SJ-Diabetes, Hypertension and Cancer Research Africa
Vol. 1 No. 9 (2024): September 2024 Issue
https://doi.org/10.51168/prhxv410
Original Article

KNOWLEDGE TOWARDS DIABETIC MELLITUS SELF MANAGEMENT AMONG PATIENTS ATTENDING DIABETIC CLINIC AT LUBAGA HOSPITAL KAMPALA DISTRICT. A CROSS- SECTIONAL STUDY

Ereneo Atwijukire*, Jane Francis Namukwaya
St . Micheal Lubaga hospital Training schools.

Abstract

Background

In developing countries, treatment adherence reaches a mere 20%, generating negative health statistics and entailing high costs for families, society, and governments. The study aims to assess the knowledge of diabetic mellitus self-management among patients attending diabetic clinics at Lubaga Hospital Kampala district.

Methodology

A cross-sectional study that utilized quantitative data collection methods from 30 respondents.

Results

Respondents had good basic Knowledge about diabetes and self-management but lacked sufficient details about management 20% of the respondents suggested insulin-treated hypertension, 20% for frequent maturation and 60% suggested that it was a diabetic drug. 46.6% suggested others such as headache, dizziness, palpitations, and sweating, 26.67% believed it could cause low blood sugar if administered in excess, 20% did not know the complications of insulin and 6.67% said it has no complications. Regarding home management of hypoglycemic insulin among DM patients' respondents where 57% had a yes, 20% no, and 23%were not sure.16 (53.3%) of the respondents were female and 14 (46.6%) were male. 66.67% had Type2 while 33.33% had Type1.16(53.3%) participants had oral hypoglycemic drugs, 7(23.3%) insulin therapy and 7(23.3%) could take both.

Conclusion

There were varying levels of Knowledge with many found to have basic information about self-management and care of Diabetes. However, Patients did not have some necessary details about the possible side effects and complications of the drugs they are taking which raises concern to have the gap addressed.

Recommendation

Adequate time and resources should be put in place to increase interaction and communication with Diabetes patients and their healthcare providers to ensure enough information is delivered in a comprehensible way. The government should set up more health sensitization campaigns that target self-care awareness among people living with non-communicable diseases like Diabetes.

Keywords: *Treatment adherence, Health sensitization, Diabetic mellitus, Kampala District.*
Submitted: 2024-05-12 Accepted: 2024-07-29

Corresponding Author: *Ereneo Atwijukire*
St .Micheal Lubaga hospital Training schools

Background

In developing countries, treatment adherence reaches a mere 20%, generating negative health statistics and entailing high costs for families, society, and governments. it is necessary to consider an approach that considers all aspects of a patient's life ranging from social-cultural, religious, and economic elements in managing Diabetes mellitus. Therapeutic education is fundamental to inform, motivate, and strengthen patients and families to live with the chronic condition (Mustafa et al, 2017). 52 million adults (20-79) in the IDF Africa Region have Impaired Glucose Tolerance (IGT) which places them at high risk of developing type 2 diabetes the figure is estimated to reach 71 million by 2030 and 117 million by 2045 where 13 million adults living with diabetes in the IDF Africa Region are undiagnosed - 54% of the total number of adults with diabetes in the region (Diabetes Atlas, 2021). The Shai-Osudoku District Hospital, SODH annual report, 2019 reveals that In the Shai-Sudoku District in the Greater Accra Region, Diabetes accounted for a significant proportion of Out Patient Department (OPD) attendance from2016 to date ranking fourth in the top 10 causes of OPD attendance where 10.8% (8903/82435) of OPD cases in 2017 and 13.3% (11226/84409) cases in 2018 (SODH annual report, 2019). According to the American Diabetes Association (2018), diabetes patients' inability to keep their glycaemic levels within the normal range may be due to several factors including the poor practice of self-care (diet plan, exercise, self-glucose monitoring among others), the attitude of patients and poor education (Kutsienyo, 2020).

There is an increasing amount of evidence that individuals who are educated and diligent in their diabetes self-care achieve better and more durable diabetic control (Bardsley, 2017). Efforts should be made to enhance patients' socioeconomic status and equip them with diabetic self-care-centered health information particularly for those patients with short duration of diagnosis (Kassa, 2021). General health education regarding diabetes mellitus self-care activities and its complications is being provided by healthcare providers working in different health settings but a well-organized diabetic self-care education program is not yet established in most African health institutions. The study aims to assess the knowledge of diabetic mellitus self-management among patients attending diabetic clinics at Lubaga Hospital Kampala district.

Methodology

The methodology described is similar to the study done by (Atwijukire & Namukwaya, 2024)

Study design and rationale

A descriptive cross-sectional study design was used and it utilized quantitative methods of data collection. This research study design was preferred because it was less time-consuming and in addition, the researcher collected data at once without following up with respondents.

Study setting and rationale

The geographical scope was Lubaga Hospital Kampala since it had a clinic where patients with DM attain services.

Study population

The study targeted patients with DM minimum of 30 attending the diabetic clinic at Lubaga Hospital. It is located approximately 5.5 km southwest of Mulago National Hospital. And approximately 5 km south of Kampala's central business. It had a bed capacity of 274. The coordinates of Lubaga Hospital were 0018'15" N, 32033'10.0" E. The area was chosen because it was easily to be reached by the researcher.

Sample size determination

Random sampling method to select several patients with DM which I used in my study representing Lubaga Hospital concerned parties. With the help of the Krejci and Morgan table, I was in a position to determine the sample size for this population; having the population size N from the table the sample size (n) where 300 was the population and 30 was the sample size of the study.

Sampling procedure

A simple random sampling procedure was used. This is defined as a sampling procedure that gives each person in the study population a chance to be selected. On each day of data collection, papers labeled "YES" or "NO" were put in a box and shaken. The eligible respondent was a caregiver who picked the paper with a Label "YES" and was enrolled in the study. This procedure was considered because of its ease and accuracy of representation; selecting subjects completely at random from the larger population produces a sample that is representative of the group being studied. This was repeated until the desired sample size of 30 DM patients was reached during the three days of data collection.

Inclusion criteria

Only DM patients attending diabetic clinics at Lubaga Hospital were included in the sample.

The study participants voluntarily consented to participate in the study.

Exclusion criteria

DM patients who had not participated in or attended a diabetic clinic at Lubaga Hospital were excluded from participation in the study. Also, any DM patients who did not complete the questionnaire were excluded. Finally, DM patients had the opportunity to exclude themselves by not agreeing to participate in the study.

Independent variables

Attitude and Practice towards self-management among patients with DM attending the diabetic clinic at Lubaga Hospital.

Dependent variable

Self-management towards DM patients attending diabetic clinic at Lubaga Hospital.

Research instruments

Questionnaires and document reviews were used to gather information concerning the research topic and each method was used with its related tools to aid the data collection process.

Data collection procedure

After approval of the proposal, an introductory letter was obtained from the school administration which was then presented to the administration of Lubaga Hospital. The researcher made a self-introduction and distributed the questionnaire to the respondents. The purpose of the study was explained to each respondent. A questionnaire was given to each participant and each respondent who fulfilled the criteria for participation in the study was greeted and made comfortable in a separate room to ensure privacy. For confidentiality and anonymity, serial numbers were used instead of names, and the questionnaires were kept in a locked cupboard and the key kept by the researcher. Then the researcher thanked the respondents after the interview.

Data management

In the process of data collection, each questionnaire after filling was checked for completeness and accuracy before leaving the area of study. Filled questionnaires were kept properly in a locker for confidentiality and safety.

Data analysis

Having completed the collection of data from the field, I went ahead to critically have my data reviewed and analyzed so that I could have conclusions which were of positive meaning

towards the research topic. I analyzed data collected from the questionnaires and interview guides using SPSS (Statistical Package for The Social Sciences) because of its simplicity, easy-to-follow command language, and well-documented user manual. (William, 2022)

Ethical Issues

All the academic sources used in this study were cited as a way of acknowledging that the information used does not entirely belong to the researcher but other people's articles and publications were used.

A formal letter from Lubaga Hospital Training Schools permitting the researcher to Uganda Martyrs Hospital Lubaga as a student of Lubaga Hospital Training Schools in need of information from their organization. Permission was obtained from Uganda Martyrs Hospital Lubaga to allow the researcher to conduct his study. This enabled the respondents to be at ease with the researcher while the researcher was able to collect the information that he wanted from the hospital staff. Unauthorized people did not have access to the data collected and was kept confidential to the researcher. The respondents had the freedom to ignore items they wished not to respond to on the questionnaire paper.

Results

Demographic information

Figure 1 shows the gender of DM patients' participants, 16 (53.3%) were female and 14 (46.6%) males. Figure 1 shows the gender of DM patients' participants, 16 (53.3%) were female and 14 (46.6%) males.

Figure 2 shows the type of DM among the respondents where 66.67% had Type2 while 33.33% had Type1.

Figure 3 shows the treatment type among DM patients attending to diabetic clinic at Lubaga Hospital where 16(53.3%) participants had oral hypoglycemic drugs, 7(23.3%) insulin therapy and 7(23.3%) could take both.

Figure 1: Shows gender of respondents, n=30.

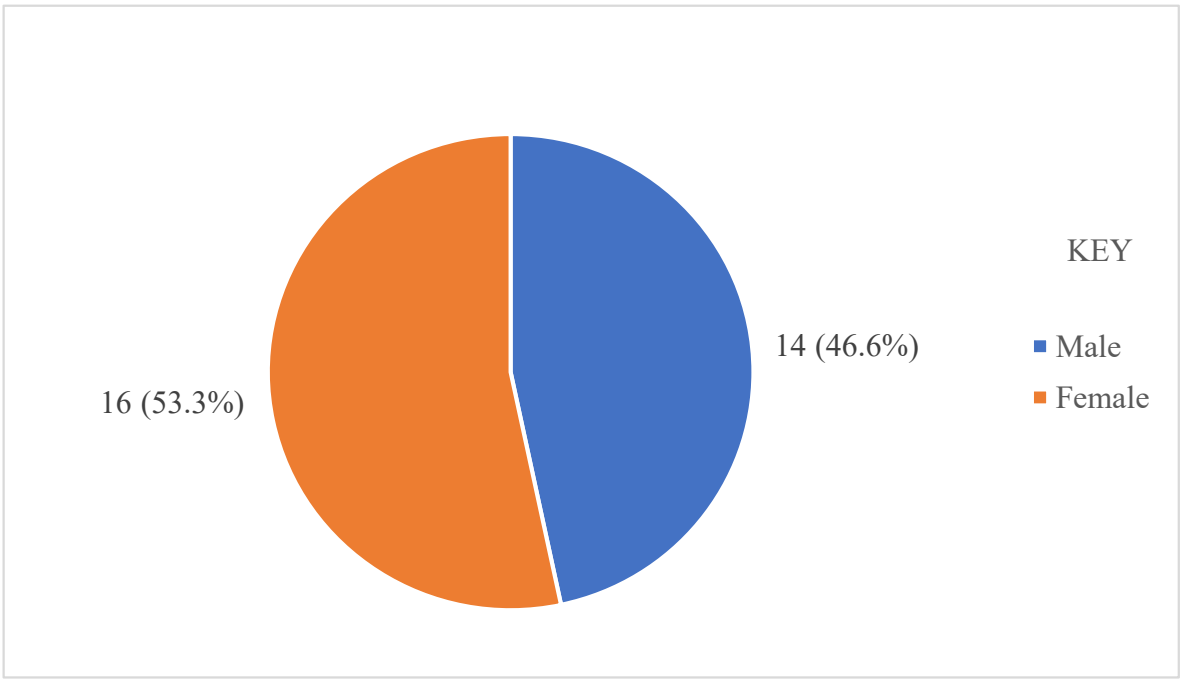


Figure 2: Shows respondent type of DM, n=30

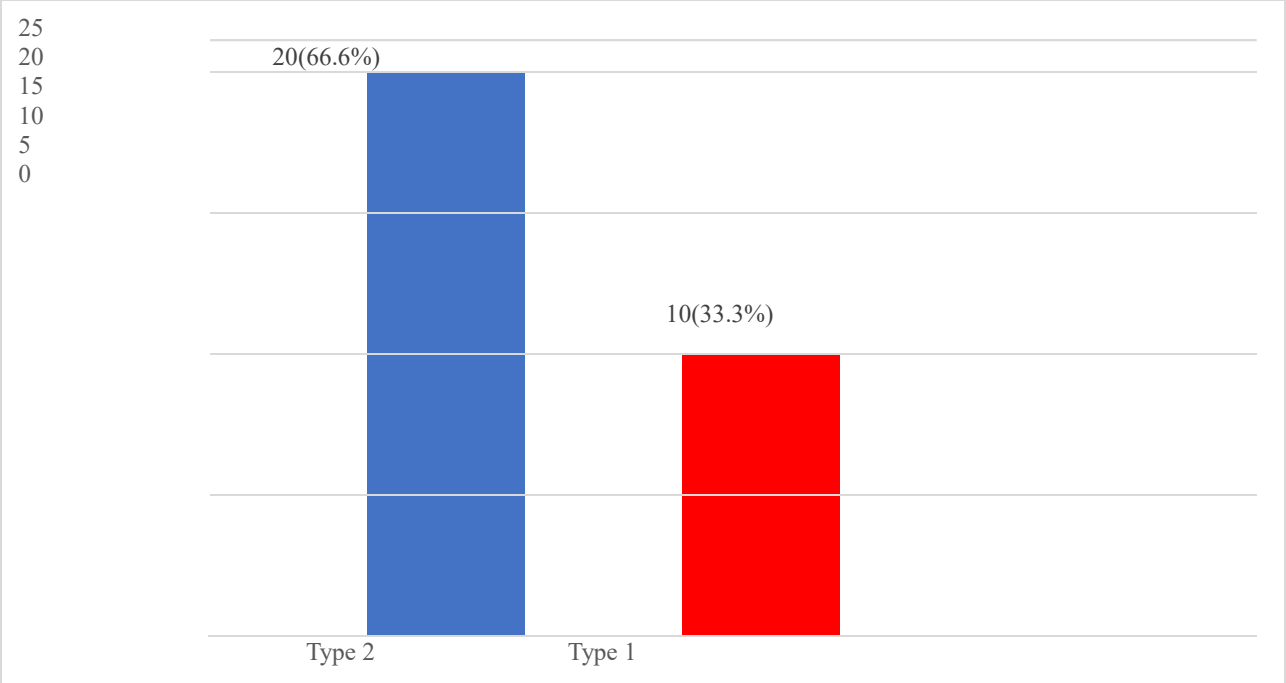
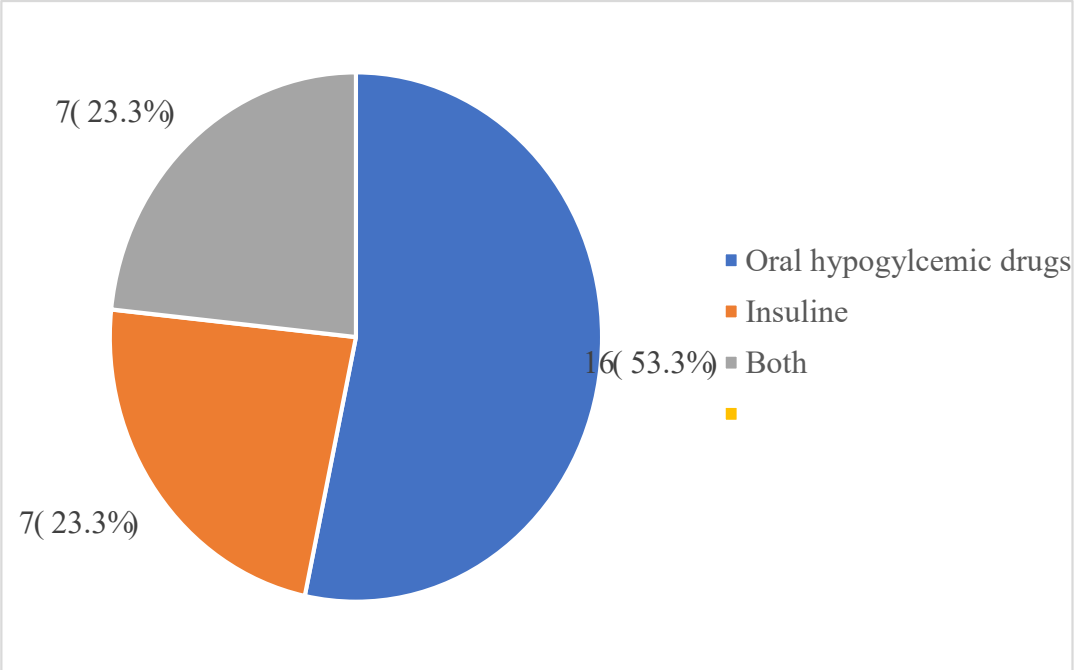


Figure 3: shows treatment type of respondents', n=30



SJ-Diabetes, Hypertension and Cancer Research Africa
Vol. 1 No. 9 (2024): September 2024 Issue
https://doi.org/10.51168/prhxv410
Original Article

Figure 4: Shows what respondents know about insulin and its use n=30

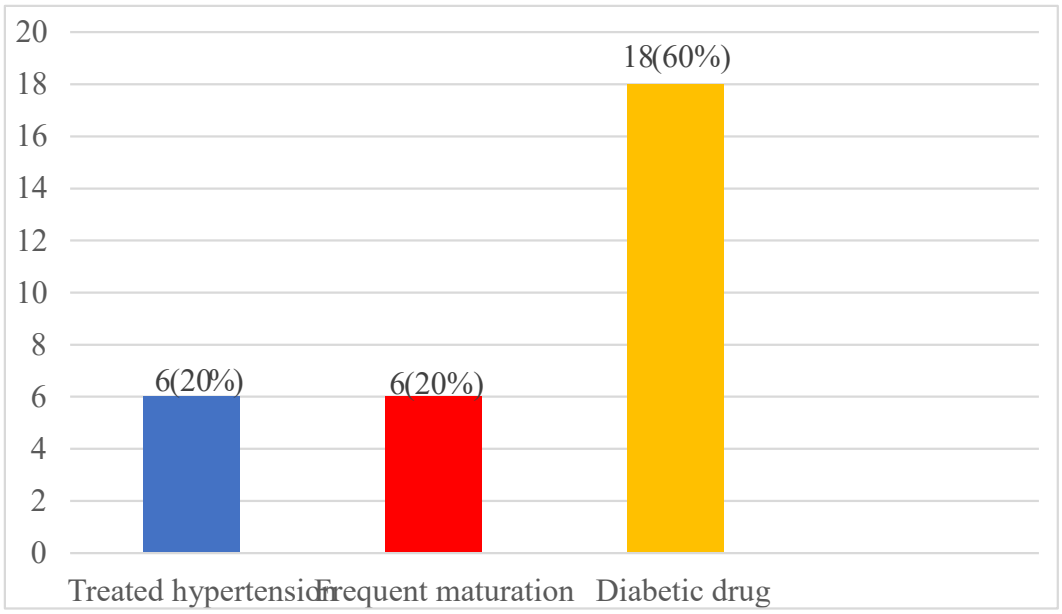
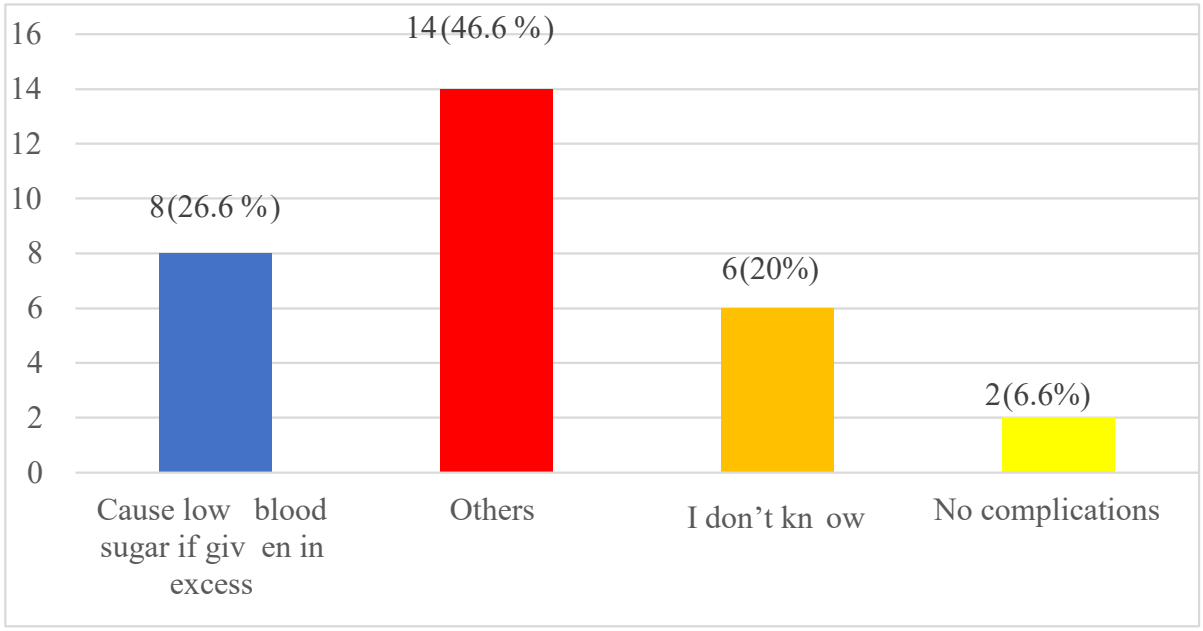
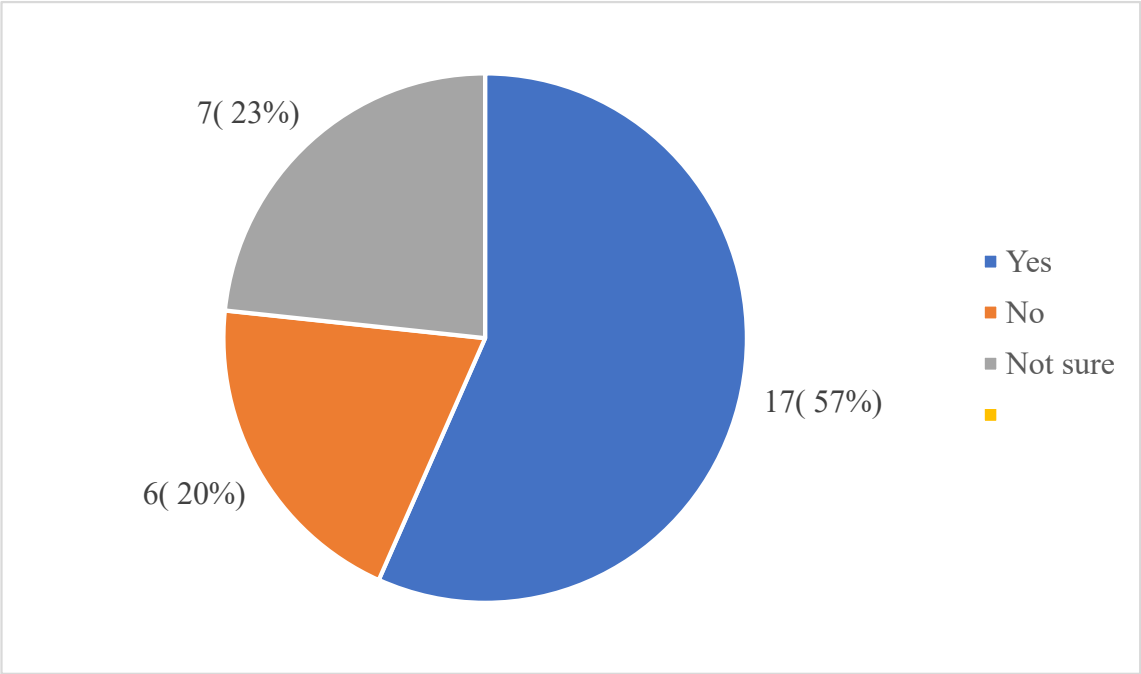


Figure 5: Showing the complications of insulin use n=30



SJ-Diabetes, Hypertension and Cancer Research Africa
Vol. 1 No. 9 (2024): September 2024 Issue
https://doi.org/10.51168/prhxv410
Original Article

Figure 6: shows the home management of hypoglycaemic insulin? n=30



Knowledge of self-management towards DM patients attending to diabetic clinic at Lubaga Hospital.

Figure 4 reveals that 20% of the respondents suggested insulin treated hypertension, 20% for frequent maturation while 60% suggested that it was a diabetic drug. Figure 5 on the implications of insulin reveals that 46.6% suggested others such as headache, dizziness, palpitations, sweating, 26.67% believed it could cause low blood sugar if administered in excess, 20% did not know the complications of insulin and 6.67% were saying it has no complications.

Figure 6 shows that regarding home management of hypoglycemic insulin among DM patients' respondents where 57% had a yes, 20% no, and 23%were not sure.

Discussion

Demographic data

Data on the personal characteristics of DM patients showed that high concentrations of the respondents were aged. 9 DM patients were greater than 60 years,10 of the respondents were aged between 5059 years,9 were aged between 35-49 years, and 2 were aged between 15-34 years. This indicated that most of the respondents were mature people this made interaction easier because people seemed to understand whatever question posed to them according to the field survey observation. This showed that the disease affected all age groups but mainly the mature people being the most common. It was also found that females were the majority of respondents at 53.3 % and males at 46.6%. this indicated that female was most affected than male. This is because females tend to seek medical services more than men, there is a danger that contrasting presumption that women overuse health care consulting sooner and more often amenable self-management is reinforced, sometimes for trials symptoms which are self-limiting amenable to self-management is reinforced .25 Since the majority (83.3%) had a form post-primary education, they stand the good chance to communication with only a minor proportion of 16.6% had not attained any form of education. Following the age at diagnosis with DM 2 were diagnosed between 15-24, 13 at 25-34, 8 at 35-44, 6 at 5564, and only one patient was diagnosed with DM at the age greater than 65. Hence 8 patients had been with DM for less than 5 years, 33.3% had lived with DM for 6-10 years and 40% had DM for over 11 years and above. It was also found out that among the 30 DM patients, 22 were of Type 2 and only 8 were Type 1 though some patients could just guess this was due to the frequency of health education at the diabetic clinic where some could never attend others twice or once a week yet it's always required for a DM patient to attend to health education.

Knowledge in self-management of DM patients attending to Lubaga Hospital diabetic clinic.

It was found that 100% of the patients had ever received information about insulin, 60% knew insulin as a diabetic drug, 20% as a treatment for maturation, and 20% said insulin is used for the treatment of hypertension. About the complications of insulin use, 26.67% said it causes low blood sugar if administered in excess, 6.67% claimed insulin had no complication at all, 20% had no idea and 46.67% stated other complications of insulin which were headache, dizziness, sweating, abdominal pain and palpitations. Bout knowledge of signs and symptoms of hypoglycemia, all the DM patients were aware of them. All the above finding shows that respondents that a higher proportion of the respondents had basic knowledge and information about self-care management but did not have more details about complications and other effects associated with Insulin. The reason for this may be because health workers did not give adequate information to clients when they visited the health centers. They could have only given incomplete health education sessions to the patients. Those who knew the details could have received them from other sources or from more professional health workers who provided adequate knowledge to their clients. These findings are similar to those by Peter P1 et al 2022 where respondents knew the consequences of Diabetes treatment and mentioned healthcare providers, media, and friends as their sources of information concerning Diabetes management and self-care lifestyle (Peter et al 2022).

Conclusion

There were varying levels of Knowledge with many found to have basic information about self-management and care of Diabetes. However, Patients did not have some necessary details about the possible side effects and complications of the drugs they are taking which raises concern to have the gap addressed.

Limitations of the study

Time for the research to be carried out isn't favored since most of the time caught up with duties.

Recommendation

Adequate time and resources should be put in place to increase interaction and communication with Diabetes patients and their healthcare providers to ensure enough information is delivered in a comprehensible way.

Acknowledgment

No single mind is capable of completing a magnitude project of this caliber without the assistance and vision of many caring people while in school. Blessed be the almighty God for His grace and measure of life. Special thanks to SR NAMUKWAYA JANE FRANCIS my supervising tutor for her tireless work and constructive criticism during my research project. She analyzed, corrected, and gave me direction on how to write my work. I appreciate her professional advice that enabled me to organize sense out of this study. I am greatly indebted to my parents and family members at large for the financial, spiritual, and moral support rendered to me during my academic pursuit. Finally, thanks go to the nursing school staff members and my fellow students especially Alex, Gloria, and Simon who assisted me in various ways during my study.

List of Acronyms

WHO: World Health Organization

DM: Diabetic Mellitus

SPSS: Statistical package for the social sciences

Source of funding

No source of funding

Conflict of interest

No conflict of interest

Author Biography

Ereneo Atwijukire is a Diploma student in Nursing at St Micheal Lubaga Hospital Training School.

Jane Francis Namukwaya is a Nursing tutor at St Micheal Lubaga Hospital Training School.

References

1. Atwijukire, E., & Namukwaya, J. F. (2024). ATTITUDE AND PRACTICES TOWARDS DIABETIC MELLITUS SELF-MANAGEMENT AMONG PATIENTS ATTENDING DIABETIC CLINIC AT LUBAGA HOSPITAL KAMPALA DISTRICT. A CROSS-SECTIONAL STUDY. *SJ Diabetes, Hypertension and Cancer Research Africa*, *1*(6), Article 6. https://doi.org/10.51168/bdv39f90

2. Kassa RN, Hailemariam HA, Habte MH, Gebresillassie AM. Self-care knowledge, attitude and associated factors among outpatients with diabetes mellitus in Arsi Zone, Southeast Ethiopia. PLOS Glob Public Health. 2021 Dec 28;1(12):e0000097. doi: 10.1371/journal.pgph.0000097. PMID: 36962144; PMCID: PMC10021671.
3. Peter PI, Steinberg WJ, van Rooyen C, Botes J. Type 2 diabetes mellitus patients' knowledge, attitude and practice of lifestyle modifications. Health SA. 2022 Oct 21;27:1921. doi: 10.4102/hsag.v27i0.1921. PMID: 36337447; PMCID: PMC9634683.
4. Alghazalg, M. (2016). Knowledge practice and barriers of foot self care

among diabetic patients at Tanta University Hospital.
5. Bardsley, P. (2017). Diabetes self management education and support in Type 2 Diabetes. *Diabetes Educ*.
6. DiabestesAtlas. (2021, December). *IDF*. Retrieved from https://idf.org/our-network/regionsmembers/africa/diabetes-in-africa.html
7. IDF. (2022). Diabetes in Africa. *IDF*.
8. Kutsienyo, P. (2020). *Knowledge and practice of type 2 diabetic mellitus self management among diabetic patients.* Ghana: Peter Kutsienyo.
9. Mustafa, Parvez, Iqbal, Shahel, Mahid, I., H.G, J., & W.D, H. (2017). Assessment of KAP diabetes regarding their foot care. 43-7.
10. WHO. (2020). Leading causes of death and disability world wide. *WHO*.

PUBLISHER DETAILS

SJC PUBLISHERS COMPANY LIMITED

SJC Publishers Company Limited
TODAY AND TOMORROW

Catergory: Non Government & Non profit Organisation
Contact: +256 775 434 261 (WhatsApp)
Email:info@sjpublisher.org or studentsjournal2020@gmail.com
Website: https://sjpublisher.org
Location: Scholar's Summit Nakigalala, P. O. Box 701432,Entebbe Uganda, East Africa