents 57.0% were adult male and 43.0% were adult female. The mean age of the respondents were 37.12 years with $SD \pm 16.49$ years. The educational levels of the respondents were 20.7% illiterate, 24.6% with secondary level, and 5.2% graduate. The largest numbers of occupation were housewives i.e. 25.2% followed by businessmen 19.6%. The majority of the respondents, 61% had income above taka 1500 per month. The study revealed that 69% of the respondents were not satisfied with the existing quality of health care services provided in outdoor as well as indoor in the hospital. Most of the respondents 73.0% were found to be in favor of the cost sharing, out of them 53% desired to share the cost partially. This 73.0% hoped that their cost sharing will definitely improve the quality of hospital service. It became amply clear from this study that social mobilization, community involvement and community participation in cost sharing will further improve the health care service preferably in tertiary level hospital. There is also a need for the improvement of healthcare network for further strengthening the health care services in tertiary level hospital of Bangladesh.

Keywords: socio-economic, cost sharing, tertiary level, health services

Introduction

The cost sharing or user fee has been an approach used by the public sector health services in developing countries to recover some of the costs of services. Cost recovery was promoted by the World Bank and others to help bring expenditures into line with revenues. In health sector, costs sharing for health care services managing major sources of monetary sharing in most countries of the world. Cost sharing is aimed to be useful to be to gain recurrent costs or reimburse the expenditure for health care services. Bangladesh has made considerable progress over the last decade in improving the health and nutrition status of its citizens and in reducing population growth rates. It still faces multiple challenges in improving the health status of poor and vulnerable and in dealing with the impoverishing effects of ill health. The health care service provided by the government of Bangladesh in primary level is almost free. But in secondary level and above i.e. tertiary level and super specialist level there cost sharing in health care services in the form of ticket fee, paying bed, pathological tests, x-ray charges and more other charges. In studies it has been found that the payment for medical services causes low – income people to use substantially fewer essential and effective medical services or medications on the other hand some proponents of cost-sharing argue that co-payments encourage people to be more cost-conscious so that they make “smarter” health care decisions and avoid unnecessary care. It is also indicated that if cost sharing is

implemented in the curative services, government can allocate more money in the preventive and primitive services which in turn will reduce the disease burden in the community. There is limitation regarding the impact of cost-sharing on the health of populations in Bangladesh, particularly its implications among the community people. There is also very limited published literature on the impact of cost sharing. Due to lack of information regarding cost sharing by the community people in health care services, it is not clear how people are behaving with the cost sharing particularly at the tertiary level and what is the extent of access of the people to this care. To ensure proper and accessible medical care to the people, it is essential to find out the peoples' opinion and acceptance regarding cost sharing in the health care services as well as peoples' socio-economic factors which may Influence them. This study is aimed to find out the peoples opinion, behavior and willingness regarding the cost sharing and their socio-economic aspects to access the health care facilities at the tertiary level. The last census in Bangladesh was conducted in 2011. The preliminary counts show a population of 142, 319 thousand which, after adjustment, can be as high as 152, 111 thousand.

Objectives

General Objective

To assess the status of cost sharing on use of health care services and socio-economic factors of the patients related to

the cost sharing in tertiary level hospitals.

Specific Objectives

- To estimate the proportions of the patients in favor of cost sharing.
- To assess the patients level of satisfaction and dissatisfaction.
- To find out the reasons in favor or disfavor of cost sharing.
- To find out the way of participation in cost sharing.
- To find out the services where respondents are willing to share the cost of service and the way of participation.

Materials and Methods

Type of study/study design: The study was a descriptive cross sectional study. The aim of the study was to see the opinion, perception and attitude towards cost sharing and also to assess the level of satisfaction of respondents with the existing health services in tertiary level hospital in Bangladesh.

Place of study: The study was conducted in specialized tertiary (Division Level) hospital in Bangladesh known as Chittagong Medical College Hospital, the 2nd largest public hospital in Bangladesh.

Period of study: April 2018 to 30 April 2019.

Study population: The male and female patients attended in outdoor for treatment, investigations and minor medical and surgical intervention and admitted in the hospital as indoor patients during the period of April 2018to April 2019.

Sample size and sampling technique: Consecutive patients attending the outdoor and indoor departments of the hospital for health care facilities during the time mentioned as above. There were more than 1500 patients attending in those outdoor department as well as indoor cases per day, but the investigator included only those who had consented to answer the questions. There were only 5000 such respondents who agreed to participate in this study. Sampling technique was systematic random sampling. The sampling interval was two to three.

Research instruments: An interview schedule was made in Bangla and in English. It included thirty five questions. The questions were related to socio-economic as well as socio-demographic, opinion, perception and attitude of the respondents. The questions were mostly closed type. The sample of the questionnaire is enclosed in the annexure.

Data Collection: The respondents were interviewed with a semi-structured interview schedule for the collection of data. It was finalized after pre-testing in similar field situation elsewhere. The investigator/ data collector interviewed all of the respondents face to face.

Data processing: Collected data were entered and processed by computer package using SPSS statistical programme & scientific calculators.

Data analysis: The collected data were checked, verified and edited to maintain inconsistency and validity. The important variables were considered and analyzed to fulfill the objectives of the study. It involved descriptive statistics, like univariate frequency tables, graphs and descriptive statistical calculations. Cross tabulation and bivariate analysis, chi-square tests etc. were done for analytical purpose by using the same SPSS computer programme.

Results and Discussion

Table 1: Distribution of patients by age n = 5000

Age (in year)	Frequency	Percent
≤10	150	3.0
10-20	590	11.8
20-30	1500	30.0
30-40	1050	21.0
40-50	730	14.6
50-60	540	10.8
60-70	320	6.4
>70	120	2.4
Total	5000	100.0

Mean ± SD (Range) = 37.12 ± 16.49 (2-90)

Table - 1 shows that a total of 5000 patients attending the outpatient and inpatient department of tertiary level hospital were interviewed. The mean age of the respondents was 37.12 years with an SD 16.49 years of age.

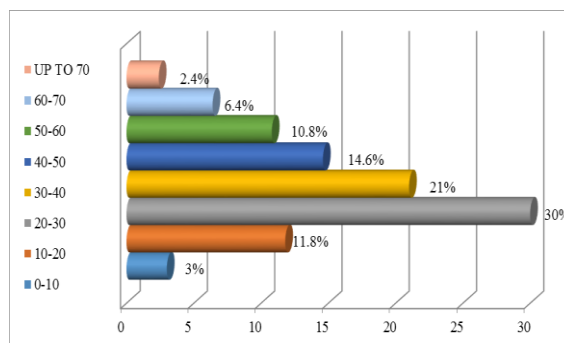


Fig 1

Table 2: Distribution of respondents by amount of expenditure to attend health care facilities (Hospital) n = 5000

	Frequency	Percent
Yes	2020	40.4
No	2980	59.6
Total	5000	100.0

Table-2 shows that 40.4% of the respondents opined that they had to spend a considerable amount of money to attend the

Health care facilities and 59.6% respondents opined that the amount of money spend to reach the health care facilities is not remarkable.

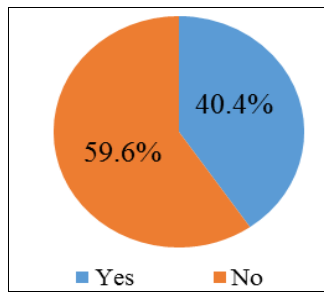


Fig 2

Table 3: Distribution of the type of health care financing usually the respondent avail n = 5000

	Frequency	Percent
None	2790	55.8
Health/Insurance	250	5.0
Employer Provided	350	7.0
Community financing	150	3.0
NGO Provided	60	1.2
Self-saving for healthcare	1000	20.0
Donation	400	8.0
Total	5000	100.0

Table – 3 shows that 55.8% of the respondents does not have any health care financing facility, 20.0 % use their self saving for health care 8.0% use donation financing, 7.0% of the respondents are financed by the employer 3.0% use community financing and financing of 1.2% of the

respondents are provided by NGO.

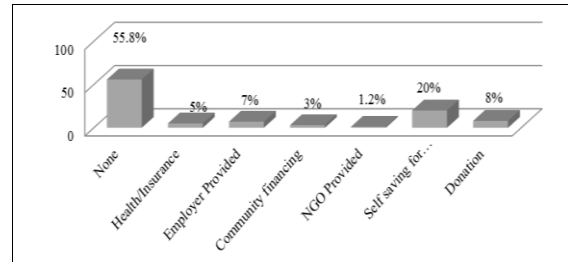


Fig 3

Table 4: Distribution by which of the following facilities you want to pay for? n = 5000

	Frequency	Percent
Consultation	3740	74.8
Blood	3010	60.2
Medication	4330	86.6
Surgery	2560	51.2
Bed	1880	37.6
Investigations	3620	72.4
Food	2880	57.6
Security	2300	46.0
Oxygen	1990	39.8
None	400	8.0
All	1460	29.2

Table – 4 shows that the respondents were more interested to pay for the medication 86.6%, for consultation 74.8%, for investigation 72.4%, for blood 60.2%, for food 57.6%, for surgery 51.2%, for security 46.0%, for oxygen 39.8%, for bed 37.6%, and for all other 29.2% respectively.

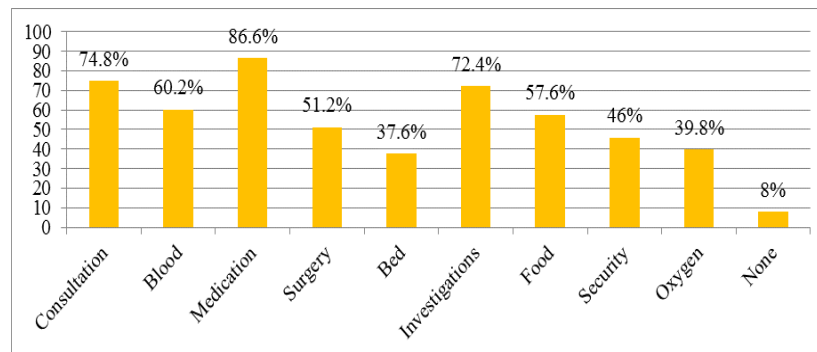


Fig 4

Table 5: Distribution of respondents, according to the basis of cost sharing, i.e. what should be the basis of cost sharing? n = 5000

	Frequency	Percent
No cost sharing	1630	32.6
Generalized for all	290	5.8
Depending upon the economic condition of the care seeker	2070	41.4
Depending upon the extent of expenditure to be incurred for individual patient	1010	20.2
Total	5000	100.0

Table - 5 shows that the cost sharing should be on the basis of economic condition of the respondents 41.4%, 32.6% respondents were in favor of no cost sharing, 20.2% of the respondents were in favor of extent of expenditure to be incurred for individual patient, 5.8% of the respondents were in favor that the cost sharing should be generalized for all service recipient.

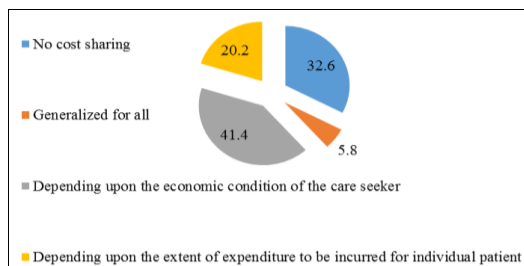


Fig 5

Table 6: Are you ready to contribute to a fund that will help you to finance health care for you and your dependant in time of need? n = 5000

	Frequency	Percent
Yes	3300	66.0
No	1700	34.0
Total	5000	100.0

Table – 6 shows that the percentage of respondents wants to share the finance or health care cost. 66.0% of the respondents were in favor of cost sharing, and 34% of the respondents were not in favor of cost sharing.

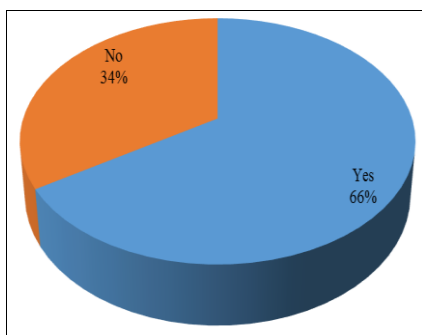


Fig 6

Table 7: Distribution of respondents: Do you think cost sharing can improve services in government health care facility? n = 5000

	Frequency	Percent
No	2630	52.6
Partially	1490	29.8
Yes	880	17.6
Total	5000	100.0

Table – 7 shows that 52.4% of the respondent does not think that imposing cost sharing can improve health care services. On the other hand 29.8 % of the respondent think that imposing cost sharing can improve health care services partially.17.6% of the respondents firmly believe that

introducing cost sharing can improve health care facilities.

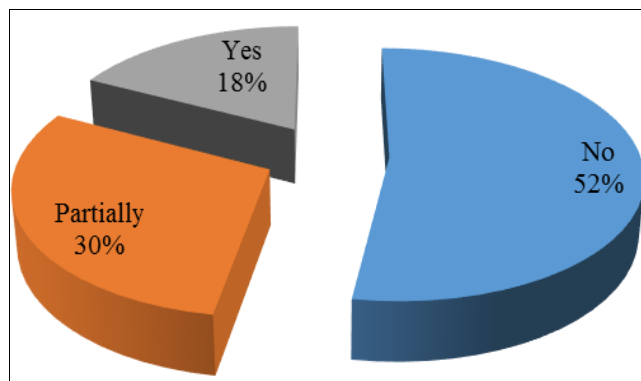


Fig 7

Table 8: Distribution of respondents according to knowledge, attitude and perception about government health care facility. n = 5000

	Frequency	Percent
Government health care facilities have enough facilities to take care of your need	3240	64.8
Doctors of public hospital (Government) are as good as those in private hospital	3770	75.4
Traditional medicines is only for the poor	2020	40.4
The rich have less health problem than the poor	2550	51.0
If the charges of the public hospital are the same as those of private hospital, I would prefer to go to private hospital	2980	59.6
Getting a health insurance is a loss of money	1780	35.6

Table – 8 shows 64.8 % of the respondent opined that Government health care service have enough facilities to take care of their health problem. 75.4% of the respondents think that Doctors of public hospital are as good as those in private hospital.51.0% believe that the rich have less health problem than the poor. 59.9% mentioned that if the charges of the Government hospital are the same as those of the private one then they prefer to be treated in the private hospital. 35.6% of the respondents believe that getting a health insurance is total loss of money.

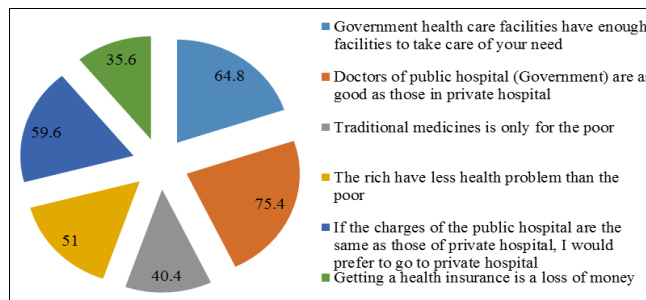


Fig 9

Conclusion

Cost sharing has been proved to be very effective to provide better health care facilities at all the level. i.e. primary, secondary and tertiary level hospitals.

Reviewing the findings of this study it was concluded that the majority of the respondents were from moderately socio-economic group and moderately literate. Therefore, all these socio-economic factors related to willingness to pay for the cost sharing. It is very interesting to note that the respondents were willing to share the hospital service cost provided the quality health care facilities are available at outdoor and indoor, secondary and tertiary level of hospital. It was revealed from the study that a good number of respondents were willing to actual cost sharing in the form of health insurance scheme (policy) for different health care services.

There is no denying the fact that the health and population sector of Bangladesh is confronted with the profound challenge of sustaining and enlarging its capacity to meet an ever-increasing demand for health. In part, the challenge requires greater efficiency and cost effectiveness from existing sources of health care in Bangladesh. It also requires the mobilization of additional resources if the challenge is to be met. Available evidence concerning Bangladesh household expenditures suggests that ability and willingness to pay additional amounts for quality health care does exist. As a result there is now a renewed interest in resource mobilization by the collection of user fees, or cost shared by service recipient through a variety of approaches.

Cost sharing offer a means for mobilizing additional funds for the health sector for quality of care improvements and extending coverage.

It was very interesting to note that cost sharing offer a means for mobilizing additional funds for the health sector for quality of care improvements and extending coverage. In addition to quality of care improvements, if implemented correctly cost sharing can also led to a number of other benefits for the health sector. These include improved efficiency, quality, and local accountability.

If elaborate studies are undertaken it may reveal real or true facts in regards to cost sharing in tertiary level hospital, thereby it will improve the health status of a country like Bangladesh.

Recommendations

From the study it has been observed that considerable progress has been made in Bangladesh in cost sharing. The following recommendations are made to further improve the progress of cost sharing.

1. Considering the present socio-economic conditions, the Government of the People's Republic of Bangladesh can formulate a policy to implement the cost sharing at all the tiers specially in tertiary level hospitals to generate more resources to support public health expenditure and improvement of the quality of service in the hospitals.
2. The role of the Government in this process is to create the market environment in which self selection can work. By legislation, GOB can alter the incentive structures facing patients and their families and friends when they come into contact with health care and its related services. By judiciously allowing user fees and self-selection in associated health care markets, the GOB can still raise revenue and subsidies the health of the poor who choose to take the commensurate market option. Such incentive mechanisms are generisable beyond user fees and indeed,

beyond the health sector but their analysis goes beyond the bounds of this research paper.

3. User fee impact must be studied closely to determine price elasticity of demand" estimates which take into account unofficial "charges as well as official ones. These "elasticity "estimates should then be used to reduce system leakage where it exists and can be controlled. Cost sharing implementation schemes should anticipate fullest absorption of consumer surplus in a manner that clearly benefits the most vulnerable elements of the population.
4. Quality features should be linked with ability to pay and willingness -to pay information so that user fees can be collected in a dynamic manner i.e. one that anticipates the multiple perceptions of quality possible across income groups and between professionals and the general public.
5. User fees collection should be maximized by application in the outpatient area of hospitals if it is clear that the poor will not be damaged in the process.
6. Where a reasonable split can be attained between hotel and the food services at a facility and medical and professional areas of judgment, user fees should be applied through the mechanism of self selection.

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