Health service utilisation and attitude of healthcare providers towards women suffering from diabetes mellitus in Kiambu County, Kenya

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Abstract

A field study was undertaken in rural Kenya with two public health facilities as the research sites. The purpose of the study was to explore utilisation of formal health services and the attitude of health care providers towards women suffering from type 2 diabetes mellitus (T2DM). The study elements comprised a sample of 200 women. A structured questionnaire was administered; key informant interviews and focus group discussions were held to evaluate health service use and the attitude of health providers. The age of the respondents ranged from 18 to 85 years. The variety of biomedical services provided showed that 99% of the respondents had blood sucrose measurement done routinely; 96% had their blood pressure (BP) measurements taken; and almost a similar number (96%) had their weight measured during clinic attendance. Over three-quarters (79%) of the respondents stated that getting drug prescriptions was a service offered at the Diabetes Clinic; 50% had their height measurements taken routinely; and 3.5% had eye examination done. A small proportion (2.5%) of the respondents cited laboratory investigations as another service offered. In the course of health service utilisation, nearly three-quarters (72%) of respondents perceived the health providers' attitude to be fair; 26% viewed the health providers as having a good attitude, but only 0.5% rated the health providers' attitude as excellent. Dissatisfaction with health services was also reported in this study. Negative attitude of health care providers was mentioned by 12% of respondents as one of the reasons for their discontent with the available health services. We conclude that staff attitudes and clinic facilities offered may affect health-seeking behaviour and choice of health care facility.

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Introduction

Diabetes mellitus, a chronic non-communicable disease, is attributed to disordered carbohydrate metabolism and its utilisation emanating from absolute or relative deficiency of insulin, 1,2 giving rise to increased glucose in the blood and tissues. This situation necessitates use of health care services as part of essential and continual medical care. Such care is important in the prevention and reduction of the risk of short-and long-term complications. 2,3 Health outcomes can also be influenced by the attitude of health care providers, who can either enhance or interfere with opportunities to access health care.

In some resource-scarce countries such as Kenya, women, (particularly those residing in rural areas) still experience a disproportionate burden of disease due to factors related to availability, acceptability, and quality of care. ^{4,5} Quality of care can be influenced by the attitude of health care providers in the course of a range of interactions with consumers of health care. The aim of this study was to investigate the utilisation of formal health services and attitude of health care providers towards women suffering from type 2 diabetes mellitus (T2DM) in a part of rural Kenya.

Patients and methods

This study was conducted in two Diabetes Clinics in two public health facilities in central Kenya. It was a cross-sectional and descriptive study involving 200 women with T2DM. The respondents were aged 18 to 85 years. Ethical approval was obtained from the Kenyatta National Hospital / University of Nairobi Ethical Review Committee. Informed consent was obtained from the participants who met the criteria for inclusion. The study elements excluded from the study those outside the selected age range, and those who voluntarily declined to give consent to participate. Both quantitative and qualitative methods of data collection were employed, which enabled exploration of the phenomena under study from different perspectives.

A questionnaire, which was piloted by the researcher and a research assistant in a Diabetes Clinic in a neighbouring public health facility, was used in the survey. It contained sections on background information, sociodemographic information, information on morbidity, pre-

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disposing factors to utilisation of health care, constraints associated with utilisation of health care and satisfaction/acceptability of health care of the respondents.

Key informant interviews generated data on availability, barriers and enhancing factors influencing use of the health services. Focus group discussions, yielded data on disease burden, health-seeking behaviour and biomedical treatment approaches.

The data generated in the survey was analysed using the Statistical Package for the Social Sciences (SPSS) programme Version 21.0. Data obtained from key informant interviews and focus group discussions were analysed through content analysis.

Other parameters of interest included blood glucose screening, blood pressure (BP), weight and height measurements, drug prescriptions, eye examination and laboratory investigations. The attitude of health providers was evaluated according to the level of satisfaction or acceptability of health care services to the respondents.

Results

A total of 200 respondents were recruited. The range of health services provided at the clinic showed that 99% of the respondents had blood sugar glucose measurement done routinely, while 96% had BP measurement, with almost a similar number (95%) having their weight measured during clinic attendance. Over three quarters (79%) of respondents stated that getting drug prescriptions was a service offered at the clinic, 50% had their height measurements taken routinely, and 3.5% had eye examination done. A small proportion (2.5%) of respondents cited laboratory investigations as another service offered (see Table 1).

Perceptions of attitude of service providers by respondents: Attitudes of health providers were considered important in this study because it is an indicator, among others, of the quality of formal health care services. Nearly three-quarters (72%) of respondents perceived health providers' attitude to be fair; about one-quarter (26%) viewed the health providers as having a good attitude; while only 0.5% rated the health providers' attitude as excellent. Direct observation revealed that some health providers were gentle with the patients, denoting a rating of good, while others had an average rating.

Causes of dissatisfaction with available health services. Dissatisfaction with health care provided in formal health care facilities can affect clinic attendance, leading to delay in seeking treatment. Study findings (Table 2) indicate various reasons for discontent with the health services obtained at the health facilities of the respondent's choice. Over one-third (36%) stated that lack of prescribed drugs contributed to dissatisfaction. Twenty-eight per cent (28%) said that high fees charged for services was the reason for unacceptable services; 26% mentioned long queues at various service points; 12% cited poor attitude

Table 1: Types of services given at the Diabetes Clinic

Service	Frequency (%)
Blood sugar screening Blood pressure measurement Weight measurement Height measurement Drug prescription Eye check-up Laboratory services *Others	199 (99.5%) 192 (96.0%) 191 (95.5%) 100 (50.0%) 158 (79.0% 7 (3.5%) 5 (2.5%) 21 (10.5%)

^{*}Others included nutrition advice.

Table 2: Dissatisfaction with health services

Reasons	Frequency (%)
High cost of services Long queues Unavailability of drugs Negative attitude of staff Unavailability of services *Others	56 (28.0%) 52 (26.0%) 73 (36.5% 25 (12.5% 3 (1.5%) 7 (3.5%)

*Others included: missing files, doctor sometimes reporting late to the clinic, laboratory personnel sometimes reporting late to the laboratory.

of health providers; while unavailability of health services accounted for 1.5% of the reasons for dissatisfaction with the health services by the respondents.

Discussion

This study was undertaken to investigate the utilisation of health services and the attitude of health care providers towards women suffering from T2DM in a rural setting. The results reveal that health care factors, including the attitude of health care providers, can influence the use of formal health care services. In resource-constrained countries such as Kenya, public health facilities are inadequate, and often experience shortage of staff and medical supplies including drugs. They are often overcrowded, affecting those who are unable to afford care in private facilities such as women in rural settings. The majority of the women in this study used public/government health facilities and various factors were attributed to the choice of different health facilities.

Results revealed that the respondents sometimes spent six hours waiting for services particularly when many patients reported to the clinic almost at the same time. Long waiting time can influence frequency of clinic attendance. On the other hand, long waiting time at the health facility for women in rural areas in particular means loss of income. This is attributed to the seasonal nature of income from subsistence farming, and so women consider waiting time at the health facility a cost due to loss of income. It is also a cost of time lost

since household chores, which are primarily duties and responsibilities of women, are not attended to. Waiting time is one of the indicators of the quality of care provided at a health facility. 7

Quality of care can also be influenced by the attitude of health care providers. The research results indicate that slightly more than one quarter (26%) of the respondents indicated that the attitude of the health providers was good, while 72% of them perceived the attitude to be fair. This rating was linked to the way the health providers interacted with the respondents and the respondents' perceptions about the type of health care that was provided. According to the respondents, the client-nurse relationship and doctor-client relationship as well as the availability of the doctor and nurse at the clinic were rated as good. Such a rating was given because whenever some of the respondents attended the clinic and they asked questions related to their health status, the health providers gave answers that satisfied the respondents. Satisfaction derived by patients when health providers take time to answer questions of concern is important in allaying feelings of anxiety and uncertainty that accompany sickness. 10

While 20% of the respondents in this study reported that they were satisfied with the health services that they got from the health care facilities, 79% expressed dissatisfaction, which was related to, inter alia, unavailability of drugs, high cost of treatment, long queues, waiting time, and the negative attitude of some members of staff. Negative attitude of staff has previously been reported in rural Kenya,¹¹ a factor that creates and perpetuates low level of trust between the community and the health care providers.

In our study, an unfriendly environment and poor verbal communication between some health providers and the respondents caused some who lived a walking distance from the public health facility to seek health services at distant facilities where they considered treatment by the health providers to be acceptable. The respondents, therefore, by-passed proximate health facilities and travelled farther away to seek what they perceived to be user-friendly health services. Such by-passing health facilities is not unique to the study setting where we conducted our research. According to a study in Sri Lanka on patients' choice of health facility, ¹² providing lower quality health services at a nearby health facility will cause patients to seek health care at far away facilities. One of the reasons for this health-seeking behaviour is that patients have a choice to seek health care from health facilities proximate to them or those that are far if quality health services are provided.

In conclusion, our research revealed that client perceptions of health providers' attitude to work and quality of health care can influence health-seeking behaviour. These health facility features can also contribute to various factors that determine health care utilisation, particularly for persons with long-standing medical conditions such as women suffering from diabetes.

Acknowledgements

This research was partly funded through a grant from the Kenya Medical Research Institute. It forms part of a PhD thesis submitted to the University of Nairobi by the first author. The authors are grateful to the Kenya Ministry of Health and County Government of Kiambu for permission to access health facilities for our study. We would also like to sincerely thank all the women who participated in the study.

Author declaration

The authors confirm that they have no competing interests to declare; that no animals were used in the research, and that informed consent was obtained from patients (documentary evidence on this provided to the publisher).

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