

PUBLIC KNOWLEDGE OF TYPE2 DIABETES AND FACTORS INFLUENCING HEALTH-SEEKING BEHAVIOUR IN KATAGUM LOCAL GOVERNMENT AREA OF BAUCHI STATE

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Abstract

This research examined knowledge of type2 diabetes among members of the public in Katagum Local Government Area of Bauchi State, Nigeria. It assessed the factors that shape health-seeking behaviour among the public in general and people with type 2 diabetes in particular as well as provide insights into healthcare practices in the region. Through a mix of qualitative and quantitative methodologies, including surveys and interviews, the study succeeded in bringing to the fore, salient issues impacting health-seeking practices in this population. The study recommends that tailored interventions should consider working with religious leaders to spread awareness about Type 2 Diabetes as religious leaders could be powerful allies in disseminating health messages that will increase not only public awareness, but patient care strategies in managing type 2 diabetes as well.

Keywords- Health-seeking behaviour; health messages; Knowledge; Misconceptions; Type 2 diabetes,

Introduction

Diabetes has been identified as one of the major causes of premature deaths as well as health complications that can lead to heart attack, stroke, blindness, kidney failure, and lower limb amputations. Global reports (World Health Organisation (WHO), 2016; International Diabetes Federation (IDF), 2021) have shown that the number of people with diabetes is on the increase across all regions with the greater burden on developing countries. In spite of this, studies in Nigeria (Ubangha, Odugbemi, and Abiola, 2014) have shown that awareness about the major causes of diabetes and its preventive measures was very low among the general population. This has the potential of increasing the scourge which, invariably, may have a negative effect on the social structure especially when more people assume the sick role.

Nigeria has the greatest number of diabetes in Africa which is estimated at about 3.6 million adults aged 20 -79 years while more than half remain undiagnosed and with a current prevalence of 4.3% (IDF, 2025; Oputa and Chinenye, 2015). It therefore affects people within the productive age who contribute to national development which if left unattended may have negative consequences on the socio-economic wellbeing of the country. There is also the problem of undiagnosed cases of diabetes. A report by DébboAfrica (2023), revealed that 54% of people with diabetes in Nigeria remain undiagnosed. And once it remains undiagnosed, it can develop into serious and fatal conditions. Consequently, people who develop chronic diabetes complications are most likely to incur larger healthcare expenditures than those diagnosed early. Because those diagnosed early have better chances of preventing harmful and chronic conditions associated with diabetes that may incur additional treatment expenditure.

Similarly, attribution of symptoms to myths and other superstitious interpretations have been identified in some studies (Ogbemera and Ekpebegh, 2014; Oguejiofor, Odenigbo, and Onwukwe, 2014), as other factors responsible for the high number of undiagnosed cases of diabetes in Nigeria. Indeed, cultural schema regarding the aetiology of disease predisposes peoples' health-seeking behaviour which determines the type of care to be sought. Similarly, labelling disease from cultural lens may sometimes carry element of stigma which potentially affect not only health-seeking but the very social existence of the individual. Therefore, investigating how diabetes is interpreted among the general population will provide ground for effective response.

The main objective of the study is to identify knowledge and prevailing factors influencing health-seeking behaviour among type2 diabetic patients in Katagum Local Government Area, Bauchi State, Nigeria.

Literature review and theoretical framework Type2 diabetes; causes, risk factors and prevention

Diabetes usually occurs when there is high blood glucose in the body due to its inability to produce enough insulin which regulates blood sugar and convert it into energy for use in the body (IDF, 2021). This leads to high level of blood glucose which results into diabetes. Diabetes mellitus is classified into three types; Type1 Diabetes, Type2 Diabetes, and Gestational Diabetes. The causes of Type2 Diabetes are not completely understood, but it is mostly associated with being overweight and obese, physical inactivity and increasing age as well as with ethnicity and family history (IDF, 2021). When a person develops diabetes and remains undiagnosed or inadequately treated, it develops into a life-threatening health condition with a fatal consequence, which affects social roles and responsibilities.

The IDF (2021), identified the risk factors for diabetes mellitus to include family history, overweight, unhealthy diet, physical inactivity, increasing age, high blood pressure, ethnicity and impaired glucose tolerance. Some studies (Sliwinska-Mosson and Milnerowicz, 2017; Liu, Yang, and Guo, 2018), have confirmed a significant effect of cigarette smoking on the development of diabetes in adults. Similarly, alcohol drinking was also found to result in severe health consequences that can worsen diabetes-related complications (Wu, Liu and Li; 2021). As such, alcohol consumption and cigarette smoking are also among the risk factors for developing Type2 Diabetes in adults.

Some of these risk factors are modifiable through the adoption of healthy lifestyle which includes the adoption of a healthy diet, increased physical activity, maintenance of a healthy body weight, as well as quitting smoking and alcohol consumption (WHO, 2022). It is presumed that once knowledge of diabetes risk factors is acquired, people are more likely to adhere to appropriate preventive measures.

Health-Seeking

Health-seeking usually results from an array of inherent behavioural influences interfaced with external environmental influences. It involves how an individual undertakes personal action to reduce the risk of disease. Such a change in behaviour is usually influenced by some enabling factors (Erinosho, 2012).

It is obvious that the decision to engage with a particular illness response is influenced by a variety of factors such as symptoms awareness, sex, age, socio-economic status, the type of illness, access to services, perceived quality of the service and of course, family influence (Cockerham, 2011; MacKian, 2003). In a study in Nigeria Onwujekwe, Onoka, Uzochukwu, and Hanso (2011), reported that as many as 71% of rural dwellers have reported inappropriate health seeking behaviour during their last illness while only 53% of urban dwellers reported inappropriate health seeking behaviour during their last illness. Similarly, Ononokpono and Odimegwu (2014), also reported differences in health seeking behaviour in relation to access to a health facility.

Consequent upon these therefore, health seeking may likely be influenced by peoples' knowledge about the disease, their socio-economic status, access to health services, pre-existing beliefs about the likely meaning of the symptoms and disease causation as well as affordability of the services.

Knowledge of type2 diabetes

One of the many factors that influence health seeking behaviour is for the individual to have knowledge of perceived symptoms of a disease. Inadequate knowledge which leads to misconceptions was found to be a barrier to proper diabetes management (Ferreira, Morais, Primenta, Ribeiro...2024). Studies have shown inadequate knowledge of diabetes among populations. For example, Agofure and Oghenerume (2022), in their study on secondary school students found poor knowledge of diabetes symptoms, risk factors, and complications.

A similar trend was found in Poland (Sekowski, Grudziak-Sekowska and Pinkas. 2022) which reported that only 17% of respondents declared a good level of knowledge of diabetes despite the fact that 43% declared that they have a history of diabetes in the family. Although overall knowledge of the disease was found to be adequate (86.9%) among patients in Tanzania (Luambano, Mwinuka, Ibrahim and Kacholi, 2023), yet knowledge of symptoms was reported to be lower (48%).

Lack of knowledge about a disease may lead to misconceptions which influence a person's health seeking and management behaviour. Nalavadey, and Baliga (2022), found misconceptions about diabetes mellitus in a study in India, that eating bitter food controls elevated sugar level in the body, and that diabetics cannot take part in sports. Similarly, in South Africa, Mdondolo et al (2003), found that lack of knowledge about a disease and the misconceptions regarding its symptoms influenced patients to seek care through traditional healers prior to seeking biomedical care services. However, diabetes misconceptions were found to be more common among uneducated and low income people (Akbar, Aqeel, Nasim, and Dhingra, 2016). Consequently, once a person is not aware of the symptoms of a disease, that person may likely not take the appropriate action needed.

Social Factors

Health seeking behaviour is sometimes influenced by social factors. For example, education, gender, age, cultural values and family influence are likely to influence health related behaviour (Deeks, Lombard, Michelmores and Teede, 2009). Several studies indicated that educational level is closely related to awareness which has significant influence on a person's health-seeking behaviour. In this direction, a study in Nigeria (Jasper, Ogundunmade, Opara, Akinrolie, Pyiki, and Umar, 2014), revealed that level of education, along with other factors, was found to be associated with better knowledge of diabetes mellitus which is also assumed to enhance better health seeking practices.

Similarly, in another study in Ibadan, Latunji and Akinyemi (2018), found that low level of education is associated with a reduction in the likelihood of seeking healthcare from formal sources. Concordant with this finding, Sankar, Lipska, Mini, Sarma and Thankappan (2015), reported in an Indian study that low education status was found to be responsible for non-adherence to treatment regimen among diabetic patients. Hence, the assumption that the higher the level of education, the likelihood to be more aware of diabetes.

Economic Factors

The economic status of patients plays a significant role in determining their health-seeking behaviour. Patients in the lower economic stratum may have difficulty coping with daily subsistence and maintaining proper healthcare at the same time. Some patients give precedence to pressing basic needs of life such as food and children's school fees over managing their health problems as reported by Musinguzi et al (2018). This shows that the financial status of patients is critical in influencing the health-seeking behaviours as well as

compliance to medication among patients with type 2 diabetes. The study reported that non-adherence to regular medication will have the potential of aggravating the condition and affect other social activities.

Materials/Methods

This research used a descriptive cross-sectional study design aimed at investigating knowledge factors that influence health-seeking behaviour among in Katagum Local Government Area of Bauchi State. Data were collected through primary source which involved both quantitative and qualitative methods. The quantitative data were elicited through semi-structured questionnaire administered on 1150 respondents while the qualitative data were collected through In-depth interviews (IDI) with twenty (20) participants. Probability and Non-probability sampling techniques were adopted. The probability sampling included multi-stage cluster, systematic and simple random sampling methods. Katagum L.G.A. Master-list Settlement obtained from the Local Government secretariat was used as the sampling frame. It consisted of all the three districts, nineteen wards, and the one thousand-one-hundred-and-thirty-two (1132) communities in the local government area.

At the first stage, the three districts were used as clusters and two (2) wards were selected from each district using the lottery method making a total of six (6) wards to represent the local government. Secondly, these wards were further used as clusters and three settlements from each ward were selected using the lottery method. Therefore, the total number of settlements covered by the study within the local government area was fifteen (15). In the last stage, systematic sampling technique was employed using interval of 3 to select households within the settlements. By this procedure, the first house was randomly selected followed by every third house until the required sample was obtained. For the non-probability purposive sampling was used.

Katagum Local Government Area has a projected population of 523,200 (five hundred and twenty-three thousand, two hundred inhabitants). However, the population of this study consisted of people aged 15years and above who are domiciled within the local government area, whose projected population, as at December 2022 was 274,680 (National Population Commission (NPC) Bauchi State office, 2023). It also included all adult males and females diagnosed with Type2 Diabetes who visit the diabetes clinic at the Federal Medical Centre and the General Hospital Azare from January-December 2022.

Letters of clearance were obtained from both hospitals before the commencement of the interviews. Similarly, all the participants were informed that their participation was voluntary and assured of confidentiality. Their informed consent was sought.

Data Analysis

In the course of analysing the quantitative data, simple descriptive statistics such as range, frequency and percentage were used to analyse the demographic characteristic of the respondents. The data were analysed using the Statistical package for Social Sciences (SPSS) version 23, and the results displayed in tabular forms.

Consequently, analysis for the qualitative data involve three basic procedures; data reduction, data display and conclusion. Therefore, all the transcriptions, research memos, and notes that were gathered during the course of the interview sessions were developed into themes, sub-themes and concepts were identified and interpreted, in line with the study objectives. Overall, interpretive and narrative analyses were used.

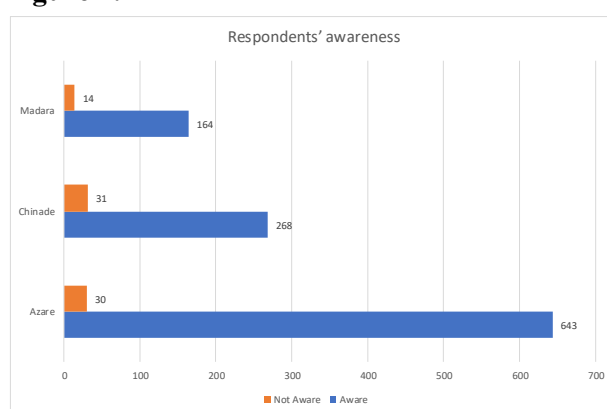
Data Presentation

Table 4.1 Demographic Characteristics of the Respondents

District	Frequency	Percentage
Azare District	673	58.5
Chinade District	299	26.0
Madara District	178	15.5
Total	1150	100.0
Age of respondents	Frequency	Percentage
15 – 34	794	69.0
35 – 54	275	23.9
55 – 74	64	5.6
75 and Above	17	1.5
Total Mean age = 32 years	1150	100.0
Gender	Frequency	Percentage
Male	813	70.7
Female	337	29.3
Total	1150	100.0
Tribe	Frequency	Percentage
Hausa	918	79.7
Fulani	141	12.3
Yoruba	11	1.0
Igbo	10	0.9
Others	70	6.1
Total	1150	100.0
Religion	Frequency	Percentage

Islam	1068	92.9
Christianity	76	6.6
Traditional	4	0.3
Others	2	0.2
Total	1150	100.0
Marital Status	Frequency	Percentage
Married	531	46.2
Single	542	47.1
Divorced	64	5.6
Widowed	9	0.8
No Response	4	0.3
Total	1150	100.0

Figure 4.1

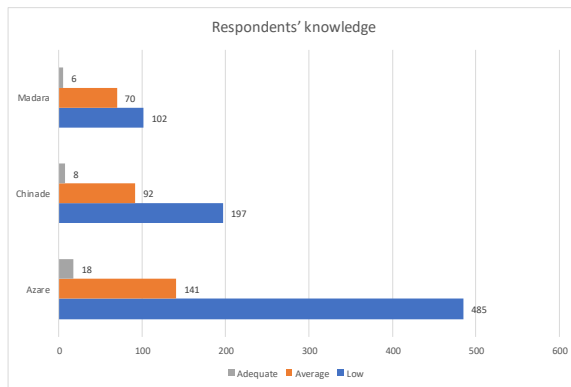


The above distribution shows that, of the one thousand one hundred and fifty (1150) respondents involved in this survey, majority of them, constituting about 93.5% are aware of diabetes as a disease. From the descriptive statistics in Table 4.3, it is revealed that 58.5% are from Azare district out of which 95.5% of them are aware of diabetes which is significantly high. Respondents from Chinade district constitute 26% and the data shows that 89.6% of them are equally aware of diabetes, and those from Madara district constitute 15.5% of the total respondents out of which 92.1% of them are aware of diabetes. The finding shows that a significant majority of all the respondents across the three districts in the study area are aware of diabetes.

Knowledge of diabetes among the public

This section investigates respondents' knowledge of the causes of type2 diabetes, risk factors for developing type2 diabetes (including conditions associated with the disease, people at risk of developing type2 diabetes, ways to reduce the chance of having the disease), and type2 diabetes symptoms.

Figure 4.2



Causes of type2 diabetes

Respondents were asked to identify the factors that cause type2 diabetes and multiple options were allowed. The responses are presented below:

Table 4.2

Factors	Frequency	%
Excessive Sugar Intake	327	28.4
Excessive Sugar Intake, and Genetic Factors	168	14.6
Excessive Sugar Intake, Genetic Factors and Life-Style Factors	30	2.6
Excessive Sugar Intake and Life-Style Factors	69	6.0
Genetic Factors	272	23.7
Genetic Factors and Life-Style Factors	62	5.4
Genetic Factors, Life-Style Factors and Other Causes	2	0.2
Genetic Factors and Other Causes	4	0.3
Life-Style Factors	157	13.7
Other Causes	28	2.4
No Response	31	2.7
Total	1150	100

The presentation in table 4.2 above shows the frequency and percentage distribution of respondents' opinion of the factors that may be the causes of type 2 diabetes. The item allows for multiple options hence respondents were at liberty to select more than one option. Majority of the respondents (28.4%) indicated excessive sugar intake as the cause of type 2 diabetes. This may probably be unconnected with the name the disease is called in Hausa language (Ciwonsuga) which literally means 'Sugar disease'. A study by Sabra et al (2010) in Saudi Arabia also reported that 65.9% of respondents believed that excessive sugar intake can directly cause diabetes. However, this view has an element of truth in it, because excessive

sugar consumption can lead to obesity which is one of the high-risk factors for diabetes mellitus.

Other respondents (23.7%) suggested genetic factors, while 14.6% think type2 diabetes is caused by both excessive sugar intake and genetic factors. Similarly, 13.7% of the respondents think that type 2 diabetes is caused by life-style factors, another 6% opted for life-style factors and excessive sugar intake, 5.4% think that the disease is caused by life-style and genetic factors while only 2.6% of the total indicated the trio of life-style factors, excessive sugar intake and genetic factors as the causes of type 2 diabetes. Similarly, some respondents during the In-depth interview also expressed various misconceptions regarding the aetiology of type2 diabetes. One of the respondents expressed;

“Hunger can cause it (diabetes) and so can un-balanced diet”.

Another respondent also expressed her opinion;

“There are things we eat nowadays which I think causes diabetes. For example, the seasonings we use in cooking like Maggi cubes, Agino moto seasoning and the like causes diabetes, because in the past, we did not eat such foods and we did not have diabetes. When we were young our parents don’t use salt, what they use was bakinmanda (a locally prepared food seasoning with a salty taste) as it was called, but it has now disappeared and people no longer use it”. (IDI- Female Patient, FMC, 2022)

The above response indicates that misconceptions about the causes of diabetes mellitus are prevalent among the population. Furthermore, some respondents have the belief that there are other causes, apart from the ones suggested, that may pose the risk of having type 2 diabetes as presented in the table. These include genetic factors and other causes (0.3%) other causes (2.4%), and genetic factors, life-style factors and other causes (0.2%) respectively. It is presumed that once knowledge of diabetes risk factors is acquired, people are more likely to adhere to appropriate preventive measures and best health-seeking practices.

The ranking was made based on the items presented in the questionnaire to test respondents’ knowledge of type2 diabetes. The items presented are six (6) and ranked according to the number of options selected. Six (6) and five (5) are ranked as adequate, four (4) and three (3) as average while two (2) and one (1) are ranked as low.

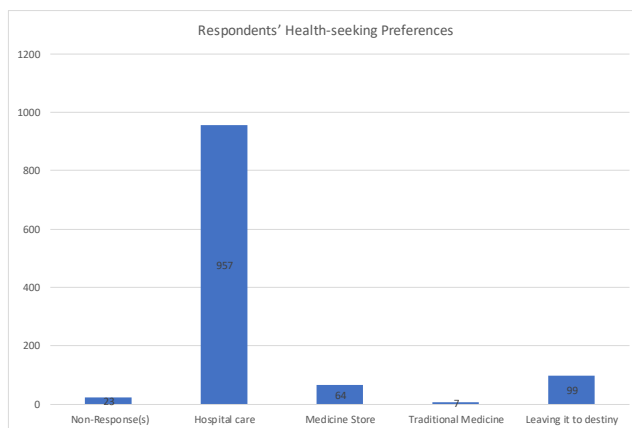
Table 4.3 Ranking of Respondents' Knowledge of Type 2 Diabetes

	Respondents' Knowledge		
	Low	Average	Adequate
Madara	102(9.1)	70(6.3)	6(0.5)
Chinade	197(17.6)	92(8.2)	8(0.7)
Azare	485(43.3)	141(12.6)	18(1.6)
Total	784(70.1)	303(27.1)	32(2.9)

The finding shows that majority of the respondents (70.1%) have low knowledge of the causes of diabetes, 27.1% have average knowledge, and only 2.9% were found to have adequate knowledge of the causes. This is similar to the finding of Okolie et al (2009) in Umuahia, Nigeria that majority of the respondents (70.0%) did not know the major causes of diabetes and its preventive measures.

Health- Seeking among the respondents

This section presents data on respondents' health-seeking preferences, their access to healthcare facility, and information on diabetes received from those facilities.

Figure 4.3

This study found that respondents' preferences of health-seeking vary. In response to the type of care they will seek when they notice any of the symptoms of type 2 diabetes mentioned above, 83.2% of the respondents chose to report their case to the hospital as presented in the above table. This shows that a significant majority have positive attitude towards health seeking.

This study also found that health-seeking among diabetic patients is usually influenced by an array of certain factors. These include personal decisions on how to tackle the risk of the disease, symptoms awareness, the magnitude of the illness, perceived quality of the

service, having a husband and family influence, among others. Some patients revealed a variety of reasons which seems to influence their decision to seek treatment at the onset of symptoms. These include, influence of family and friends, prior knowledge of the symptoms due to having had a family with diabetes, self-volition, and fear and anxiety. People sometimes seek healthcare due to the influence of one or a combination of these factors. The feeling of illness and advice by family members or friends are mostly the motivating factors towards health seeking mentioned by the respondents. Some of the respondents disclosed that their relatives, friends or spouses encouraged them to seek medical advice for the complications they experienced. A participant expressed;

“My brother who happened to be a medical doctor took me to the hospital when he realised, I was losing weight. And after investigations I was diagnosed with diabetes”. (IDI-Female patient, FMC 2022).

This shows that some participants remain passive without taking appropriate action and waited for their significant others to intervene, even after the symptoms manifested and have started to experience a condition of ill-health. There are others who noticed a change in their condition they are not comfortable with hence sought advice from associates before taking the necessary measures. This was expressed by a participant;

“When I discovered I was urinating abnormally I complained to a friend’s elder brother who happened to be diabetic, and he advised me to go to the hospital for check-up because it might be a symptom of diabetes”. (IDI-Male patient, FMC 2022).

This finding is concordant with the one in Ghana by Asante et al (2023) which found out that, individuals who received prompts from family members and friends towards a particular healthcare facility have a higher likelihood of engaging that facility.

In a patriarchal society women tend to be more dependent on their husbands even in taking healthcare decisions. One of the respondents revealed that when she started to experience pain on her legs and weakness of the body, her husband invited an herbalist. Even though her preference was to go to the hospital but she could not object because it appears from her statement that the husband’s decision was final. One of the patients narrated;

“I started having pain in my legs and that was the beginning...my husband called a traditional herbalist who conducted surgery on my legs...though I prefer going to the hospital but my husband called the herbalist”. (IDI-Female patient, FMC 2022).

This concurs with the finding from a study in Malaysia (Low, Tong and Low, 2016) which revealed that some patients, as part of expressing their sick roles, remain passive and allow their family members or friends to take decisions concerning their personal health. The study discovered that family members and friends may even recommend alternative treatments for the patients and persuade them in that direction.

The above finding reaffirms the construct of the Theory of Planned Behaviour, Subjective norm, which states that the perceived pressure from important people in the individual's life to engage or not to engage in certain behaviour weighted by his or her motivation to comply with those important people are the motivating factors toward a particular behaviour. It also reaffirms the postulation in Igun's stages of health seeking which states that health seeking in the African context has usually been a family affair.

However, this study found that there are other wives who seemed to be less subservient when it comes to taking decision on their personal health. Even though they could refer their cases to their husbands but when the wrong decisions are taken, they may resort to their own volition. One of the patients expressed;

“I informed my husband about my condition and he said we should go to the hospital...even if my husband said otherwise, I would insist on going to the hospital because the hospital is where correct and appropriate measures would be taken”. (IDI-Female patient, GH 2022).

Most patients identified having experienced the symptoms of diabetes before being diagnosed with the disease, such symptoms like tingling of the feet, dry mouth, severe thirst, frequent urination, weight lose etc. However, their responses in addressing the symptoms differed. Some of the patients, especially those who have relatives or neighbours that are diabetic, seek medical attention at the onset of symptoms identification knowing that the symptoms are those of the disease. One of the patients recounted her ordeal;

“My father had it (diabetes). Many years before my marriage my father suffered it. Twelve years after I was married off, I became so obese. One night I felt feverish and became so pressed for urination. In the morning I told my husband that I thought I was also diabetic and would go to hospital (sobs) and that was how I was diagnosed with it”. (IDI-Female patient, FMC 2022).

One of the participantsexplained her situation when the symptoms persisted;

“When I noticed the changes in my condition, such as the incessant urination, I started to suspect that I might be diabetic because I was not like that before. I

therefore recalled how my mother started (her illness) so I just locked my room and rushed to the hospital”. (IDI-Female Patient, FMC, 2022).

These findings indicate that people with family history of diabetes are more likely to have good knowledge of diabetes risk factors and therefore take prompt action. This finding is concordant to the one reported in a Ugandan study (Heljm and Atwine, 2011) which also revealed that some patients seek medical attention at the onset of symptoms which immensely assist in putting the condition under control. Azuogu et al (2018) also found a statistically significant relationship between family history of diabetes and general knowledge of diabetes risk factors. Our finding therefore reaffirms the construct of perceived threat in the health belief model (HBM), which combines the constructs of perceived susceptibility and perceived severity, as a motivating factor towards health seeking. The fear held by the patients that any unnecessary delay in seeking medical attention may exacerbate the condition and consequently affect their social being serves as the driving force for taking prompt action.

Some patients however, did not take swift response to the symptoms when they manifested, they were rather reluctant in taking measures. One of the participant explained the reason for her reluctance;

“At first I thought it was not serious because I was not aware of the disease then and could not relate the symptoms to be those of diabetes”. (IDI-Female Patient, FMC, 2022).

In a study in Tanzania, Metta (2016) found out that none of the patients who participated in the study had initial knowledge that the symptoms they were experiencing were indicative of diabetes. This may obviously delay a person’s effort in taking appropriate measure. And the implication is that, such a delay may result in the patient developing chronic condition that will have more adverse social and health consequences. This is similar to another finding in Uganda (Musunguzi et al, 2018) which reported that some patients with mild symptoms mostly self-treated with herbal or modern medicines or patronise drug shops and pharmacies, whereas only patients with severe symptoms sought care from hospitals or higher-level health centres.

Discussion of Findings

This study found that awareness about the existence of diabetes among the general population was high as 93.8 percent indicated having known the disease from different sources with family being the major source of awareness (36.3%). However, respondents’

general knowledge of type2 diabetes was found to be very poor as only 2.9% demonstrated adequate knowledge while those who demonstrated poor knowledge are found to be 70.1%.

Our finding is a little higher than the figure reported by Adebayo et al (2015) which shows the percentage of patients who prefer to consult a doctor if they were ill at 49%. However, the study revealed that 5.6% of our respondents think they would rather go to a medicine store for an over-the-counter treatment which coincides with what Muhammed et al (2013) reported that majority of households (53.6%) prefer to utilize patent medicine stores or pharmacies as the first line of therapy.

Similarly, this study found that 0.6% respondents thought of using traditional herbs to address such symptoms while 8.6% of the respondents would rather leave it to destiny which implies taking no action. Therefore, the finding shows that health seeking among the respondents involves an array of different of approaches, while some are willing to report any change they notice in their health conditions to the hospital, others prefer resorting to alternative care. This reaffirms one of the assumptions in Igun's stages in health seeking model which is the Self-treatment stage. This stage, according to the model, is dependent upon the belief that the person understands and attaches a label to the symptoms which makes him/her to determine the type of treatment he/she adopts.

Health seeking among type2 diabetes patients was found to be influenced by array of predisposing factors. Patients with family history of diabetes were found to have better knowledge of its symptoms hence sought medical attention at the onset of symptoms. Those who do not have a family history of diabetes and are ignorant of the symptoms tend to ignore them as not serious, hence took no action or resort to over-the-counter treatment, until the condition became severe. There are others who remain passive after they notice the symptoms and allow significant persons in their lives to take necessary action and decide on the type of care to seek. This reaffirms the constructs of perceived susceptibility and perceived threat of disease as motivating factors towards health seeking behaviour. It also supports the postulations in Igun's stages in health-seeking which describes the processes of health seeking in African societies to be a family affair.

Conclusion

Awareness of type2 diabetes is found to be high among the public irrespective of their demographic identities. However, the study finds that knowledge of diabetes, in terms of its causes, risk factors and symptoms was very low among the public despite the high awareness.

The prevailing influence and relative dominance of significant others, especially husbands, on health care decisions may have its negative repercussion especially when wrong decisions are taken. The findings from the study reaffirm some of the theoretical constructs of the HBM, and Igun's stages of health-seeking which show synergy between different actors in the process of seeking care. There are psycho-social problems associated with living with diabetes which have adverse effect on the individual. However, with adequate sensitization and counselling from healthcare professionals and relevant stakeholders, and social support from family and community members, such problems would be overcome and those living with type2 diabetes can live a healthy life.

Recommendations

Diabetes mellitus is a complex health condition that affects not only the individual but the society as well, in different respects. Therefore, any attempt to curtail its scourge will require a well-coordinated and comprehensive approach through massive sensitization campaign involving governments at all levels, healthcare providers, communities, non-governmental organisations (NGOs) and donor agencies both local and international.

Possible interventions should consider working with religious leaders to spread awareness about Type 2 Diabetes. Religious communities often trust their leaders for health-related information, and these leaders could be powerful allies in disseminating health messages. Such collaboration will sensitize religious institutions to incorporate health education into their community outreach programs, exploiting their influence for widespread impact.

References

- Akbar, N., Aqeel, T., Nasim, A., and Dhingra, S. (2016). Assessment of knowledge and dietary misconceptions among diabetic patients. *Journal of Pharmacy Practice and Community Medicine*. 2(21):9-15
- Asante, V. Gariba B.B, Appiah-Brempong, E. and Sarpong, H.L. (2023). Factors influencing the health-seeking behaviour of persons who have diabetes in the Kumasi metropolis. *Ghana journal of science*. 64(1): 25-33
- Azuogu, B.N., Madubueze, U.C., Una, A.F., Okedo-Alex, I.N. and Azuogu, V.C. (2020). Prevalence and Knowledge of Diabetes mellitus risk factors among secondary school teachers in Abakaliki educational zone, Nigeria. *Journal of Epidemiological Society of Nigeria*. 2(2): 37-44.
- Cockerham, W. C. (2011), *Medical sociology (12th edn)*. New Jersey: Prentice-Hall.
- DébboAfrica, (2023). Disease Prevention and Management. Factsheet: Diabetes in Nigeria: Here's What to Know. <https://www.debbo.africa>
- Deeks A, Lombard C, Michelmores J and Teede H (2009). The effect of gender and age on health related behaviour. *BMC Public Health*. 2009; 9:213. Doi: 10.1186/1471-2458-9-213
- Erinosho, A. O. (2012). *Health sociology*. Ijebu-Ode: Bulwark Consult.
- Ferreira, P.L., Morais, C., Primental, R., Ribeiro, I., Amorim, I., Alves, S.M., and Santiago, L. (2024). Knowledge about type 2 diabetes: its impact for future management. *Front Public Health*. 8(12)
- International Diabetes Federation (2025). *IDF Diabetes Atlas – 11th Edition*
- International Diabetes Federation (2021). *IDF Diabetes Atlas – 10th Edition*
- Jasper, US. Ogundunmade, BG. Opara, MC, Akinrolie, O. Pyiki, ED and Umar, A. (2014). Determinants of diabetes knowledge in a cohort of Nigerian diabetics. *Journal of diabetic and metabolic disorders*. 13 (1), 39 doi: 10.1186/2251-6581-13-39
- Latunji, O.O and Akinyemi, O.O (2018). Factors influencing health-seeking behaviour among civil servants in Ibadan, Nigeria. *Annals of Post-graduate medicine*. 16(1): 52-60
- Liu, X. Yang, L. and Guo, Y. (2018). Smoking and smoking cessation in relation to risk of diabetes in Chinese men and women: A 9-year prospective study of 0.5 million people. *The Lancet Public Health*. 3(4): 162-176
- Luambano, C., Mwinuka, B., Ibrahim, R.P., and Kacholi, G. (2023). Knowledge about diabetes mellitus and its associated factors among diabetic outpatients in Muhimbili national hospital in Tanzania. *Pan African Medical Journal*. 45:3
- MacKian, S. (2003). *A review of health-seeking behaviour: problems and prospects*. London: University of Manchester.

- Muhammed, K.A. Umeh, K.N. Nasir, S.M. Suleiman, I.H. (2013). Understanding the barriers to the utilization of primary healthcare in a low-income setting: implications for health policy and planning. *Journal of Public Health Africa*. 4(2):e13
- Musinguzi G, Anthierens S, Nuwaha F, Van Geertruyden J, Wanyenze R.K. and Bastiaens H.(2018). Factors Influencing Compliance and Health Seeking Behaviour for Hypertension in Mukono and Buikwe in Uganda: A Qualitative Study. *International Journal of Hypertension*. Volume 2018, Article ID 8307591, 13 pages <https://doi.org/10.1155/2018/8307591>
- Nalavadey, S and Baliga, S.S. (2022). Misconceptions about diabetes mellitus among diabetes patients: A cross-sectional study. *Indian Journal of Health Sciences and Biomedical Research*. 15(3):230-234
- Ogbera, O.O and Ekpebegh, C (2014). Diabetes Mellitus in Nigeria: The past, present and future. *World journal of diabetes*. 5(6) 905-911 doi:10.4239/wjd.v5.i6.905
- Oguejiofor, O, Odenigbo, C and Onwukwe, C. (2014). Diabetes in Nigeria: Impact, Challenges, Future directions. *EndocrinolMetab Syndr*. 3:130.
- Okolie, V. U, Ehiemere, O. I., Iheanacho, N. P. and Kalu-Igwe I. N. (2009). Knowledge of diabetes management and control by diabetic patients at Federal Medical Center Umuahia Abia State, Nigeria. *International Journal of Medicine and Medical Sciences*. Vol. 1(9): 353-358
- Ononokpono, D.N. and Odimegwu, C.O. (2014). Determinants of maternal healthcare utilization in Nigeria: A multi-level approach. *The Pan-African Medical Journal*. 17(2)
- Onwujeke O., Onoka, C., Uzochukwu, B., and Hanso, K. (2011). Constraints to universal coverage: inequities in health service use and expenditures for different health conditions and providers. *International journal for equity in health*. 10(1):50
- Oputa, R.N. & Chinenye, S. (2015). Diabetes in Nigeria a translational medicine approach. *African Journal of Diabetes Medicine*. 23(1): 7-10
- Sankar UV, Lipska K, Mini GK, Sarma PS and Thankappan KR (2015). The adherence to medication in rural Kerala, India. *Asia pacific journal of public health*, 27(2): 513-523.
- Sekowski, K., Grudziak-Sekowska, J., Pinkas, J. and Jankowski, M. (2022). Public knowledge and awareness of diabetes mellitus its risk factors, complications, and prevention methods among adults in Poland- A 2022 nationwide cross-sectional survey. *Public Health and Pro*.
- Sliwinska-Mosson, M. and Milnerowicz, H. (2017). The impact of smoking on the development of diabetes and its complications. *Sage Journals*. 14(4): 265-276
- Ubangha LO, Odugbemi TO and Abiola AO. (2016). Diabetes mellitus: identifying the knowledge gap and risk factors among adolescents attending a public school in Lagos. *Journal of Clinical Sciences*. 13(4): 193-198
- World Health Organisation (2016). First WHO Global report on diabetes. <http://www.who.int/diabetes/global-report>

- World Health Organisation, (2022). *African region tops world in undiagnosed diabetes: WHO analysis*. WHO Regional office for Africa.
- Wu, X. Liu, X. and Li, Y. (2021). Prevalence and Characteristics of alcohol consumption and risk of Type2 Diabetes mellitus in Rural China. *BMC Public Health* (21): 1644