ATTITUDE AND PRACTICES 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 school

ABSTRACT.

Background:
The study aims to assess the attitude and practices towards diabetic mellitus self-management among patients attending diabetic clinics at Lubaga Hospital Kampala district.

Methodology:
A descriptive cross-sectional study with 30 respondents collected data using quantitative methodologies. A basic random sample process was performed, and the data was evaluated and analyzed via SPSS.

Results:
Respondents had fairly good attitudes and practices towards self management43% of participants said it's dangerous for a DM patient to forget to take medicine, 40% said it's not dangerous and 17% did not know whether it's dangerous or not. 63.3% agreed that a DM patient should comply with their diet, 20% said No and 16.67% did not know. 60% followed them less than or 3 days a week while 40% 4-7 days a week and the majority incorporated fruits and vegetables in their diet. 53.3% consumed fried food products less than or 3 days a week while 46% 4-7 days a week. Consumption of fat diet was 50% 4-7 days among the DM patients. The majority of the respondents did exercise at least 30 minutes daily. Medication practices such as adhering to oral hypoglycemic drugs and adhering to insulin therapy were between 4-7 days a week. Of the respondents, 16% washed their feet not less than 4 times a week. 16 (53.3%) were female and 14 (46.6%) males.

Conclusion:
The general overview of Attitudes towards the management of Diabetes is recommendable which informed the good practices of respondents towards self-care and adherence to care instructions.

Recommendation:
Health workers should more emphasis on giving clear and concise health education to all patients coming for diagnosis or treatment and roll out more sensitization campaigns to raise awareness in the general population.

Corresponding author: *Ereneo Atwijukire[*]*
Email: *atwijukireelly@gmail.com*
St Micheal Lubaga hospital Training school

BACKGROUND.

Globally, approximately one in three of all adults suffer from multiple chronic conditions (Marengoni, 2011). In this group of health conditions, diabetes mellitus stands out because of high morbidity and mortality rates, as well as increasing prevalence levels (Skolnik, 2018). Reports by PHO/WHO Estimated 422 million people are living with diabetes worldwide the majority living in low-and middle-income countries, and 1.6 million deaths are directly attributed to diabetes each year (WHO, 2020). In India, it was mentioned that practice towards self-care activities was not satisfactory, there were significant associations with practice towards self-care activities in diabetic patients' socio-demographic variables such as gender, age, marital status, educational status, dietary habits, and duration of diabetes (Shunjhunu, et al., 2014). In Ethiopia About 70.4% of the total patients had a good attitude towards self-care practices and Patients with high monthly income were significantly associated with a good attitude while patients who were taking both insulin and oral anti-diabetics were 94% (AOR=0.06, 95% CI 0.01–0.67) less likely to have a good attitude when compared to patients taking insulin injection (Niguse, 2019). In Uganda, It was assessed that about 4 in 5 patients adhere to anti-diabetic treatment stressing the need to improve patients' adherence by making the drugs available. (Ruteemberwa, 2015). In a study in Kenya, the World Health Organization (WHO) estimates the prevalence of diabetes to be 3.3% and forecasts a rise to 4.5% by 2025. However, this figure is likely to be an

underestimation because over 60% of people with diabetes in Kenya are undiagnosed.

Appropriate and adequate daily self-care knowledge and practice among patients with diabetes is reported to significantly reduce the incidence of complications and related socio-economic burdens to families and the health care system in terms of disability, prolonged hospitalization, and deaths. Adequate knowledge of self-care is critical for appropriate self-care practice. However, many previous studies in developing countries of which Uganda is inclusive, have revealed scanty information on self-care knowledge and practices among people with diabetes. The study aims to assess the attitude and practices towards diabetic mellitus self-management among patients attending diabetic clinics at Lubaga Hospital Kampala district.

METHODOLOGY.

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 was used in the study representing Lubaga Hospital concerned parties. With the help of Krejci and Morgan's 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 did not complete the questionnaire were excluded.

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 the 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, data was reviewed and analyzed so that I could have conclusions that 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.

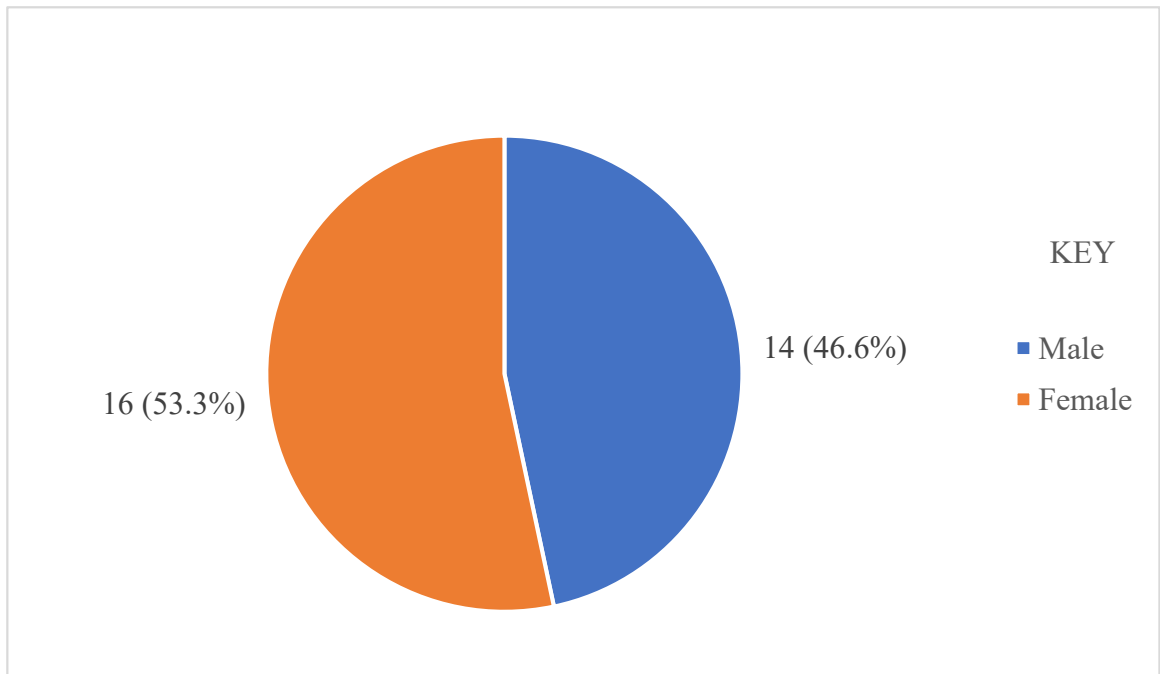**Figure 1: Shows gender of respondents, n=30.**

Figure 1 shows the gender of DM patients' participants, 16 (53.3%) were female and 14 (46.6%) males totaled to 30 participants.
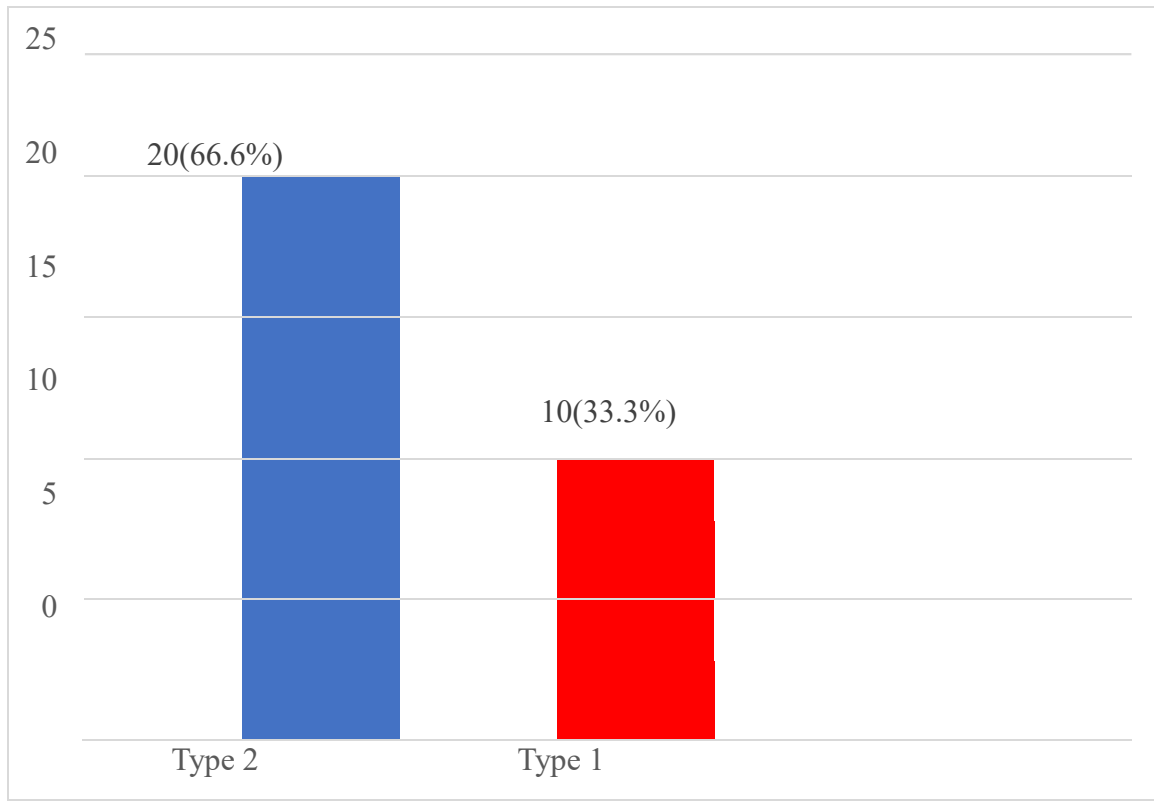
Figure 2: Shows respondent type of DM, n=30

Page | 4

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

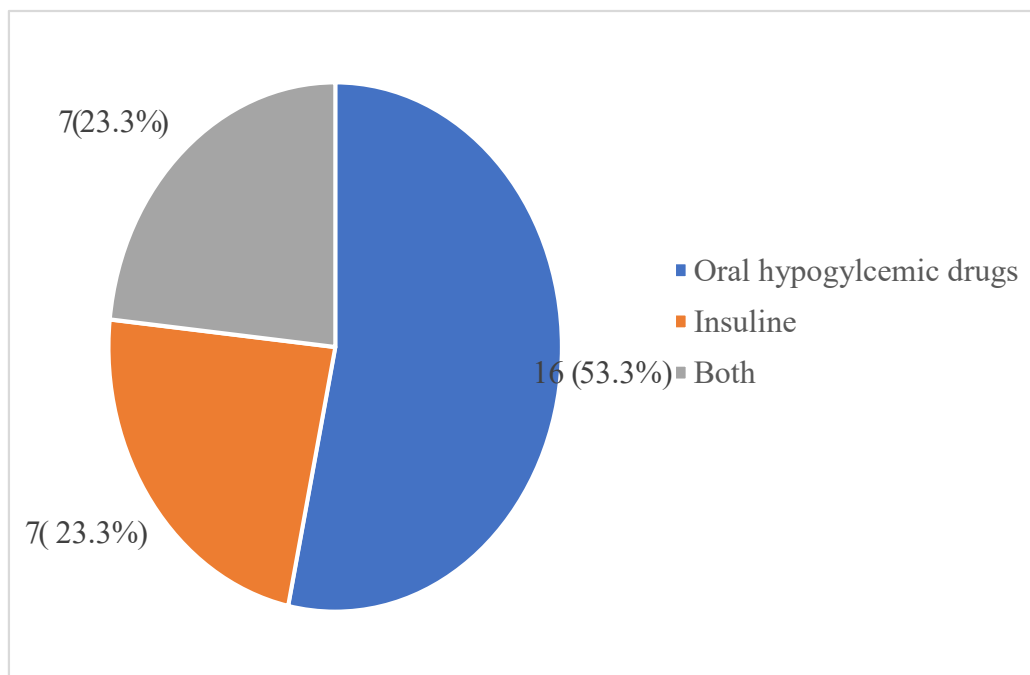**Figure 3: shows the treatment type of respondents. n=30.**

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.

The attitude of self-management towards DM patients attending the diabetic clinic at Lubaga Hospital.

Figure 4: Showing how dangerous for DM patients to forget to take medicine. n=30
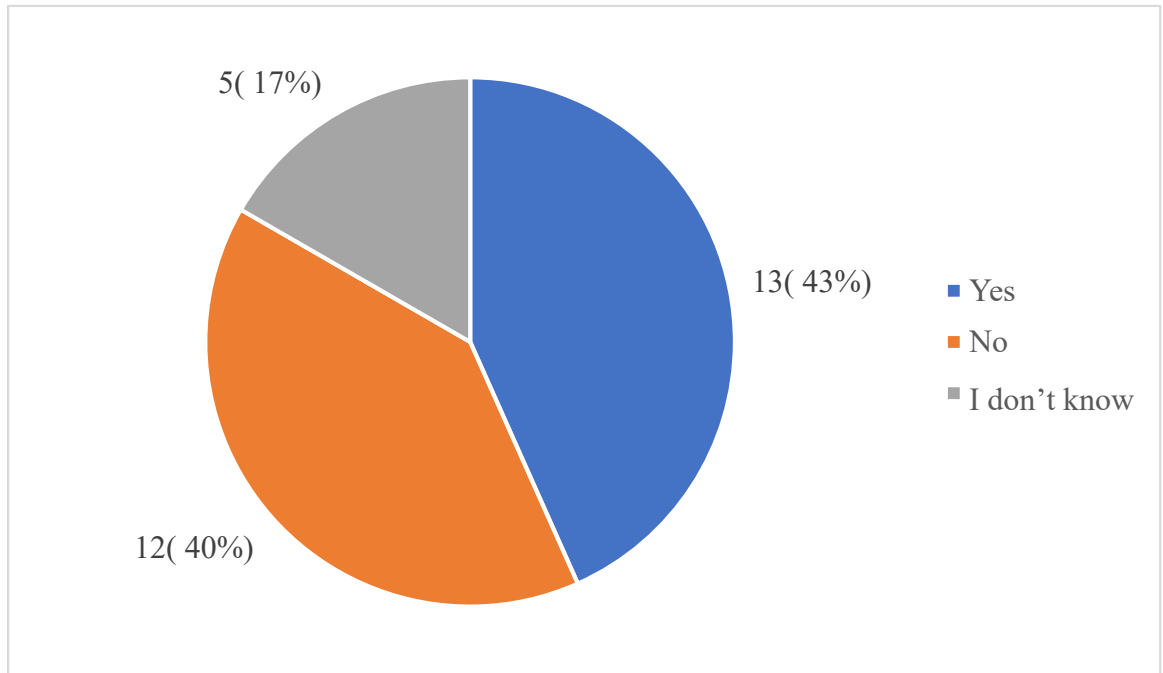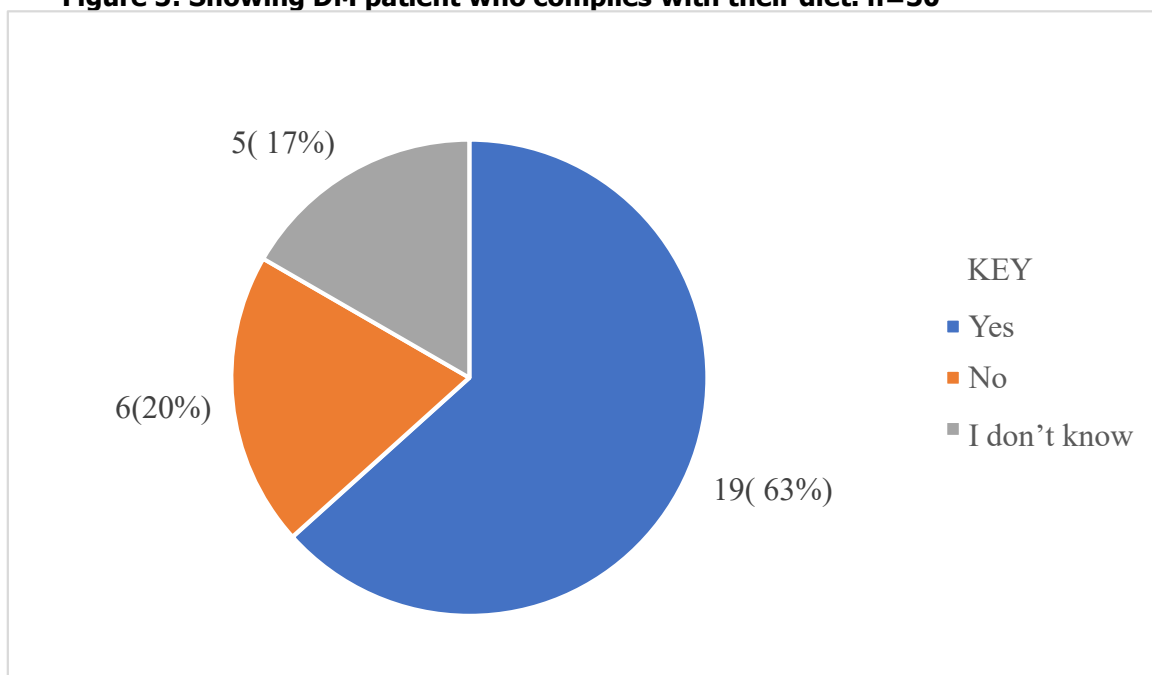
Figure 4 shows 43% of participants saying it's dangerous for a DM patient to forget taking medicine, 40% were saying it's not dangerous and 17% did not know whether it's dangerous or not dangerous for a DM patient to forget taking medicine.

Figure 5: Showing DM patient who complies with their diet. n=30

In Figure 5 more than half 63.3% agreed that a DM patient should comply with their diet, 20% said No and 16.67% did not know.

Figure 6: showing how diabetes changes a person's outlook in life. n=30
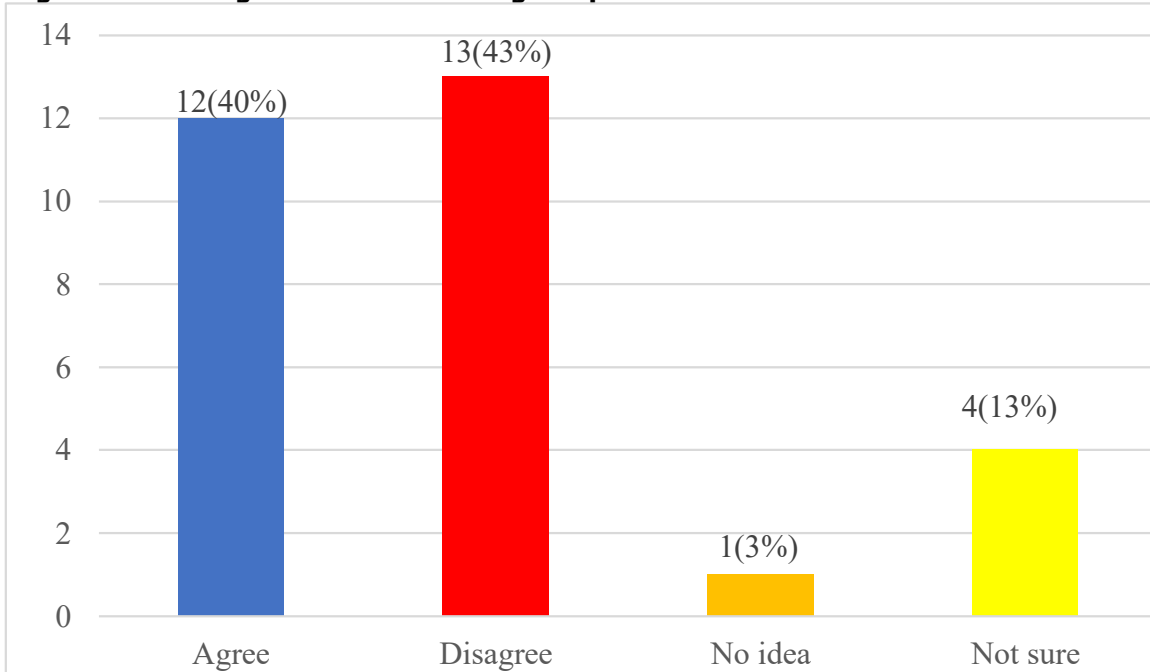
From the figure 6 patients disagreed, 12 agreed, 1 had no idea and 4 were not sure that having diabetes changes a person's outlook in life.

Table 1: shows how frustrating for people with diabetes to take care of their disease. n=30

Response	frequency	Percentage (%)
Agree	6	20
Disagree	21	70
Not sure	3	10

Table 1 indicated that 70% said it's frustrating for people with diabetes to take care of their disease, 20% disagreed and 10% were not sure.

Figure 7: Shows people who don't need to take insulin to treat their diabetes have a pretty mild disease
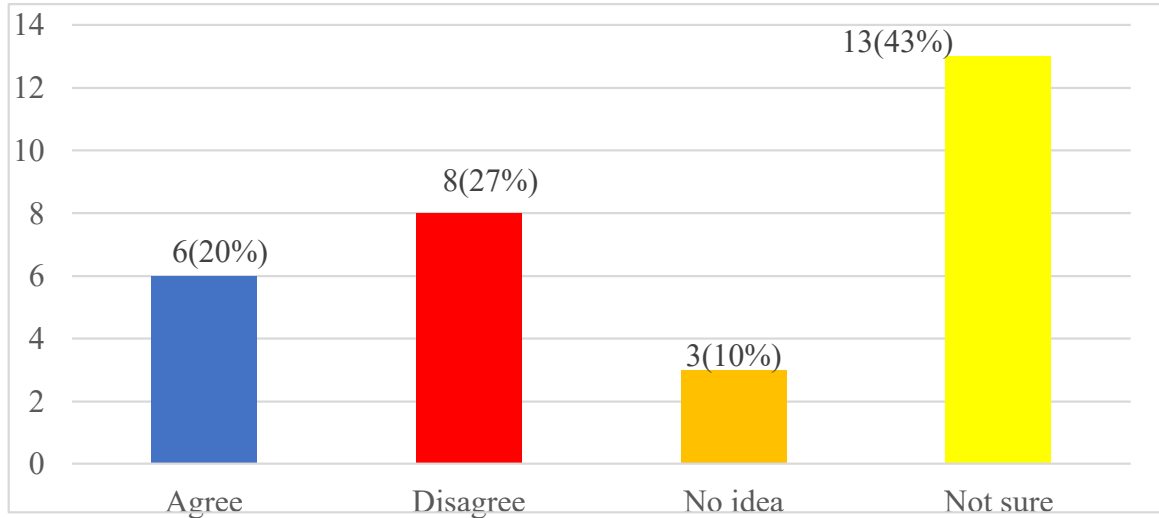
n=30

Figure 7 showed people who do not need to take insulin to treat their diabetes have a pretty mild disease.

Figure 8: showing decisions regarding daily Diabetes care should be made by a person with diabetes. n=30
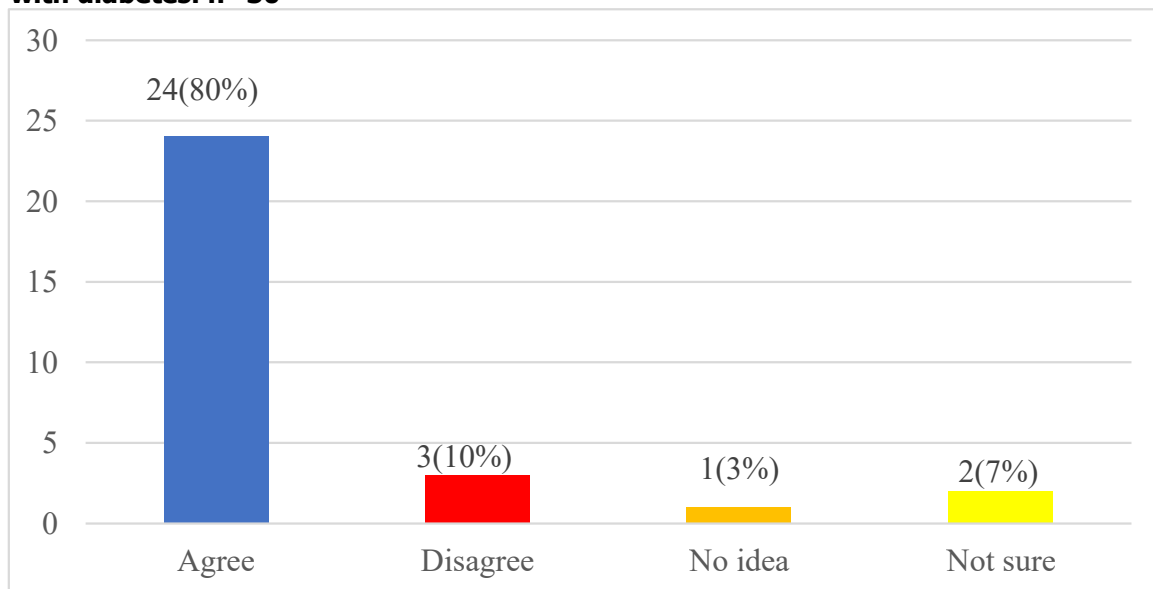

Figure 8 shows the important decision regarding daily diabetes care should be made by a person with diabetes where 24 respondents agreed, 3 disagreed, 2 were not sure and 1 had no idea.

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

Table 2: Assessing practice of self-management towards DM patients attending the diabetic clinic at Lubaga Hospital.n=30

Assessing practice	Period	Male	Female	Total
Following a healthy eating plan	Less than or 3 days a week	8	10	18
	4-7 days a week	6	6	12
Incorporating fruits and vegetables into the diet	Less than or 3 days a week	10	8	18
	4-7 days a week	4	8	12
Consuming fried food products	Less than or 3 days a week	7	9	16
	4-7 days a week	7	7	14
At least 30 minutes of exercise daily	Less than or 3 days a week	9	6	15
	4-7 days a week	5	10	15
Adhering to oral hypoglycemic drugs	Less than or 3 days a week	6	10	16
	4-7 days a week	8	6	14
Adhering to Insulin therapy	Less than or 3 days a week	5	7	12
	4-7 days a week	9	9	18
Washing feet	Less than or 3 days a week	7	7	14
	4-7 days a week	7	9	16
Drying in between toes	Less than or 3 days a week	5	4	9
	4-7 days a week	9	12	21
Inspecting the inner surface of shoes	Less than or 3 days a week	6	9	15
	4-7 days a week	8	7	15
Examine feet	Less than or 3 days a week	10	7	17
	4-7 days a week	4	9	13

Table 2 shows that 60% followed them less than or 3 days a week while 40% 4-7 days a week and the majority incorporated fruits and vegetables in their diet. 53.3% consumed fried food products less than or 3 days a week while 46% 4-7 days a week. Hence the consumption of a fat diet was 50% 4-7 days among the DM patients attending to diabetic clinic at Lubaga Hospital. The majority of the respondents did exercise at least 30 minutes daily. Medication practices such as adhering to oral hypoglycemic drugs and adhering to insulin therapy were between 4-7 days a week. Of the respondents, 16% washed their feet not less than 4 times a week.

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 females were more affected than males. 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.

The attitude among self-management to the DM patients attending Lubaga Hospital diabetic clinic.

While assessing the attitudes towards diet among diabetes patients, it showed that 63.3% still believed that a diabetes diet could be complied with, 20% of the patients believed diet should not complied with and 16.67% did not know. This showed that people had a poor attitude which might be associated with a lack of sensitization from the healthcare providers. 6 respondents believed that having diabetes changes a person's outlook, 21 disagreed with it and 3 were not sure about it. It was found that 43.3% believed that it's dangerous for a DM patient to forget to take their medicine while 40% said it's not dangerous and 16.6% did not know. This implies that there were varying levels of attitudes towards particular areas concerning diabetes both positive and negatively impacting prognosis. Some of these findings are similar to a study among Palestinians of the Westbank which revealed that 58.7% of the patients had positive attitudes toward their disease. Attitude scores were positively associated with the ability to keep a usual fasting plasma glucose level below 140 mg/dL, postprandial plasma glucose level below 200 mg/dL, HbA1c below 7%, and BMI below 25 kg/m2 (Shawahna, 2021).

The practice of self-management among DM patients attending Lubaga Hospital diabetic clinic.

Dietary practices to follow a healthy eating plan 60% followed them less than or 3 days a week while 40% 4-7 days a week and the majority incorporated fruits and vegetables in their diet. 53.3% consumed fried food products less than or 3 days a week while 46% 4-7 days a week. Hence the consumption of a fat diet was 50% 4-7 days among the DM patients attending to diabetic clinic at Lubaga Hospital.

The majority of the respondents did exercise at least 30 minutes daily. Medication practices such as adhering to oral hypoglycemic drugs and adhering to insulin therapy were between 4-7 days a week. Furthermore, practices about foot care Most of the respondents 16% washed their feet not less than 4 times a week. The findings are similar to those of Mustafa which revealed that most of the respondents had good practices for foot care (Mustafa, 2017).

CONCLUSION.

The general overview of attitudes towards the management of diabetes is recommendable which informed the good practices of respondents towards self-care and adherence to care instructions. There were traces of poor attitudes and unrecommendable practices among some respondents posing negative health outcomes to them.

LIMITATIONS OF THE STUDY.

Time for the research to be carried out was not favoured since most of the time caught up with duties.

RECOMMENDATION.

Health workers should more emphasis on giving clear and concise health education to all patients coming for diagnosis or treatment and roll out more sensitization campaigns to raise awareness in the general population.

ACKNOWLEDGMENT.

LIST OF ACRONYMS.

WHO: World Health Organization
DM: Diabetic Mellitus
SPSS: Statistical package for the social sciences

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. Marengoni A., Angleman S., Melis R. Aging with multimorbidity: a systematic review of the literature. Ageing Res. Rev. 2011; 10:430–439. https://doi.org/10.1016/j.arr.2011.03.003 PMID: 21402176
2. Mustafa, A., Iqbal, M., & Parvez, M. A. (2017). Assessment of Knowledge, Attitude, and Practices of Diabetics Regarding Their Foot Care. *Annals of Punjab Medical College*, *11*(1), 43-47. https://doi.org/10.29054/apmc/2017.244
3. Ruteemberwa, B. (2015). Adherence to anti-diabetic medication among patients with diabetes in Eastern Uganda.
4. Shawahna R, Samaro S, Ahmad Z. Knowledge, attitude, and practice of patients with type 2 diabetes mellitus about their disease: a cross-sectional study among Palestinians of the West Bank. BMC Public Health. 2021 Mar 9;21(1):472. doi: 10.1186/s12889-021-10524-2. PMID: 33750352; PMCID: PMC7941958.
5. Shunjhunu, Singh, Sikar, Toviji, Rajasthan, Bharat, & Jibhard. (2014). A study to assess the practice of diabetic patients towards self-care activities for longevity life.
6. Skolnik. (2018). No communicable disease country profiles.
7. WHO. (2020). Leading causes of death and disability worldwide.
8. WHO. (2022, September 6). *Diabetes prevention*. Retrieved from Health topics: https://www.who.int/newsroom/factsheets/detail/diabetes#:~:text=be%20physically%20active%20%E2%80%93%20doing%20at,of%20diabetes%20and%20cardiovascular%20disease.

Publisher details.