



Level of awareness about diabetes among adults attending services at Entebbe Grade B Hospital, Wakiso District. A Cross-sectional study.

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Abstract

Background:

Awareness about diabetes is an important component in the prevention, early detection, and effective management of the disease. Therefore, this study aims to assess the level of awareness about diabetes among adults attending services at Entebbe Grade B Hospital in Wakiso District.

Methodology:

Quantitative data were collected using structured questionnaires with closed-ended questions from adults attending services at Entebbe Grade B Hospital in Wakiso District. The completed questionnaires were checked for completeness, coded, and entered into Microsoft Excel for analysis. Data were analyzed using descriptive statistics such as frequencies and percentages.

Results:

All 35 (100%) participants had heard about diabetes. Common complications of poorly managed diabetes included poor vision/sight 7 (20%), delay in wound healing 5 (14%), and severe headache 23 (66%), with no participants having experienced none. 33 (94%) of the participants believed that stress and poor sleep could affect their blood sugar levels, whereas only 2 (6%) did not believe it.

Conclusion:

Adults attending services at Entebbe Grade B Hospital in Wakiso District were generally aware of diabetes since all participants had heard about the disease.

Recommendation:

Healthcare workers at Entebbe Grade B Hospital should strengthen patient health education on diabetes causes, risk factors, complications, and management. Regular awareness programs should be conducted to improve patients' understanding of the disease.

Keywords: Diabetes mellitus, health education, complications of diabetes, Entebbe Grade B Hospital, Wakiso District.

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Background of the study

Globally, diabetes has become a major public health concern due to its rapidly increasing prevalence. The number of adults living with diabetes has continued to rise, with millions of individuals affected worldwide, particularly in low- and middle-income countries where access to health education and healthcare services may be limited. In these settings, a large proportion of people with diabetes remain

undiagnosed, increasing the risk of severe complications and premature mortality. Awareness and knowledge about diabetes play a critical role in its prevention, early detection, and effective management. Individuals who are knowledgeable about the causes, symptoms, risk factors, and complications of diabetes are more likely to adopt preventive behaviors such as maintaining a healthy diet, engaging in regular physical activity, and seeking timely medical care. Studies have shown that increased awareness



can facilitate early diagnosis, reduce complications, and improve overall health outcomes among individuals at risk of the disease. However, several studies across regions have reported limited knowledge and awareness of diabetes among the general population. Many people lack basic information about the causes, symptoms, and management of the disease, which contributes to delayed diagnosis and poor disease control. For example, research in some African settings revealed that a significant proportion of individuals were unaware of the role of insulin or the biological mechanisms involved in diabetes, highlighting major gaps in public understanding of the disease. In Sub-Saharan Africa, the burden of diabetes is increasing rapidly due to urbanization, lifestyle changes, and limited health education programs. Despite this growing burden, awareness about diabetes remains relatively low in many communities. Limited knowledge about risk factors and complications may hinder preventive practices and delay health-seeking behavior among adults. In Uganda, diabetes is an emerging public health issue, and improving community awareness is essential for controlling the disease and preventing its complications. Assessing the level of awareness among adults attending healthcare facilities can provide important insights into existing knowledge gaps and guide the development of targeted health education programs. Therefore, this study aims to assess the level of awareness about diabetes among adults attending services at Entebbe Grade B Hospital in Wakiso District.

Methodology

Study design

The study employed a descriptive cross-sectional design because it was time-saving, as the data were collected at a single point in time.

Study area

The study was carried out at Entebbe Grade B hospital. The hospital is located in the central business district of the town of Entebbe, in Wakiso District, approximately 44 kilometers (27 mi) by road, southwest of Mulago National Referral Hospital, the largest hospital in the country, located in Kampala, Uganda's capital and largest city. The coordinates of the hospital are: 0°03'50.0"N, 32°28'18.0"E (Latitude: 0.063874; Longitude: 32.471655)

Study population

The study population included adults who were attending services at Entebbe Grade B hospital, Wakiso district, during the study with medical conditions related to diabetes.

Sample Size Determination

The sample size was determined using the Kish and Leslie method of 1965.

$$n = \frac{[z^2pq]}{e^2}$$

Where: n = the sample size, z = Standard normal deviation (1.96 for 95% confidence), p = The overall prevalence of diabetes was 10.1% (Mayega, 2016), e = level of confidence (90% confidence interval) = 10% = 0.1, q = 1 - p; Q = 0.8276 = 34.88134384. Thus, n = Approximately 35 participants
The study enrolled a sample size of 35 participants.

Sampling technique

The study adopted a purposive sampling technique because the researcher selected adults who provided meaningful information about diabetes awareness and lifestyle practices.

Sampling procedure

Participants were approached during their hospital visits. After obtaining informed consent, eligible individuals were enrolled until the target sample size was reached.

Data Collection Method

The data was collected through the interview method and group-focused discussion.

Data collection tools

The data collection tools included Entebbe Grade B hospital HMIS records, scholastic materials, and a questionnaire that was typed in Luganda, English, and Lunyankore, among others, as these were the languages that the participant understood best, with both open-ended and closed-ended questions.

Data collection procedure

After gaining approval from the relevant authorities, the researcher consented with legible participants and offered each of them a box with papers written on either a "Yes" or a "No," but not both options. However, if a participant selected a paper with a "Yes," they were considered for the data collection process with an appreciation at the end of the study, and if a "No," they were wished a good health and



escorted to the treatment room, then handed to the health care provider on duty.

Study variables Dependent variables

Level of diabetes and adoption of lifestyle practices for diabetes prevention.

Independent variables

Factors associated with diabetes

Quality Control

The questionnaire was tested with the research committee, and modifications were made where necessary. The information in this research report was also verified by nutritionists and endocrinologists to ensure that the information contained in this report was valid.

Inclusion criteria

Adults with medical conditions that were related to diabetes, who were present during the time of study, and had consented willingly.

Exclusion criteria

Individuals who were under 18 years, those who were in critical condition that needed immediate medical attention,

those who picked a paper with a “No” during the sampling process, and those who did not consent were not considered for the study.

Data Analysis and Presentation

Data was analyzed using SPSS, and descriptive statistics were used to summarize findings. The study results were presented using statements, tables, and graphs.

Ethical consideration

Ethical approval was obtained from the relevant authorities. Participants were informed about the purpose of the study, and written consent was obtained. Confidentiality and anonymity of the participants and their information were ensured and maintained throughout the study period.

Results

Level of awareness about diabetes among adults attending services at Entebbe Grade B Hospital, Wakiso District Heard about diabetes

The study findings showed that all 35 (100%) participants had heard about diabetes.

A common complication of poorly managed diabetes

Table 1 shows the results of common complications of poorly managed diabetes.

VARIABLES		FREQUENCY	PERCENTAGES
	Poor vision/sight	7	20%
A common complication of	Delay in wound healing	5	14%
poorly managed diabetes	Severe headache	23	66%
	None of the above	0	0%

Table 1, the study findings showed that the common complications of poorly managed diabetes included poor vision/sight 7 (20%), delay in wound healing 5 (14%), and severe headache 23 (66%), with no participants having experienced none.

Diabetes diagnosis by a healthcare professional

The study findings showed that all 35 (100%) participants had been diagnosed with diabetes by a healthcare professional.

Self-rating knowledge about diabetes

Figure 1 Shows results about self-rating knowledge about diabetes



As represented in Figure 1, the study findings showed that 13 (37%) adults who were attending services at Entebbe Grade B hospital, Wakiso district rated their knowledge about diabetes as low, 22 (63%) rated themselves as average, whereas none rated themselves as having high knowledge about diabetes.

Stress/poor sleep affects blood sugar.

The study findings showed that the participants either believed that stress and poor sleep could affect their blood sugar levels or they could not, but none were sure. According to the study findings, 33 (94%) of the participants believed that stress and poor sleep could affect their blood sugar levels, whereas only 2 (6%) did not believe it.

Discussion

The study found that all 35 participants (100%) had heard about diabetes and had been diagnosed with the condition by a healthcare professional. This suggests that the respondents had at least basic exposure to information about the disease, likely through clinical consultations, health education during hospital visits, or interactions with healthcare providers. Patients who attend health facilities regularly are more likely to have heard about their conditions because health workers often provide some level of counseling during treatment and follow-up care. These findings are consistent with the study conducted by Mohammed Zowgar, which reported that most diabetic patients had heard about the disease because they were already receiving treatment in healthcare facilities (Zowgar et al., 2018). Similarly, a study by Jumana Al-Mansour

found that patients attending clinics generally demonstrated high awareness of the existence of diabetes due to regular interaction with healthcare providers (Al-Mansour, Al-Rawashdeh, & Fadhil, 2019). This indicates that healthcare settings play an important role in disseminating basic knowledge about diabetes among patients.

The findings showed that participants reported several complications associated with diabetes, including severe headaches (66%), poor vision (20%), and delayed wound healing (14%). These results suggest that while participants were aware that diabetes can cause health problems, their understanding of complications was limited and focused mainly on symptoms they had personally experienced. Knowledge based mainly on personal experience may limit individuals from recognizing other serious complications such as kidney failure, nerve damage, and cardiovascular diseases. These findings are similar to those reported by Tesfaye Belsti, who found that many diabetic patients were aware of a few common complications, such as vision problems, but lacked comprehensive knowledge about the broader complications of the disease (Belsti et al., 2019). Likewise, Alemayehu Oluma reported that diabetic patients often recognize complications they frequently experience while remaining unaware of other long-term complications (Oluma et al., 2021). This suggests a need for more comprehensive patient education.

Conclusion

The study concluded that adults attending services at Entebbe Grade B Hospital in Wakiso District had general awareness about diabetes since all participants had heard



about the disease. However, their knowledge about specific complications and factors affecting blood sugar levels appeared limited and mainly based on personal experiences. This indicates that although awareness exists, there is still a need to improve comprehensive knowledge about diabetes prevention, risk factors, and complications.

Recommendation

The study recommends that healthcare workers at Entebbe Grade B Hospital should strengthen health education programs for patients attending the facility. Regular diabetes awareness sessions should be conducted to improve patients' understanding of diabetes causes, risk factors, complications, and proper management practices.

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List of Abbreviations

ADA: American Diabetes Association
DM: Diabetes Mellitus
DPP: Diabetes Prevention Program
NCD: Non-communicable Disease
SDGs: Sustainable Development Goals
T1DM: Type 1 Diabetes Mellitus
T2DM: Type 2 Diabetes Mellitus
WHO: World Health Organization

Data availability

The data is available upon request.

Informed consent

All the respondents consented to this study.

Source of funding

The study did not receive any external funding.

Conflict of interest

The author did not declare any conflict of interest.

Author contributions

Paul Kasaaliita was the principal investigator. Jimmy Okwany, Hasifah Nansereko, Francisco Ssemuwemba, and Jane Frank Nalubega supervised the research project.

Author Biography

Paul Kasaaliita holds a Diploma in Clinical Medicine and Community Health from Mildmay Institute of Health Sciences.

Francisco Ssemuwemba is the dean of the School of Allied Health

Hasifah Nansereko is the chairperson of the Institutional Review Council (IRC)

Jimmy Okwany and Jane Frank Nalubega are tutors at Mildmay Institute of Health Sciences.

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