Evaluating Public Out-Patient Care: Satisfaction Scores and Profile Characteristics of Diabetes Mellitus Patients

Aisha Jalil [1], Rubeena Zakar [2]

ABSTRACT

This description cross sectional survey was conducted to measure patient satisfaction with medical care provided in a public diabetes clinic located in Lahore and evaluate the group variations among patient's profile characteristics and mean satisfaction scores.
The scores were calculated based on the six dimensions of study tool i.e technical expertise of doctors, communication, interpersonal aspects, time dimension, availability of doctors and general satisfaction. In result the Higher mean patient satisfaction scores were associated with the unemployment, low education, female gender and being Christian. The negative skewedness indicated that majority of the recruited diabetes patients reported high satisfaction on the scale (80-86%).
It is concluded that higher satisfaction was associated with patient characteristics i.e unemployment, low educational attainment, being female and religious minority. The results suggested the need to develop socio-culturally appropriate interventions in order to improve the quality of diabetes care in public outdoor clinics of Pakistan.
KEYWORDS: patient satisfaction score, outpatient clinic, doctor-patient encounter, diabetes mellitus.

HOW TO CITE THIS:
Jalil A, Zakar R. Evaluating Public Out-Patient Care: Satisfaction Scores and Profile Characteristics of Diabetes Mellitus Patients. Isra Med J. 2017;9(2):114-16

INTRODUCTION

Medical encounter in out-patient clinic involves not only the immediate adherence to the clinical needs of patients, but also entails the provision of interpersonal and emotional support. Integrating the knowledge of behavioral sciences with clinical expertise is crucial for satisfying the patients seeking consultation in outdoor clinics. Pakistan ranks among the largest countries in the world with high prevalence of diabetes mellitus [1]. According to International Diabetes Federation, global prevalence is 8.3% and 5.1 million people died with diabetes mellitus in year 2013 [2]. Despite the growing diabetes population, health expenditure in South-East Asian countries accounted for less than 1% of the global health expenditure on the disease in year 2013 [3]. Pakistan is expected to have 12.8 million adults (20-79 years) with diabetes in 2035 [4]. It is a challenge for the doctors to satisfy the patients; working within a limited and inadequate physical structure of public sector out-clinics in Pakistan. Still the empirical evidence on the patient satisfaction with diabetes care provided in free of cost public clinics is scarce.

The assessment of patient outcomes is widely used to assess the quality of healthcare services. There is little empirical evidence about the satisfaction of diabetic patients seeking medical consultation in public outdoor clinics of Pakistan. Thus; the purpose of this study was to: (i) measure the satisfaction of diabetes mellitus patients; (ii) examine the group variations in patient demographic characteristics and mean satisfaction scores. The clinical significance of this study lies in the use of internationally validated questionnaire designed for patients with chronic disorders including diabetes mellitus. In addition, none of the recent researches focused on patient satisfaction in public diabetes out-patient clinics.

1. Doctoral Candidate in Sociology
2. Associate Professor of Public Health
Institute of Social and Cultural Studies,
University of the Punjab, Pakistan.

Correspondence to:
Aisha Jalil
Doctoral Candidate in Sociology,
Institute of Social and Cultural Studies,
University of the Punjab, Pakistan.
Email:aisha5@live.com

Received for Publication: 31-10-17
Accepted for Publication: 24-05-17

METHODOLOGY

This descriptive cross sectional survey was carried out in Jinnah Allama Iqbal Institute of Diabetes and Endocrinology, Lahore; during 22nd July, 2015 to 31st August 2015. The study tool Patient Satisfaction Questionnaire (PSQ 3) included six dimensions: technical expertise of doctors, communication, interpersonal aspects of medical encounter, time dimension, availability of doctors and general satisfaction. Note that the tool comprised of 50 items, however we used 36 excluding the financial cost subscale for unsuitability for the study context [5]. The tool was translated into Urdu and pre-tested with the patients similar to the selection criteria of this study.

The inclusion criteria used to identify the patients were: adult (18 years and above), diabetes mellitus and three previous visits of the same diabetes outpatient clinic. The patients in critical condition, permanent disability (e.g. deafness) and irregular

visits were excluded from the scope of this study. In addition, patients were asked to base their answers on the consultation received prior to the interview day; in order to cater the potential influences of researcher's presence on the performance of doctors. Informed verbal consent for the participation was sought from recruited patients. The methodology of this study was approved at multiple stages: Departmental Doctoral Panel Committee, Doctoral Program Coordination Committee, and Board of Advanced Studies and Research. The approval of Ethical Review Board, University of the Punjab was sought before data collection. Written permission was sought from the hospital administrator prior to the data collection.

Statistical Analysis of the Data: SPSS (Version 22.0) was used for data processing and analysis. The results are based on independent samples t-test. We measured patient satisfaction scores by following the scoring rules provided by Research and Development Health (RAND Health) [6]. A Likert scale of five response categories: strongly agree, agree, uncertain, disagree and strongly disagree; was used to measure patient satisfaction. The sub-scale scores ranges were: technical expertise= 10X5= 50, time provision=2X5=10, interpersonal aspects=7X5=35, communication=5X5=25, access/ availability=5X5=25 and general satisfaction= 6X5=30.

An overall patient satisfaction score was calculated by summing up all the sub-scale scores. The Kolmogorov-Smirnov test was performed to assess the normality of overall patient satisfaction scores, which indicated non-normality of data. Overall score for patient satisfaction was computed using compute variable function in SPSS. Using frequency distributions, the categorical variables of demographic characteristics were manually banded in two groups. The percentage of patients scoring high satisfaction scores was calculated by dichotomizing overall patient satisfaction score variable: Patient satisfaction scores (low/high); with median score as cut-point.

RESULTS

The results demonstrated statistically significant differences in the mean patient satisfaction scores across baseline characteristics: occupational status, education, gender, marital status and religion of the patients. The place of residence and age of respondent were found insignificantly associated with mean scores. Out of 1164 patients approached; 1128 consented to be interviewed. Overall, 984 (87%) of the patients in the sample were aged forty years and above. 854 (75.7%) diabetes patients came from different places located within Lahore city. 672 (59.6%) patients were not doing any paid job and 423 (37.5%) were employed. The mean PSS of unemployed was more than the employed counterpart. In the same way, the illiterate respondents' mean PSS (n=556, 130 ± 20) was more than the literates (n=539, 125 ± 23.5). PSS of females (n=672, 131.4 ± 19.3) was found to be more than that of males (n=423, 121.5 ± 24.3). The mean satisfaction score of married patients (n=957; 128 ± 21.5) is higher in contrast to respondents who are not in relationship (n=138; 123 ± 25) with p value= .031 (Table-I).

TABLE-I: SOCIAL DEMOGRAPHICS AND MEAN PATIENT SATISFACTION SCORE OF RESPONDENTS (N=1128)

Variables	Frequency (%)	Mean ± SD	t	P value^
Age			-1.68	.09
≤ 39	144 (12.8)	124.5 ± 28.7		
≥ 40	984 (87.2)	128 ± 21		
Permanent residence			-.022	.983
Within Lahore	854 (75.7)	127.6 ± 22		
Outside Lahore	241 (21.4)	127.6 ± 22.3		
Occupational status			4.37	.000
Not doing paid job	672 (59.6)	130 ± 20.9		
Employed	423 (37.5)	124 ± 23		
Education			3.88	.000
Illiterate	556 (49.3)	130 ± 20		
Literate	539 (47.8)	125 ± 23.5		
Gender			7.04	.000
Female	672 (59.6)	131.4 ± 19.3		
Male	423 (37.5)	121.5 ± 24.3		
Marital status			2.18	.031
Married	957 (84.8)	128 ± 21.5		
Not in Relationship	138 (12.2)	123 ± 24.7		
Place of residence type			1.81	.071
Rural	245 (21.7)	125.4 ± 23		
Urban	850 (75.4)	128.3 ± 22		
Religion			-2.27	
Christianity	35 (3.1)	136 ± 17.7		.023
Islam	1060 (94)	127 ± 22		

The statistical analysis showed that the mean patient satisfaction score (overall) was 127.6 ± 22. The negative skewedness of variable indicated that majority of the recruited diabetes patients reported high satisfaction on the scale. In this regard, the patient satisfaction measures ranged between 78 to 86% of the total sample.

DISCUSSION

We observed statistically significant differences in the mean patient satisfaction scores across occupational status, education, gender, marital status and religion. With regard to the level of patient satisfaction, our findings contradicted to some international studies that demonstrated lower estimates in Pakistan [7]. However, none of the recent studies, specifically studied the satisfaction of diabetes mellitus patients seeking consultation in public out-door diabetes clinics in Pakistan. Local studies have diversely stated the level of patient satisfaction in various clinical settings [8-10].

Empirical evidence from developed as well as underdeveloped countries revealed that higher patient satisfaction is associated with illiteracy, unemployment, poverty and female gender [11]. Likewise, previous satisfaction studies in Pakistan also revealed that poverty and gender are associated with PS [12]. Irrespective of how the healthcare is organized, continuous improvement in healthcare quality is essential in the settings: private sector; where consumer is well-aware about medical care as well as in the public sector that is mostly consumed by poor and illiterate patients[13].

LIMITATIONS AND STRENGTHS

The present study was subject to certain limitations: cross sectional design, lack of inter-hospital comparison, limited time and resources. However; large sample size, use of internationally tested tool and data collection by the primary author are the major strengths of this study.

CONCLUSION

Higher satisfaction was associated with patient characteristics: unemployment, low educational attainment, being female and religious minority. The results suggested the need to develop socio-culturally appropriate interventions in order to improve the quality of diabetes care in public outdoor clinics of Pakistan.

Author Contribution:
Jalil A: Designed study, collected and analyzed data and wrote the paper.
Zakar R: Supervised the study and reviewed the paper. Both agreed on the final version of this paper.

Disclaimer: None.
Conflict of Interest: None.
Source of Funding: None.

REFERENCES

1. International Diabetes Federation. Global diabetes score card: tracking progress for action 2014. Website: [https://www.idf.org/sites/default/files/EN_6E_Atlas_Full_0.pdf]
2. IDF Diabetes Atlas, 7th Edition. Brussels, Belgium: International Diabetes Federation, 2015. Website: [http://www.diabetesatlas.org]
3. Global Health Expenditure Database. Website: [http://data.worldbank.org/indicator/SH.XPD.PUBL.ZS]
4. Forouhi NG, Wareham NJ. Epidemiology of diabetes. Medicine (Abingdon, England : UK Ed). 2014; 42(12):698-702.
5. Jalil A, Zakar R, Zakar MZ, Fischer F. Patient satisfaction with doctor-patient interactions: a mixed methods study among diabetes mellitus patients in Pakistan. BMC Health Serv Res. 2017;17:155.
6. RAND. Basic guidelines for translating surveys. Website: [http://www.rand.org/health/surveys_tools/]
7. Worldwide Independent Network of Market Research. Doctor-patient global communication performance assessment by CAT. Media Report WIN; 2011. Website: [http://www4.ibope.com.br/download/relatorio_global.pdf]
8. Huda SA, Samani ZAA, Samani W. Perception about Family Physicians: Results of a Survey of Patients visiting Specialist Clinics for Treatment. J Pak Med Assoc. 2004; 54:589.
9. Irfan SM, Ijaz A, Farooq MM. Patient Satisfaction and Service Quality of Public Hospitals in Pakistan: An Empirical Assessment. Middle-East J Sci Res. 2012; 12(6):870-77.
10. Khattak A, Alvi MI, Yousaf MA, Shah SZA, Turail D, Akhter S. Patient Satisfaction – A Comparison between Public & Private Hospitals of Peshawar. Int J Collab Res Intern Med Public Health. 2012; 4(5):713-22.
11. Carlin CS, Christianson JB, Keenan P, Finch M. Chronic illness and patient satisfaction. Health Serv Res. 2012; 47(6):2250-72.
12. Khamis K, Njua B. Patients' level of satisfaction on quality of health care at Mwananyamala hospital in Dar es Salaam, Tanzania. BMC Health Serv Res. 2014; 14:400.
13. Morgan MW, Salzman JG, LeFevere RC, Thomas AJ, Isenberger KM. Demographic, Operational and Healthcare Utilization Factors Associated with Emergency Department Patient Satisfaction. West J Emerg Med. 2015; 16(4):516-26.