

Measuring Satisfaction of the Elderly People with Healthcare in Bangladesh

JM Abdullah

Department of Public Administration, University of Rajshahi, Rajshahi 6205, Bangladesh.

Abstract:-Applying both the qualitative and quantitative analytical approach this study tries to measure satisfaction of the elderly people with health services. Mainly primary data collected through survey, focus group discussions and interview with key informants is used for the research. Weighted average values of satisfaction show that elderly people living in rural and semi-urban areas are satisfied with minor variance and statistical tests find no significant difference between the areas. Gender segregated analysis also depict similar scenario with little variance. In-depth discussions show some contrast. Healthcare system in the country has its limitations to deliver services to the elderly. Despite shortages in service delivery they are satisfied with majority of the indicators which is due to their low sense of entitlement of healthcare.

Key words: Elderly, healthcare, satisfaction

I. INTRODUCTION

The health sector occupies an enormously important position in ensuring sustainable overall socio-economic advancement of a country like Bangladesh (Andaleeb et. al., 2007). With population aging in scenario, health of the elderly people (aged between 60 and 90 years) becoming significant issue. Elderly population will increase over time and it is estimated that current aged people which is 7.1 per cent of the total population will rise to 9.30 percent by the 2025 and 22.3 percent by 2050 (United Nations, 2017). The male-female ratio of the aged is respectively 8.2 and 7.5 per cent in rural areas and 5.5 percent each in urban areas. This scenario shows that the country will be an aged nation within this century with relatively poor socio-economic condition, which has its far reaching consequences.

Elderly people have some needs pertaining to medical, financial and social. Elderly people require proper healthcare and nursing as their functional and cognition ability decline with aging. Most of the elderly people in Bangladesh face some basic problems, such as poor financial support, senile diseases, and absence of proper health and medicine facilities, exclusion and negligence, deprivation, and socio-economic insecurity (Islam & Nath, 2012).

Healthcare delivery is a daunting challenge area of the Bangladesh's healthcare system. The country has three tiers of health services and all types of healthcare such as curative, preventative, dental etc. are delivered through these system. Primary health services are given through community clinics, union sub-centres at union level, and upazila hospitals. Secondary health services are given through upazila hospitals

and district hospitals, and tertiary healthcare is given through district and national-level hospitals and health institutes. Tertiary and secondary health services are also given by private hospitals and clinics, which are mostly urban centric. But the existing health service system does not have any specific arrangement for the aged such as separate unit or prioritized services for them (Abdullah et. al., 2018). They are supposed to receive general and specialist health services out of the existing system. Positive association between health and education is well established (Ross & Wu, 1995). Education rate in the country was not high when today's aged people were in their childhood four or five decades ago. Majority of the aged people live in rural areas with low education level, which sometimes cause their low sense of entitlement of healthcare.

Healthcare of the growing number of elderly people of which majority live in rural and semi-urban areas is a significant issue. Still around 65 percent people live in rural areas in the country (The World Bank, 2016). All the tertiary healthcare structures are located in urban centres. These scenarios pose the question how much elderly are satisfied with the health services delivered to them in rural and semi-urban areas. This study is designed to identify the gap and subsequently help addressing the causes.

II. METHODS

This descriptive research applied both the quantitative and qualitative approaches in analysis. It is based on primary data that were collected from elderly people living in rural and semi-urban areas. Urban areas were not considered in the study as these have relatively better health facilities in the country. Survey, focus group discussions (FGD) and interviews with key informant (KI) were the tools for data collections.

Literature reveals that the concept of satisfaction is complicated (Heidegger et. al., 2006), irrespective of the area in which it is studied. Satisfaction on healthcare is a multidimensional concept; not yet tightly defined; and part of an apparently yet to be determined complex model (Gill & White, 2009). This study applies some selected indicators - satisfaction in availability of health service, satisfaction in doctor's attention, doctors explain purpose of medical test, doctors explain test results, nurses give attention, emergency care facilities, maintenance of medical records, hospital environment and information dissemination on health - to understand the level of satisfaction.

A southern district Khulna and a northern district Rajshahi were purposively selected and one upazila from each district was picked randomly and samples were selected randomly from the elderly people. The reasons for selecting these districts are percentage of elderly people aged between 60 and 90 years in these districts are consistent with the national average and geographically these districts are average in size and total population also represents average population size among the districts in the country. A total of 93 (calculated sample size 100) (34 female and 59 male respondents) elderly people were surveyed. The following formula of Yamane (1967) with $\pm 10\%$ level of precision is used to fix the sample size (Yamane, 1967).

$$n = \frac{N}{1 + N(e)^2}$$

Here, n = sample size; N = target population; e = level of precision.

Four FGDs (with five to six in each group) incorporating elderly people who have experiences in receiving health services from government hospitals as well as private sector and knowledge on health service system and three KIs incorporating medical professionals and development professionals working nationally on elderly healthcare issues were interviewed to collect qualitative data. Participants of focus group discussions and key informants were selected purposively. The data collection was carried out in December 2015 and January 2016.

This study replicates a Likert-type rating scale as satisfaction measurement instrument developed by Hinshaw & Atwood (1982). A five-point 'Likert scale' was applied to assess the level of satisfaction of the participants. Weighted Average Index (WAI) was used to interpret the level of satisfaction. Assigned values of WAI are: strongly dissatisfied = -2.0 to -1.01; dissatisfied = -1.0 to 0.01; neutral = 0.00; satisfied = 0.01 to 1.00; strongly satisfied = 1.01 to 2.00. The interpretation of satisfaction scores is not in absolute terms as it is based on social scales. On ethical ground, no identities of participants are exposed and pseudo names are used.

III. FINDINGS AND DISCUSSION

Satisfaction on health services by place of living

Respondents are satisfied (Weighted Average Index = 0.18, 0.47) with the treatment available at the upazila hospitals (Table 1). However, satisfaction of rural respondents is close to neutral value (relatively low WAI). Their satisfaction is about basic healthcare and in some cases secondary treatment as upazila hospitals lack specialist doctors and sophisticated diagnostic facilities necessary for elderly people. Research in the context of Bangladesh found that satisfaction is determined by the cultural background of the people and the dilemma is that though optimally care is capable in meeting both medical and psychosocial needs, but in reality care that meets all medical needs may fail to meet the client's

emotional or social needs. While discussing with a key informant Mr. AH, a development professional who works on elderly healthcare, the following views came out on why they are satisfied,

"The health services elderly people are getting now is far better than they got in their childhood or adult stages in 40/50 years back. Due to their poor literacy level and their living places they even do not have clear idea on what advanced healthcare facilities they can get."

Respondents were satisfied with doctor's attention towards them (WAI = 0.06, 0.40) while receive treatment (Table 1). However, the WAI values suggest that respondents from rural area are close to neutral point of view (relatively low WAI value). It indicates that rural respondents have lower satisfaction level on doctor's attention than participants in semi-urban area. Research found that doctor's service orientation is the most important factor for patient satisfaction (Andaleeb et al., 2007). During a FGD in Rajshahi question was asked on the topic and their narrations contradict the survey respondents. One participant Mr. B said,

"Sometimes doctor spend very short time in examining patient and prescribing medicine. They (doctors) finish the process in a hasty manner that causes annoyance. Even doctors do not want to hear details from the patients."

Common allegations found during FGDs that doctors spend time talking in phone while examining patients and they examine patients in a quicker manner. Allegation of attending medical representatives while on duty was also found. During interview with a KI Mr. M, who was professionally a doctor, explains the matter. He said,

"Doctors receive calls to give medical advises, although they receive calls of family and friends sometime. On allegation of low consultation time he explains that they examine patients in quick manner which is due to large volume of patients."

This reason was found legitimate as there are only 3.8 physicians per 10,000 people (irrespective of age) in the country (Director General of Health Services, 2015). Mr. M further said,

"Medical representatives visit us to brief about new medicines. We try to maintain a time slot for their visit which is mostly beyond our duty hours. Usually we do not allow their visit during office hours."

Respondents in both the rural and semi-urban areas are satisfied (WAI = 0.47, 0.87) on the extent of doctor's explanation of reason of medical test (Table 1). They are also satisfied (WAI = 0.59, 0.95) on explanation of diagnosis result. However, respondents of semi-urban area have views close to strongly satisfied (relatively higher WAI value) in both the indicators, which indicate that respondent of semi-urban area

have higher level of satisfaction than rural area. Research shows that upazila hospitals have shortage of sophisticated diagnosis equipment and only some simple medical tests can be done there (Abdullah et al., 2018). What happen during this situation came out during a FGD in Khulna. One participant explained the issue in the following way,

“If complicated diagnosis is required, doctors suggest going to private diagnostic centres as upazila hospitals do not have these facilities.”

Reasons for their satisfaction become evident in the discussion of KI Mr. N, a development professional who works on public health issues. He said,

“Sometime doctors do not explain the reasons of medical test due to technicality which the patients would not understand. Doctors usually explain the simple reasons as technical aspect sometime become very difficult to make the patients understand as their education levels are not high. The same reason is applied in explanation of diagnosis result.”

Another KI Mr. AH gave another perspective on why respondents in semi-urban area have higher level of satisfaction. He elaborated in the following way,

“Elderly people those live in semi-urban area have higher income level than that of rural area and they can afford higher cost of specialized hospitals in public as well as private sector where patients are handled with care. Explaining the reasons of medical test and test results are done with care.”

Table 1: Satisfaction on health services by place of living

Indicators of satisfaction	Place of living	WAI	Assessment level	Sig. value (T-test)
Satisfaction on availability of health services	Rural	.18	S	.229
	Semi-urban	.47	S	
Doctor's attention to patients	Rural	.06	S	.166
	Semi-urban	.40	S	
Doctors explain purpose of medical test	Rural	.47	S	.108
	Semi-urban	.87	S	
Doctors explain diagnosis report	Rural	.59	S	.163
	Semi-urban	.95	S	
Attention of nurses	Rural	.22	S	.813
	Semi-urban	.28	S	
Emergency care	Rural	.57	S	.905
	Semi-urban	.60	S	
Maintenance of patient records	Rural	-1.27	SD	.054
	Semi-urban	-1.71	SD	

Hospital environment	Rural	.21	S	.841
	Semi-urban	.26	S	
Health information dissemination	Rural	-.08	D	.153
	Semi-urban	.34	S	

*Significant at 95% confidence level

Assessment levels: Strongly Dissatisfied=SD; Dissatisfied=D; Neutral=N; Satisfied=S; Strongly Satisfied=SS.

Respondents both in the rural and semi-urban areas were satisfied (WAI=0.22, 0.28) with attention of nurses to the patients (Table 1). Although WAI value indicates that their perceptions on satisfaction are close to neutral value (relatively lower WAI value). Nurses-population ratio in the country is 1.15 nurses per 10,000 populations (Director General of Health Services, 2015). With the ratio in place it hard to get services of nurse all the time. An explanation was found why their satisfaction level is very close to neutral value during a discussion with a key informant Mr. N. He explains,

“Services of nurse are most necessary when patients are admitted to the health outlets. As upazila-level health outlets are not equipped with doctors and equipment to treat all diseases of the aged, they usually receive outdoor services from there. Assistance of nurses is available during outdoor services as they have to assist doctors, but their services are not available all the time when people take inpatient department services.”

Emergency medical care includes immediate transferring of patients to hospital and instant life support.

Respondents in rural and semi-urban are satisfied (WAI=0.57, 0.60) with emergency care they get from upazila hospitals (Table 1). Similar views also came out during FGD in Khulna. One participant said,

“Upazila hospital is not far away and in emergency condition a patient can easily be shifted to there by ambulance or even locally available transportation facilities. Common life support equipment such as oxygen cylinders are also available in upazila hospitals.”

Regarding maintenance of patient records in hospitals, respondents are strongly dissatisfied (WAI= -1.27, -1.32) (Table 1). People in rural and semi-urban areas go to public hospitals due to low cost, free medicines and proximity. The reasons of strong dissatisfaction become clear from opinion of participants of a FGD in Rajshahi. They expressed their frustration due to more or less identical reason. They said,

“In upazila hospitals, names are recorded as patients are to register their name with paying a nominal amount of 10 taka. If the same patients go there after six months or a year, no records are found regarding

his/her diseases or medicine prescribed. If the patients do not preserve their documents, that records will not be found.”

Perception on hospital environment is satisfactory (WAI= 0.21, 0.26) to the respondents (Table 1). However, satisfaction level is close to neutral value (relatively low WAI value) in both the areas. Similar perception came in support of the above from a FGD in Khulna that highlighted better hospital environment. One participant explains,

“Hospital buildings are better than previous time and no medical wastes are found here and there. All upazila health complexes (new buildings) have ramp.”

Contradictory information came out at the same discussion when Mr. D said toilets of the hospitals are not clean. Floor is not clean. He further said,

“Many medical representatives gather at the hospitals compound. Sometimes their number exceeds the number of patients. They meet doctors while the doctor is on duty, which sometime prolong the waiting time of patients.”

Arrangements of dissemination of health related information is dissatisfactory (WAI= -.08) to the respondents of rural area and satisfactory (WAI= 0.34) of semi-urban area (Table 1). However, WAI values indicate that both the negative and positive values are close to neutral value. Regarding information dissemination system in upazila level hospitals KI Mr. Nsaid,

“Information search and retrieval system in upazila hospitals are not good. Hospitals in district and national levels and private hospitals have comparatively better arrangements.”

All the WAI values and their corresponding assessment levels, except maintenance of patient records which is strongly dissatisfactory and information dissemination arrangement which is dissatisfactory, are satisfactory. Independent samples test found no statistically significant difference between rural and semi-urban areas in their satisfaction on health services. Respondents in rural and semi-urban areas were satisfied with the basic health services they got from upazila level hospitals. These hospitals have dearth of specialist doctors and diagnostic facilities and with all these limitations respondents are satisfied. But qualitative data showed that there have elements of dissatisfaction particularly on lack of specialist doctors, doctor’s attention, insufficient of services of nurses, and health information system. Research showed that quality of healthcare in public sector hospitals is still a great concern in Bangladesh (Siddiqui & Khandaker, 2007). This dissatisfaction sent people abroad for quality healthcare. Bangladeshis are seeking healthcare abroad increasingly and this is not limited to affluent people; many people now-a-days use their savings to go overseas to get quality healthcare (Aziz, 2015).

Satisfaction on health services by gender

Both the elderly male and female respondents are satisfied (WAI= 0.30, 0.40) with the available health services in upazila hospitals (Table 2). Gender disaggregated values also show there is no difference in perception on satisfaction. The reason is that (mentioned in earlier section) the healthcare facilities elderly people are getting now is far better than they got in their childhood or adult stages of life in 50/60 years back. Due to their poor literacy level and their living place they even do not have clear idea on what advanced healthcare facilities they can get. Although WAI values show no difference in perception irrespective of male and female, but female participants made some points during FGDs. They mentioned,

“Sometime we (women) face womanly problems. If the doctor becomes male, we feel shy to discuss all our problems with doctor. We feel comfortable to discuss our problems with woman doctor.”

Regarding satisfaction on doctor’s attention to the patients, both the male and female are satisfied (WAI= 0.25, 0.24) (Table 2). Although WAI values indicate their perception on satisfaction is close to neutral value (relatively lower WAI value). Doctors usually attend the patients carefully. Some allegations are also there such as they do not want to hear details about the problems, speak in phone or attend medical representatives (mentioned in earlier section). These are common issues across health sector and it is not that one gender affected more and another less. Doctors examine patients in quick manner due to large volume of patients and they receive phone calls mostly to give medical advices. This is a common scenario in the country. Health workforce data of the country showed that 70% of the doctors are male and 30% female (Director General of Health Services, 2015), and it is difficult to make the gender balance in health workforce immediately.

Both the male and female are satisfied (WAI=0.63, 0.78) at doctor’s explanation regarding necessity of medical test. The reasons are similar as discussed in the earlier section. Nothing different happened irrespective of male and female.

Table 2: Satisfaction on health services by gender

Indicators of satisfaction	Gender	WAI	Assessment level	Sig. value (T-test)
Satisfaction on availability of health services	Male	.30	S	.719
	Female	.40	S	
Doctor’s attention to patient	Male	.25	S	.973
	Female	.24	S	
Doctor explain purpose of medical test	Male	.63	S	.590
	Female	.78	S	
Doctor explain diagnosis report	Male	.60	S	.060
	Female	1.12	SS	

Emergency care	Male	.47	S	.227
	Female	.76	S	
Nurses' attention	Male	.19	S	.491
	Female	.37	S	
Maintenance of patient records	Male	-1.5	SD	.677
	Female	-1.6	SD	
Hospital environment	Male	.20	S	.630
	Female	.32	S	
Information dissemination	Male	-.06	D	.067
	Female	.50	S	

*Significant at 95% confidence level

Assessment levels: Strongly Dissatisfied=SD; Dissatisfied=D; Neutral=N; Satisfied=S; Strongly Satisfied=SS.

Regarding explanation of diagnosis result, it is satisfactory for male (WAI=0.60) and strongly satisfactory (WAI=1.12) for female (Table 2). Physicians usually explain the simple reasons as technical aspect sometime become very difficult to make the patients understand as their education levels are not high. Explanation of this variance came out during discussion with a key informant. He explained,

“Financial ability of male respondents, earning member in family, can afford to receive treatment in district or national level hospitals or private clinics with better facilities which give them options to compare on how doctors explain the result. On the contrary, women in rural area have to rely on his son or daughter or husband for healthcare cost. That is why they mostly receive healthcare from upazila health complex. This is the cause of difference in degree of satisfaction between male and female.”

Respondents of both the gender are satisfied (WAI= 0.47, 0.76) on emergency health care (Table 2). Explanation is similar made in earlier section. Respondents of both the gender are satisfied (WAI=0.19, 0.37) with attention of nurses to the patients (Table 2). The WAI value indicates that their perception on satisfaction is close to neutral value (relatively lower WAI value). Hadley et. al., in their research found that nurses in government hospitals in Bangladesh spent only 5.3% of their working time in direct contact with their patients (Hadley & Roques, 2007). Moreover, health workforce data shows that there are 1.15 nurses per 10,000 populations in the country (Director General of Health Services, 2015). That is why respondents are satisfied which is close to neutral value.

On maintenance of patient records both the male and female respondents are strongly dissatisfied (WAI= -1.50, -1.60) (Table 2). Explanation is made in earlier section irrespective of gender and place of living. Hospital environment is satisfactory (WAI= 0.20, 0.32) to both male and female (Table 2). But WAI values suggest that their satisfaction level is close to neutral value (relatively lower WAI value).

Perception of satisfaction on hospital environment is similar irrespective of gender and explanation is made in earlier section.

Health information dissemination arrangements satisfied female (WAI=0.50), but dissatisfied male (WAI= -.06) (Table 2). Health information includes different aspects such as disease detection, health improvement, life style information etc. Jahan(2006) in her research found dismal scenario of effect of health information (Jahan, 2006). She found that traditional health literacy programme in Bangladesh failed to bring expected change in community to improve health. Regarding health information dissemination one FGD participant reflected the following views,

“Most of female in rural and semi-urban areas mostly receive treatment at UHC, because they cannot go to district or national level hospitals or private clinic due to financial incapability. They remain satisfactory what they get. But their male counterparts sometimes take services from private hospitals or district or national level hospitals and they saw better information dissemination system there that is why they remain dissatisfied with the information dissemination of upazila hospital.”

All the WAI values and their corresponding assessment levels, except maintenance of patient records which is strongly dissatisfactory and information dissemination arrangement which is dissatisfactory, are satisfactory. Explanation of diagnosis report is strongly satisfying. Independent samples test found no statistically significant difference between male and female in any indicator. Qualitative data showed variance in satisfaction with information dissemination. Male become dissatisfied on information dissemination because their exposure to better services in private sectors in comparison to upazila-hospitals and opposite reason is applicable for female.

IV. CONCLUSION

This research measured the perception of satisfaction with healthcare of the elderly people living in rural and semi-urban areas. Results show that they are satisfied with most of the indicators with little variance. But in-depth discussions with the elderly reveal some contrasts which are more practical. Research reveals concern of quality of healthcare in public hospitals. Even financially capable people prefer receiving treatment abroad due to this concern. Vital issues that delimit the service delivery to the aged are very conspicuous such as absence of geriatricians as well as sophisticated diagnosis equipment in upazila-level health outlets. Other issues such as ratio of general physicians and patients, nurses and patients, and poor records management are catalysts of service delivery. Despite these deficiencies in the healthcare system elderly people living in rural and semi-urban areas are satisfied. It is due to their poor sense of entitlement of healthcare and the reason lies in their low level of education

as well as financial condition that bar them receiving tertiary level health facilities.

ACKNOWLEDGEMENT

I am grateful to the respondents/participants of this research.

Conflicting interest: No conflicting interest to declare.

Funding: No funding received for this research.

REFERENCES

- [1]. Abdullah, J. M., Ahmad, M. M., & Saqib, S. E. (2018). Understanding accessibility to healthcare for elderly people in Bangladesh. *Development in Practice*, 28(4), 1–10. <https://doi.org/10.1080/02699931.2011.628301>
- [2]. Andaleeb, S. S., Nazlee, S., & Shahjahan, K. (2007). Patient satisfaction with health services in Bangladesh. *Health Policy and Planning*, 22(4), 263–273. <https://doi.org/10.1093/heapol/czm017>
- [3]. Aziz, M. (2015, March 15). Seeking help abroad: the rising trend of overseas healthcare. Retrieved 4 April 2018, from <http://www.thedailystar.net/seeking-help-abroad-40605>
- [4]. Director General of Health Services. (2015). *Health Bulletin 2015*. Dhaka.
- [5]. Gill, L., & White, L. (2009). A critical review of patient satisfaction. *Leadership in Health Services*, 22(1), 8–19. <https://doi.org/10.1108/17511870910927994>
- [6]. Hadley, M. B., & Roques, A. (2007). Nursing in Bangladesh: Rhetoric and reality. *Social Science & Medicine*, 64(6), 1153–1156. <https://doi.org/10.1016/j.socscimed.2006.06.032>
- [7]. Heidegger, T., Saal, D., & Nuebling, M. (2006). Patient satisfaction with anaesthesia care: What is patient satisfaction, how should it be measured, and what is the evidence for assuring high patient satisfaction? *Best Practice & Research Clinical Anaesthesiology*, 20(2), 331–346. <https://doi.org/10.1016/J.BPA.2005.10.010>
- [8]. Hinshaw, A. S., & Atwood, J. R. (1982). A Patient Satisfaction Instrument: precision by replication. *Nursing Research*, 31(3), 170–175. <https://doi.org/10.1097/00006199-198205000-00011>
- [9]. Islam, M. N., & Nath, D. C. (2012). A Future Journey to the Elderly Support in Bangladesh. *Journal of Anthropology*, 2012, 1–6. <https://doi.org/10.1155/2012/752521>
- [10]. Jahan, R. A. (2006). Promoting health literacy : a case study in the prevention of diarrhoeal disease from Bangladesh. *Health Promotion International*, 15(4), 285–292. <https://doi.org/10.1093/heapro/15.4.285>
- [11]. Ross, C. E., & Wu, C. (1995). The Links Between Education and Health. *American Sociological Review*, 60(5), 719–745.
- [12]. Siddiqui, N., & Khandaker, S. A. (2007). Comparison of Services of Public , Private and Foreign Hospitals from the Perspective of Bangladeshi Patients. *Journal of Health, Population and Nutrition*, 25(2), 221–230.
- [13]. The World Bank. (2016). Rural population (% of total population). Retrieved 5 April 2018, from <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?view=chart>
- [14]. United Nations, D. of E. and S. A. P. D. (2017). World Population Prospect. Retrieved 4 April 2018, from <https://esa.un.org/unpd/wpp/DataQuery/>
- [15]. Yamane, T. (1967). *Statistics: An Introductory Analysis* (2nd Ed). New York: Harper and Row.