Prevalence and Determinants of Perceived Quality of Healthcare Among Clinic Attendees with Diabetes and Hypertension

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ABSTRACT

Aim: To determine the prevalence and determinants of perceived quality of healthcare (PQH) among persons with diabetes mellitus (DM) and hypertension (HTN) attending health centres in six parishes in Jamaica.

Methods: In this cross-sectional study, one hundred and fifty persons eighteen years and older attending health centres across six parishes having either DM or HTN were selected using simple random sampling. An interviewer-administered questionnaire was used and included questions developed by researchers to measure prevalence of PQH in the domains of clinician-client communication (CCC), emotional support (ES), patient education (PE), environment and facilities (EF) and overall satisfaction (OS). A waiver for ethical approval was granted by the UWI Ethics Committee. Data were analyzed using PSPP.

Results: The mean PQH scores for CCC and PE was 4.6 out of 5. There were significant differences in mean PQH scores for CCC by age groups, with younger adults having higher scores. The mean PQH score for the domains of EF was 4.7 out of 5, with significantly higher scores for those not in union and those with higher monthly income. The mean PQH scores for OS were 16.3 out of 32, demonstrating a low level of PQH.

Conclusion: There were high mean PQH scores for CCC, PE and EF but a low mean score for overall satisfaction with care received. These high levels of mean PQH scores suggest that the delivery of primary health care services in Jamaica is well perceived, however effort is needed in specific areas to improve overall satisfaction.

INTRODUCTION

Quality of care (QoC) according to the World Health Organization is "the extent to which health care services provided to individuals and patient populations improve health outcomes". In order to achieve this, "healthcare must be safe, effective, timely, efficient and people- centered" (WHO, 2017).

When examining the perceived quality of health care in other countries it was found to be satisfactory overall (Sanclemente-Anso et al, 2015; Nuri, 2019; Hawkins et al, 2016). According to WHO (2015), achieving quality standards improves effectiveness and utilization of health information and services (IPPF, 2015).

QoC, may be assessed according to the management of specific diseases such as Diabetes Mellitus (DM) and Hypertension.

Satisfactory QoC for patients living with DM plays a role in their willingness to adhere to prescribed treatment plans. Patients believed that a more patient-centered approach to management would help them cope with their condition, and adhere to their treatment plans. (Pera, 2011).

Similar to DM, the prevalence of Hypertension was found to be higher in low and middle-income households (40%) (WHO, 2015). In Jamaica, 25% of the population is living with Hypertension and the high prevalence of Hypertension amongst the population helps create a large economic burden (Figueroa, 2017). In a study conducted in Bangladesh, many patients reported only taking their anti-hypertensive medication when they were symptomatic and stopped when they were feeling better (Naheed, et al 2018). Lack of education as a result of inadequate consultation time may lead to complications and as a result low perceived QoC.

METHODS

A cross-sectional study was conducted to determine the prevalence and determinants of perceived quality of healthcare among persons 18 years and older with diabetes and/or hypertension.

The target population was all patients with diabetes and hypertension who were registered to see the doctor at health centres in six (6) parishes across Jamaica, namely: St. Ann, Trelawny, St. James, Hanover, Westmoreland and St. Catherine. A total of 150 persons were sampled using the probability sampling strategy, specifically, the simple random method.

Data was collected with the use of paper-based, interviewer-administered questionnaires which were administered face-to-face. The questionnaires consisted of 50 questions aimed at eliciting socioeconomic and demographic characteristics, data on health status, health visit and perceived quality of healthcare.

Quantitative data were analyzed with the assistance of PSPP for Microsoft Windows. P values 0.05 or less were regarded as statistically significant.

The principles enunciated in the FMS/UHWI Guidelines for the conduct of research and the Ministry of Health's Guidelines for the Conduct of Research on Human Subjects have been complied with.

RESULTS

Of the 150 persons interviewed with hypertension and/or diabetes mellitus, the majority (70.7%, n=106) were females. The mean age of the sample was 61.9 (standard deviation) [SD]= 13.0). The researchers developed five questions each to measure the perceived quality of healthcare (PQH) in the categories of clinician–client communication, the patient education and the environment and facilities. Three questions were also developed to measure the PQH related to emotional support and eight questions to measure the PQH related to their overall satisfaction with different aspects of their health centre experience. The items were coded as one (1) for perceived good quality and zero (0) for perceived poor quality. The internal reliability, as measured by Cronbach's alpha, for the items used to measure the PQH for clinician-client communication, environment and the facilities and emotional support was 0.5, and 0.7 for overall satisfaction.

Table 1 Mean PQH for Clinician-Client Communication (CCC) and Patient Education (PE), Emotional Support (ES), Environment and Facilities (EF) and Overall Satisfaction (OS) by Socioeconomic and Demographic Characteristics.

	Mean (SD)			
	CCC and PE	ES	EF	OS
Age Groups (years)				
18 − 35	5.0 (0.0)***	3.0 (0.0)	4.8 (0.5)	13.8 (3.6) *
≥ 36	4.6 (0.7)	2.8 (0.6)	4.7 (0.7)	16.4 (2.6) *
Sex				
Males	4.5 (1.0)	2.8 (0.7)	4.8 (0.5)	15.8 (2.6)
Females	4.7 (0.6)	2.8 (0.5)	4.7 (0.7)	16.5 (2.6)
Union Status				
In union	4.6 (0.9)	2.8 (0.6)	4.6 (0.8) *	16.3 (2.8)
Not in union	4.7 (0.6)	2.8 (0.5)	4.8 (0.5) *	16.3 (2.5)
Education				
Primary or below	4.7 (0.8)	2.9 (0.5)	4.7 (0.7)	16.4 (1.9)
Secondary	4.7 (0.6)	2.8 (0.5)	4.7 (0.6)	15.9 (3.2)
Vocational	4.3 (1.0)	2.7 (0.6)	4.5 (0.6)	16.9 (3.6)
Tertiary	5.0 (0.0)	2.7 (0.8)	4.8 (0.5)	16.3 (2.2)
Employment				
Employed	4.7 (0.7)	2.8 (0.5)	4.6 (0.8)	16.6 (2.9)
Unemployed	4.6 (0.7)	2.8 (0.6)	4.8 (0.6)	16.1 (2.4)
Income (JMD)				
<$28,000	4.6 (0.7)	2.9 (0.4)	4.7 (0.6) *	16.1 (2.3)
$28,000-$50,000	4.9 (0.3)	2.8 (0.6)	4.5 (1.0) *	16.6 (3.3)
$50,001-$70,000	4.3 (1.4)	2.6 (1.1)	4.9 (0.4) *	16.1 (1.1)
>$70,000	4.7 (0.8)	2.7 (0.5)	4.8 (0.5) *	17.8 (2.3)

* p < .050; ** p < .010; *** p < .001

PQH= Perceived quality of healthcare, **JMD** = Jamaican Dollars

The mean PQH for clinician-client communication was 4.6 (SD= 0.7), while the mean PQH for environment and the facilities was 4.7 (SD=0.6), using a range of 0-5, with higher scores indicating a greater PQH. The mean PQH for emotional support was 2.8 (SD= 0.5), using a range of 0-3. The mean PQH for overall satisfaction in the 18-35 years age group was 13.8 (3.6) and for the ≥ 36 years age group the mean was 16.4 (2.6).

This was statistically significant (p= .031). There were no statistically significant differences in the PQH for overall satisfaction by sex, union status, employment and income levels. For educational level, the assumption of homogeneity of variance was violated, ANOVA could not be reported.

CONCLUSION

This research project found that there was an overall high perception of quality of care received in the primary care setting particularly regarding the patient-clinician relationship. Furthermore, it was noted that patients withheld maximum scores for areas which they felt required improvement including the registration process, wait times and general staff deportment.

A study such as this can lead to tangible improvements in the delivery of health care services from a patient's perspective. It not only highlights the aspects of care that patients already appreciate but it also sheds light on areas to be improved with hopes that this will further encourage patient compliance and thereby lessen the burden on the secondary health care system.

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