

A study on patient satisfaction at a Chest Clinic in Sri Lanka

G.S.P Ranasinghe¹, Sunil De Alwis², P.W.C. Panapitiya²

* Ministry of Health and Indigenous Medical Services

** Ministry of Health and Indigenous Medical Services

DOI: 10.29322/IJSRP.10.07.2020.p10392

<http://dx.doi.org/10.29322/IJSRP.10.07.2020.p10392>

Abstract- Patient satisfaction is an important and commonly used indicator for measuring the quality in health care. A study was carried out at a Chest Clinic in Sri Lanka. A simple random sampling was used to select 60 patients attending to the clinic. Self-administered questionnaire was used to collect quantitative data and observation was done at the clinic and collected qualitative data. Results showed that the overall mean satisfaction which is, the Human and Non-Human aspect the value was 4.074 which is marginally satisfactory level. The mean satisfactory level for services provided by each category that is for Doctor 4.429, Nurses 4.148, and Minor staff is 4.074 respectively, whereas, Clinic services like responsiveness showed 3.893 which is below satisfactory level. This study elaborates that human resource services (Doctors, Nurses and Minor Staff) and non-human resources (clinic services) affect patient satisfaction. According to the study it could be conceptualize patient satisfaction as dependent variable affect by the independent variables which are services by doctors, nurses, minor staff and clinical services (non-health aspect). This conceptualization has to be proven by further studies on same area.

Index Terms- Patient Satisfaction, Factors affecting

I. INTRODUCTION

Patient satisfaction is an important and commonly used indicator for measuring the quality in health care. Patient satisfaction affects clinical outcomes, patient retention, and medical malpractice claims. It affects the timely, efficient, and patient-centered delivery of quality health care. Patient satisfaction is thus a proxy but a very effective indicator to measure the success of doctors and hospitals [1].

The study done by Kamra, Singh and Kumar De, looked into the factors affecting patient satisfaction and their relationships with respondent demographics for tertiary-level health-care services. The study has revealed, factors which affect patient satisfaction are convenience, affordability, fulfillment of clinical requirements, nursing and staff care, general behaviour of doctors, registration and administrative procedures, infrastructure and amenities, professional behaviour of doctors and the facilities at reception and out-patient department area. It also found that health insurance and various categories of respondent demographics, namely gender, residence, education and occupation are significantly different statistically ($P < 0.05$) with respect to the identified factors [2].

The study done by Fang J, Liu L, Fang P, found that Medical staff's services were the most important factor affecting patient satisfaction, while demographic characteristics of patients had no significant effect on satisfaction, while Hospital facilities and environment had a lower degree of satisfaction level [3].

A cross-sectional study done in public hospitals in Shanghai, People's Republic of China to find out patient satisfaction. A 5-point Likert scale rating was used to assess items. The study revealed that an increase in satisfaction in the areas of doctors' and nurses' service attitudes, and expenditure and environment which contributes to improve the overall satisfaction levels. Responsible health management departments should pay attention to patient satisfaction and improve the quality of relevant health services [4].

National Programme for Tuberculosis Control and Chest Diseases (NPTCCD) is the central organization of the Ministry of Health headed by the director and is responsible for preventing and controlling Tuberculosis (TB) and other chest diseases in the country. Its mission is to contribute to the socio-economic development of the nation by committing ourselves to create a TB free Sri Lanka by means of formulating policies, planning, coordinating and monitoring of TB and chest diseases control activities in the country [5].

The NPTCCD acts as the center for the technical guidance and the activities of the National Programme for Tuberculosis Control and Chest Diseases are decentralized and it functions through a network of district chest clinics, branch chest clinics and two chest hospitals and in close coordination with regional health services, other general health institutions and community organizations. Central chest clinic at Medical Research Institution is such institution carry out management of TB patients by mode of outdoor clinic setup [6].

II. METHODOLOGY

Objective of this study is to carry out patient satisfactory at a central chest clinic. Study setting was Central Chest Clinic (CCC) MRI Boralle, Sri Lanka. Study design was a descriptive cross-sectional study. Study Population was patients attending at Central Chest Clinic (CCC) MRI Boralle. Self-administered questionnaire was given to patients to collect quantitative data and observation was done to assess the clinic status.

III. SAMPLE SIZE

Sample calculation done according to below formula [7].

$$\text{Formula for Sample size} = N = \frac{Z^2(p)(1-p)}{d^2}$$

$N = \text{Sample size}$

$Z = \alpha \text{ value} = 5\% = 1.96$

$P = 0.5$

$d = \text{Precision} = 15\% = 0.15$

$$N = \frac{1.96^2(0.5)(0.5)}{0.15^2} = 46.68$$

$$N = 47 + 47 \times 10\% (\text{Non - Respondent Rate}) = 47 + 4.7 = 51.7 = 52$$

Total sample of 60 patients were taken. Simple random sampling was used to select patients.

Data Collection was done by the principle investigator and the data was analyzed using SPSS statistical package. Administrative clearance was taken from relevant authorities and the inform consent was taken from the patients before giving the questionnaire and autonomy was achieved.

IV. RESULTS

Sex Distribution

Table 1 – Sex Distribution

	Frequency	Percent	Cumulative Percent
Male	20	33.3	33.3
Female	40	66.7	100.0
Total	60	100.0	

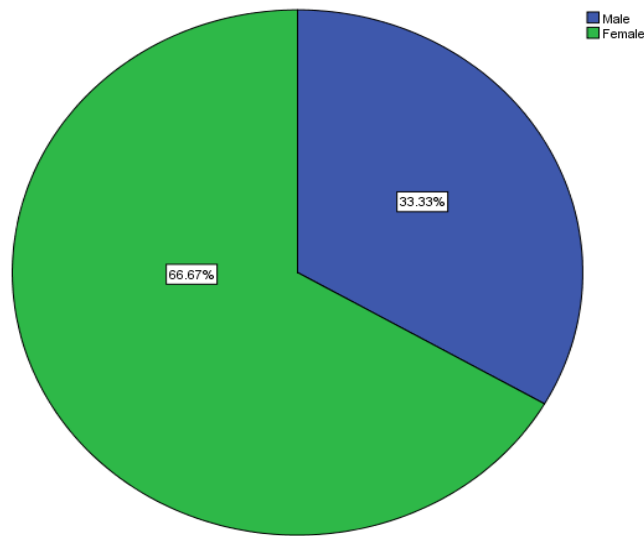


Figure 1 –Sex Distribution

Ethnicity Distribution

Table 2 – Distribution of Ethnicity

		Frequency	Percent	Cumulative Percent
Valid	Sinhala	54	90.0	90.0
	Tamil	4	6.7	96.7
	Muslim	2	3.3	100.0
	Total	60	100.0	

Religion Distribution

Table 3 – Distribution of Religion

		Frequency	Percent	Cumulative Percent
	Buddhist	46	76.7	76.7
	Catholic	8	13.3	90.0
	Christian	4	6.7	96.7
	Islam	2	3.3	100.0
	Total	60	100.0	

Education Level

Table 4 – Distribution of Education Level

	Frequency	Percent
No Schooling	2	3.3
Grade 1 - 5	2	3.3
Grade 6 - 11	6	10.0
O/L	18	30.0
A/L	18	30.0
Certificate	2	3.3
Diploma	6	10.0
Degree	4	6.7
Post Graduate	2	3.3
Total	60	100.0

Overall Satisfaction level of the services provided by the clinic and each category of staff

Table 5 – Distribution of Satisfactory level according to the services provided by Doctors, Nurses, Minor staff, Clinic Services and overall satisfactory level

	Mean	Median	Mode	Std. Deviation	Minimum	Maximum
Doctors	4.429	5	5	0.735	2	5
Nurses	4.148	4	4	0.8105	2	5
Minor staff	4.074	4	5	0.9877	2	5
Clinic Service	3.893	4	4	0.9081	2	5
Overall satisfaction	4.074	4	4	0.9081	1	5

V. OBSERVATION

Non-health aspects which are basic amenities like toilets and safe drinking water were limited. The clinic was overcrowded and there was no appointment system. Chairs were less compared to number of patients.

VI. DISCUSSION

The Sex distribution showed 67% females and 33% males and majority were Sinhala People (90%) who attended the clinic. Majority who attended the clinic were Buddhist (77%). The education level showed well as > 86% had education level of Ordinary Level and above. This showed majority had good literacy level.

The satisfaction level was assessed using the Likert Scale in the Questionnaire. The value for Likert Scale was given below

1. Highly Unsatisfactory
2. Unsatisfactory
3. Unsatisfactory or Satisfactory / Medium
4. Satisfactory
5. Highly Satisfactory

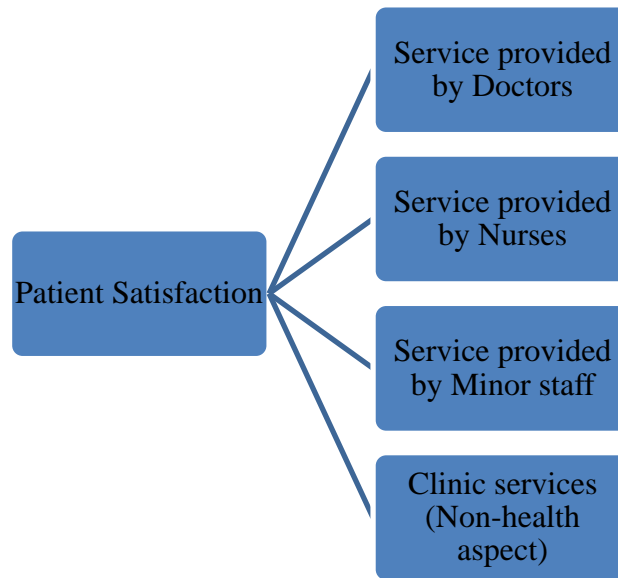
Human resource services (Doctors, Nurses and Minor Staff) were assessed with the Likert Scale and the mean satisfactory values were given in table 5. The mean satisfactory levels for services provided by each category as follows, and for

Doctor 4.429, Nurses 4.148, and Minor staff is 4.074 respectively. All the values showed above 4 and considered as satisfactory level. General Clinic services like responsiveness showed 3.893 which is below satisfactory level. The overall service in the clinic which is, Human and Non-Human aspect the value was 4.074 which is marginally satisfactory level. These results reflect the similarity to the studies done by Kamra, Singh and Kumar De, Fang J, Liu L, Fang P, and Zhang L et al.

VII. CONCLUSION

The patients attending for the clinic were Sinhala Buddhist Community and had good education level with Female dominance. Overall service by the Central Chest Clinic showed satisfactory level as the value is 4.074. There was less satisfactory level for clinic services (non-health) aspect (Responsiveness). On observation of the clinic showed overcrowding and basic amenities like toilets and drinking facilities were limited. This could be reason for low satisfactory level. Accordingly, this study elaborates that human resource services (Doctors, Nurses and Minor Staff) and non-human resources (clinic services) affect patient satisfaction. According to these findings following model / conceptual frame work could be worked out and suggested.

Suggested model / conceptual framework as follows



According to this study the Dependent Variable could be define as Patient Satisfaction, where as independent variables could be defined as services provided by Doctors, services provided by Nurse, services provided by Minor staff and Clinic services. To validate this model further studies should be carried out.

VIII. RECOMMENDATIONS

- Similar studies should be done in details and in different setting to assess the factors affecting patient satisfaction.
- As the above model is worked out from this study, further researches should be carried out to validate this model.
- After validation, this model could be used to improve patient satisfaction by improving these areas.

REFERENCES

- [1] Prakash B. Patient satisfaction. *Journal of Cutaneous and Aesthetic Surgery*. 2010;3(3):151.
- [2] Kamra V, Singh H, Kumar De K. Factors affecting patient satisfaction: an exploratory study for quality management in the health-care sector. *Total Quality Management & Business Excellence*. 2015;27(9-10):1013-1027.
- [3] Fang J, Liu L, Fang P. What is the most important factor affecting patient satisfaction - a study based on gamma coefficient. *Patient Preference and Adherence*. 2019;Volume 13:515-525.

- [4] Zhang L, Chen H, Li M, Wang J, Xue C, Ding T et al. Factors influencing inpatients' satisfaction with hospitalization service in public hospitals in Shanghai, People's Republic of China. *Patient Preference and Adherence*. 2016;:469.
- [5] NPTCCD. Home [Internet]. NPTCCD. 2019 [cited 8 July 2020]. Available from: <http://www.nptccd.info/>
- [6] Ministry of Health, Nutrition and Indigenous Medicine. *Annual Health Bulletin 2016*. Medical Statistics Unit Ministry of Health, Nutrition and Indigenous Medicine; 2018 p. 150.
- [7] Daniel WW (1999). *Biostatistics: A Foundation for Analysis in the Health Sciences*. 7th edition. New York: John Wiley & Sons.

AUTHORS

First Author – Dr. Gamege Samantha Prabath Ranasinghe, MBBS, MSc in Medical Administration, MD in Medical Administration, MBA, Ministry of Health and Indigenous Medical Services gspr73@gmail.com
Second Author – Dr. Sunil De Alwis, MSc in Community Medicine, MD in Medical Administration, MBA, Ministry of Health and Indigenous Medical Services
Third Author – Dr. Lal Panapitiya, MBBS, MSc in Medical Administration, MD in Medical Administration, Ministry of Health and Indigenous Medical Services