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Quality of Life Domains among Patients with Type 2 Diabetes, in Samaru Community, Sabongari Local Government Area, Kaduna State

*Umar A. B.[1], Umar A. A.[1], Umar L. B.[2]., Yunusa U.[2], Kumbo A. S.[1]
1. Department of Nursing Science, Ahmadu Bello University Zaria
2. Department of Nursing Science, Bayero University Kano
Corresponding Author: Umar. AB.
Corresponding Email: addanice@yahoo.co.uk

Abstract

Background: The study aimed at assessing the perception of quality-of-life domains of patients with type 2 diabetes in the Samaru Community, Sabon Gari local government area Kaduna State. **Method**: A descriptive design was adopted for the study where ninety (90) patients with type 2 diabetes mellitus participated in the study. The World Health Organization quality of life (WHOQOL. BREF) instrument adapted from the World Health Organization was used for data collection. The data collected was analyzed using descriptive statistics. **Results**: Findings from the study on the perception of the respondents towards the quality of life domains showed that the overall general health was perceived to be fair with a mean score of 2.88 and a standard deviation of 1.060, The physical health domain had an aggregate mean score of 3.06, The psychological domain (2nd domain) mean score of 2.41, Level of dependant domain (3rd domain) had an aggregate mean score of 2.69 and a standard deviation of 1.153 Social relation (4th domain) had a mean score of 2.69 and a standard deviation of 1.152, and the environmental domain had aggregate mean score of 2.95 and a standard deviation of 1.034. All the domains reported a mean score lower than the decision mean of 3.5, meaning that they perceived the domains to be fair. **Conclusion/ Recommendations**: It is concluded that the respondents have a fair perception of the domains of their quality of life. It is therefore recommended that health workers need to include the assessment of QOL in their plan of intervention in other to provide patients with type 2 diabetes holistic care.

Keywords: Quality of Life, domains, Patients with type 2 Diabetic, Samaru community
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Introduction

Roughly 6 million Nigerians are living with diabetes mellitus (World Health Organization, 2020). The disease though preventable, exposes its victims to debilitating, disabling, and militating conditions which impede their quality of life. When the quality of life is poor, the physical, psychological, and social relations and mobility independence of an individual will be affected thereby compromising his health and capabilities to carry out his day-to-day activities. An individual's awareness and feelings about his physical, psychological, social, emotional and mental well-being define his perception of his quality of life and points to his behaviour in seeking health care and ensuring self-care. World Health Organization defines QoL as "an individual's perception of their position in life in the context of the culture and value

systems in which they live, and in relation to their goals, expectations, standards, and concerns." Diabetic Mellitus causes serious deterioration in the general QoL of its victims (World Health Organization, 2020).

To tackle a diabetic patient's condition well, health workers need to understand the patient's perception about his quality of life, collect patients' inputs about their quality of life priorities and expectations, to personalize their therapy and clinical course. In particular, the evaluation of QOL, a construct that has been defined as "a general concept that implies an evaluation of the impact of all aspects of life on general well-being" (Gupta, et.al, 2021). The outcome of the evaluation which directs the development of strategies for the care of the patients, can promote individualization of care as patients are bound to have variation in their perception of the various domains of Qol. Healthcare providers must focus on the psychosocial aspects of patients with T2DM just as they focus on their medical treatment as these aspects have a direct impact on their Quality of Life (QoL), leading to a better outcome (World Health Organization, 2020).

The World Health Organization in trying to define and measure the quality of life by asking people all around the world what they think is important for their quality of life identified six key life areas which include social relationships, psychological well-being, level of independence, religion and spirituality, physical health, and the environment (Sexton, 2016) these identified areas made up what today became the domains of quality of life. The factors that affect the overall quality of life vary by people's lifestyles and their personal preferences. Regardless of these factors, this measure plays an important part in the financial decisions in everyone's lives. Some of the factors that can affect a person's quality of life can include conditions in the workplace, healthcare, education, and material living conditions (Amy, 2019). Questioning and measuring the quality of life is important, as it helps the comprehension of factors related to improvement or worsening quality of life (sexton,2016). The function-neutral health-related quality of life framework developed by Krahn and colleagues in 2014 is very important in trying to understand the QOL of diabetic patients. This framework was developed starting from the assumption that physical functioning is not a key determinant for quality of life but that it is the relationship between the environment and the disability or illness that affects the quality of life; this framework emphasizes the fact that people with a chronic condition can be healthy and have a good (or bad,) quality of life—regardless of their levels of physical function; poor physical health is instead conceptualized as the presence of feelings of pain, sickness, and fatigue. This makes it a good framework for defining QOL in diabetic patients since they generally do not experience severe physical limitations (with the possible exception of complications such as a diabetic foot).

The framework identifies four core different broad dimensions plus an additional fifth (the environment), each described with several key concepts, which are presented in the instrument. In brackets, details regarding the meaning of the label are specified:(a)Physical health:(1)Energy/fatigue (impact of diabetes on feelings of "being fatigued," "feeling tired" or "feeling full of

energy")(2)Stamina (physical strength)(3)Pain (feelings of pain)(4)Sick/well (items regarding feeling "sick" or "ill" as opposed to feeling healthy)(5)Rest (items assessing the quality of sleep, being capable of resting, etc.).(a)Mental health:(1)Distress (feelings of mental distress)(2)Mood (items assessing mood states, e.g., depression, happiness, and anger)(3)Memory (and other cognitive abilities in general)(4)Attitude (items addressing the positive/negative attitude towards the sickness or the situation)(5)Emotional regulation (emotional response to sickness, capacity to react to diabetes-related negative events, etc.)(b)Social health:(1)Social engagement (impact of diabetes on social life, e.g., going to the restaurant with friends)(2)Relationships (impact of diabetes on existing relationship with familiars, close friends)(3)Intimacy (impact of diabetes on sexual life)(4)Discrimination (feeling oppressed or discriminated by others due to diabetes)(c)Life satisfaction/beliefs:(1)Meaning to life (being capable of finding a meaning in one's own life regardless of diabetes)(2)Satisfaction (towards diet, treatment, etc.)(3)Recreation (diabetes' impact on leisure activities, hobbies, etc.)(4)Activities (diabetes' impact on work, duties, and daily routines) (d) Environment: (1)Access to services (easiness to access healthcare system, to get information, etc.)(2)Public policies (impact of public policies on QOL, e.g., on financial situation and on out of pocket expense due to diabetes)(3)Societal attitudes (towards diabetes), (Palamenghi, Carlucci, and Graffigna, 2020).

Diabetes mellitus (DM) is a disease that, though preventable, exposes its victims to debilitating, disabling, and militating conditions which impede their quality of life. When the quality of life is poor, the physical, psychological, and social relation and mobility independence of an individual will be affected thereby compromising his health and capabilities to carry out his day to day activities. The impact of the disease and treatment on all chronic patients' quality of life (QOL) and lifestyle is a key concern for both the victims and caregivers. The physical, psychological, and social burden of diabetes affects patients' self-care behaviours, disease management, therapeutic adherence, and, consequently, QOL (Palamenghi, Carlucci, and Graffigna, 2020). However, health workers being caregivers and disease managers need to focus on all the domains of quality of life of patients so as to provide holistic and quality health care. For their care to be effective they will need to know the perception of the victims of diabetes about their QOL.

The researchers observed that there are quite a few studies on the perception of domains of QOL among diabetes patients, thus no study was made available on the perception of domains of quality of life among type 2 diabetes patients in the Samaru community. Regrettably, in many settings, the lack of effective policies to create supportive environments for healthy lifestyles and the lack of access to quality health care mean that the prevention and treatment of diabetes, particularly for people of modest means, are not being pursued (WHO, 2017).

Anecdotal observation of the researcher reveals that diabetic patients in the

community who come to the clinic have poor lifestyle practices, some of them developing complications while others dying from the complications. A poor perception of the quality of life status of a patient with diabetes can promote poor lifestyle practices leading to the deterioration of the patient's condition and a poor quality of life in the communities. Patient's perception of his quality of life can promote Lifestyle modification through, a healthy diet, regular physical activity, maintaining normal body weight, and avoiding tobacco use which can control and reduce the risk of developing complications hence promoting the quality of life of diabetic patients in the communities. The burden of the disease, the gap observed and the very important role, the outcome of the study will play in the management of type 2 diabetic patients in the Samaru community, motivated the study.

Methods and Materials

A descriptive design was adopted for the study. Ninety (90) patients with type 2 diabetes in Samaru community.

The instruments used for the study include:

Sociodemographic questionnaire: A semi-structured questionnaire with an internal consistency of 0.863, was adapted from Gracia and associates (2017) to collect information on patients' socio-demographic data, this covers age, sex, occupation, education and medical history.

World Health Organization Quality of Life (WHOQOL- BREF) (Szabo *et al*., 1998). This is an adapted instrument which contains close-ended questions. The WHOQOL instrument places primary importance on the perception of the individual. The WHOQOL instruments are tools that not only inquire about the functioning of people with diabetes, across a range of areas but also how satisfied the patients were with their functioning and with the effects of treatment. WHOQOL-BREF is a set of twenty-six (26) items which were spread across the domains of QoL. It focuses on five broad domains of quality of life, and socio-demographic data giving six sections A-F. Section A focused on domain one physical health, Section B focused on domain two physiological domain, Section C focused on domain three level of independence, Section D focused on domain four social relations, Section E focused on domain five environment. Responses were scored on a five-point rating scale as follows: Very poor-1, Poor- 2, Neither poor nor good-3, Good - 4 and Very good-5.

Validity and reliability of instruments

The English version of the questionnaire was translated into the Hausa language by an expert in the faculty of languages. Then the face validity, and content validity were checked. To ensure face validity, the questionnaire was given to a few diabetic patients, to evaluate the items with respect to problems, ambiguity, relativity, proper terms and grammar, and understandability. For content validity, 5 experts from medicine and nursing, assessed the quality of content validity. To determine the quantitative content validity, the content validity index and content validity ratio were calculated. The adopted instrument has been tested by the World Health Organization experts.

Reliability

The adapted instrument (WHOQOL BREF,) has been tested by the World Health Organization experts and proven to be valid and reliable and approved for

testing the quality of life of patients. It is made available for education purposes pose at the website: https://www.who.int.media (Szabo *et al*., 1997). Reliability co-efficient of Standardized instrument, WHOQOL BREF: The instrument has a reliability index of 0.857 (Skevington, Lotfy & O'Connell, 2003).

Method of Data Collection

For the purpose of data collection, an introduction letter and approval to carry out the study was collected from the department. Ethical approval to conduct the research study among human subjects was also collected from the Ministry of Health and Human Resources. Permission was also obtained from the community leader to access and recruited the respondents for the study. Home visitation was conducted, where a questionnaire was used to collect information on respondent's demographic information and medical history. Questions include whether the respondent is diabetic. The diabetic status of the patients was confirmed through observation of their clinic cards. Ninety (90) self-reported patients with type 2 diabetes were recruited for the study.

Ethical consideration: The aim of the study and the procedure involved was explained to the respondents. It was also explained to them that they have a right to withdraw from the study at any level they become uncomfortable. Also, it was categorically stated to them that all responses are only going to be used for the purpose of the study. After the explanations, the respondents gave their consent to participate in the study.

Method of Data Analysis

The data collected was collated and analysed using a statistical package for Social science version 25. Descriptive statistical tools of frequency, percentages, mean and standard deviation were used in analyzing the data. Results were presented in frequency tables. A decision mean of 3.5 was used to ascertain the perception of the respondents.

Table 1: *Organization of Questionnaire for Analyzing the Domains of Quality of Life*

DOMAINS	**QUESTIONS FOR COMPUTING DOMAIN SCORES**
Domain 1 Physical	Q1+Q2+Q3+ Q16.
Domain 2 Psychological	Q5 + Q6 + Q7 + Q11 + Q19 + Q26
Domain 3 Level of independence	Q4 + Q10 + 15 + Q17 + Q18
Domain 4 Social relations	Q20 + Q21 + Q22
Domain 5 Environment	Q8 + Q9 + Q12 + Q13 + Q14 + Q23 + Q24 + Q25

Source: *Researchers decision mean of 3.5 for good perception*

The mean score was used to analyze the quality of life domains.

Grading of scores

Mean score ≥ 3.5 indicates a good perception of the quality of life domain
2- 3.4 indicate the fair perception of

quality of life domain
< 2 indicates the poor perception of the quality of life domain

Ethical Considerations

Kaduna State Ministry of Health and Administrative Ethics and Research Committee approved the conduct of the study. Furthermore, approval for the conduct of the study in the community was obtained from the community leader and local government health authority. Participation was voluntary and all respondent were informed of their right of voluntary withdrawal even, after initial consent. Respondent did not bear any loss. Participation in the study was done with limited discomfort to respondents. Informed consent was obtained and respondents were informed of the use of unique confidence to conceal their identity and further assured of confidentiality and privacy of the information they have provided.

Results

Introduction

The results of statistical analysis of data from the respondents involved in this study. Data were collected on the perception of quality of life domains and sociodemographic characteristics of the respondents. Data collected were analyzed with Statistical Package for the Social Science (SPSS) IBM version 25 and presented below:

a) Descriptive statistics.

Table 2: *Distribution of Demographic Variables of Respondents* ***(n=90)***

Variables	frequency	percentages (%)
Age in years		
<30	6	6.7
30-39	5	5.6
40-49	34	37.7
50-59	25	28
>59	20	22
Sex		
Male	13	8.9
Female	77	91.1
Occupation		
Civil Servant	11	12.2
Farmer	3	3.3
Self-employed	53	59
Unemployed	23	25.5
Education		
No formal education	12	13.3
Primary	22	24.4
Secondary	42	46.7
Tertiary	14	15.6

Table 2 above shows that, the number of respondents below 30 years is 6(6.7%). The respondents within the 40 to 49 years age bracket were 34(37.7%), while respondents with 59 years and above age bracket were 20(22%). of the total respondents, 77(91.1%) were female while 13(8.9%) were males. This distribution ensures gender representation in the study. 59 % were self-employed and only 12.2% were civil servants. Abount46.7% of the total respondents had secondary education while 13.3% had no formal education.

Table 3: *Distribution of Respondents' Medical History (n=90)*

Variables	Frequency	Percentage (%)
Period of diagnosis (years)		
<1	25	27.7
2-3	7	6.7
4-6	15	16.6
7-9	18	20.2
>10	25	27.7
Type of treatment taken		
Diet only	35	38.9
Oral drugs and Diets	42	46.7
Injection and Diets	13	14.4

Table 3 above, revealed that 7(6.7%) of the respondents had diabetes for 2-3 years before the commencement of this study. while 25(27.7%) had diabetes for over 10years before the study. The table also showed that 35(38.9%) were on diet only as a treatment for the disease before the study. 42(46.7%) were on oral drugs and diets and only 13(14.4%) of the respondents were on injection and Diets.

Assessment of Diabetic Patients' Perception of their Quality of Life Domains

Research question one: What are the perceived quality of life domains of diabetic patients? To assess the perceived quality of life domains of the diabetic patients in the Samaru community, the mean scores of each domain were computed. The mean score on the domains of quality of life is based on a five-point scale. Scoring is therefore fixed at $\geq$ 3.50 for good perception of the domain of quality of life, 2-3.49 for fair perception and < 2 for poor perception of the quality of life domain. To analyze the five domains of quality of life, the responses were reorganized to cover the five domains of quality of life and the frequency, mean and standard deviation are presented in the table below

Table 4: *Responses to QOL Domains as Perceived by the Respondents (n= 90)*

	WOQOL BREF variables	VERY POOR	POOR	AVERAGE	GOOD	VERY GOOD	MEAN	STAND
OG	OVERALL GENERAL HEALTH	-	30	40	20	-	2.88	1.060
	GENERAL QOL	-	28	35	27	-	2.68	1.047
	AGGREGATE MEAN						**2.83**	
D1	PHYSICAL HEALTH DOMAIN							
	Pain and discomfort	6	6	26	42	10	3.40	0.800
	Energy and fatigue	5	46	14	11	14	2.80	1.100
	Sleep and rest	4	17	47	19	3	3.00	1.000
	AGGREGATE MEAN						**3.06**	
D2	PSYCHOLOGICAL HEALTH							
	Positive feelings	4	45	36	5	-	2.24	1.370

	Spirituality, religion and personal beliefs	-	47	30	13	-	2.60	1.200
	Thinking, learning memory, concentration	-	22	48	20	-	1.53	1.736
	Body image and appearance	-	18	64	8	-	2.88	1.060
	Self-esteem	2	37	32	19	-	2.75	1.125
	Negative feelings	4	29	34	13	-	2.50	1.250
	AGGREGATE MEAN						**2.41**	
D3	LEVEL OF INDEPENDENCE							
	Activities of daily living	1	26	29	20	-	2.44	1.280
	Dependence on medicinal substances and medical aids	-	-	40	30	-	2.66	1.170
	Mobility	3	17	37	28	-	2.88	1.060
	Work Capacity	28	35	20	24	-	2.80	1.100
	AGGREGATE MEAN						**2.69**	
D4	SOCIAL RELATIONSHIP							
	Personal relation	1	36	26	27	-	2.87	1.067
	Sex life	25	33	29	6	-	2.24	1.380
	Practical social support	2	25	48	12	5	2.98	1.010
	AGGREGATE MEAN						**2.69**	
D5	ENVIRONMENT							
	Safety	2	27	46	10	5	2.87	1.066
	Home environment	2	38	42	5	3	2.65	1.065
	Financial resources	6	43	36	5	-	2.44	1.280
	Opportunities for acquiring new information and skills	-	24	59	7	-	2.80	1.100
	Recreation and leisure	-	37	35	20	-	2.87	1.067
	Physical environment	-	17	42	25	6	3.20	1.400
	Access to healthcare	-	10	39	24	17	3.53	0.224
	Transport	-	15	62	10	3	3.00	1.100
	AGGREGATE MEAN						**2.92**	

Table 4 above revealed an aggregate mean of 2.92 which is lower than the decision mean of 3.5, the perception of respondents is said to be fair.

Table 5: *Mean Score on Quality of Life Domains, as Perceived by Respondents (Study Group) before Intervention*
(n= 90)

Quality of life domains	**Mean**	**SD**	**t**	**p-value**
Domain 1 : Physical	3.06	0.967	-0.0902	0.928
Domain 2 : Psychological	2.41	1.290	-0.1026	0. 9186
Domain 3: Level of independence	2.69	1.153	-0.3961	0.693
Domain 4: Social relations	2.69	1.152	0.0915	0.9274
Domain 5: Environment	2.95	1.034	-0.0521	0.9586
Aggregate mean	**2.76**	**1.00**	**-0.11**	**0.8900**

Table 5 above shows the aggregate mean score according to the five domains of quality of life as perceived by respondents the mean score is 2.76 which is lower than the decision mean of 3.5, the respondents perceived their quality of life as being fair. The aggregate p-value of 0.8900 revealed that there is no significant difference in their responses.

Discussion

The study assessed the perception of quality of life (QOL) domains among patients with type 2 dietetics in Samaru. The findings of the study on socio-demographic information revealed that 6.7% of the respondents are of the 30 years age limit while 22% are 59 years and above. This study does not agree with the result of a study by Spasic et al. (2014) on the quality of life of type 2 diabetic patients which reported 47% of the respondents were below 65 years of age brackets. The study result disagrees with the result of the study conducted by Pussari (2014) which reported that 76.7% of the respondents were age over 45yrs. The result further revealed that 91.1% of the respondents were female while 8.9% were male. This result is in agreement with the result of a study conducted by Spascic et al. 2014 where they reported that female was Larger than males in number, to be precise 59.3% were female while 40.7% were male. Pussari (2014) also reported that 68% were female while 32% male. Similarly, results of respondentss gender showed that females are more affected by the disease than males. This result is not in agreement with Sayeed et al, (2020) who reported that diabetes mellitus is higher in men than in women in rural areas of Africa, Nigeria inclusive. This result is in agreement with Agbakhani *et. al* (2016) who revealed that pull of 136 patients that participated in their study, Men was lower in number and women being higher. The variability may be due to differences in geographical area.

The study also revealed that the majority (74.5%) of the respondents had one form of work or the other, and very few (25.5%) of them were unemployed. Thus, over half (59%) are self-employed. Being employed means they have a source of income for sustaining their life and it also means they are carrying out their day-to-day activities. From the quality-of-life theory, the respondent fulfils their psychological domain of self-esteem. It also showed that the domain of quality of life is also being actively displayed by the respondents having a work capacity and less dependence on others for financial support. Where an individual can support himself and family members, social relationships which is the fourth domain of quality of life are achieved. The fifth domain is also not left behind for this respondent, because having financial resources promotes freedom, physical safety and security and also improves the individual's home environment

Furthermore, the result revealed the duration of the illness before the study to be 6.7% of the respondents had the disease 2-3 years before the study, while 27.7% had lived with the disease for 10 years before the study. The result is not in agreement with the study of Spasic (2014) where 32.6% of the respondents lived with the disease for 10 years or below and 67.4% had the disease for over 10 years. The variation in the duration of the disease among the respondents could be differences in the geographical location of the respondents, their lifestyles and ways of living. Looking at the perception of the

respondents towards the quality of live domains the result showed that the overall general health was perceived to be fair with a mean score of 2.88 and a standard deviation of 1.060,

The physical health domain which is the first of the five quality of life domains was perceived to be fair with an aggregate mean score of 3.06, this is lower than the decision mean of 3.5 slated for a good perception. The result is not in agreement with the study by Pussari (2014) on QOL reported that of 73 respondents 64.4% of the respondents were reported to have a poor QOL in the physical domain. Analysis of the components of the physical domain also reveals Pain and discomfort had a mean score of 3.40 and a standard deviation of 0.800. By implication, the respondents are struggling with a level of pain, and there may be ease in its relief through taking drugs or because the pain is by its very nature on and off, his/her quality of life may be affected by the constant threat of pain which makes it very important for health care workers to understand that even where patients did not complain about pain that may be experiencing it and in one way or the other they are trying to accommodate it. Energy and fatigue had a mean score of 2.88 and a standard deviation of 1.100. This component is concerned with the interest and strength that a person has in order to perform the necessary tasks of daily living, as well as other chosen activities such as recreation when reported not to be good implies that the patients are having challenges in this area and need to be assisted to improve on that area by health workers during management of their disease. Sleep and rest had a mean score of 3.00 and a standard deviation of 1.000. Sleep problems might include difficulty going to sleep, waking up during the night, waking up early in the morning being unable to go back to sleep and lack of refreshment from sleep. Problems in this area, affect the patient's quality of quality of life. The perception of the respondents in this domain thus better than the other four domains is not strong enough to be reported as being good.

The psychological domain (2nd domain) is reported to have an aggregate mean score of 2.41 which is lower than the decision mean of 3.5. the domain is perceived to be fair. The result is not in agreement with the study by Pussari (2014) on QOL which reported that of 73 respondents 53.4% of the respondents were reported to have a poor QOL psychological domain. The result is also in disagreement with the result of the study by Gruvic and Grujic, (2014) on the perception of the psychological domain among type 2 deviate patients which reported a mean point of 56.28 and was reported to be lower. The components of the domain that were assessed include Positive feelings, the area cover satisfaction, peacetime, cheerfulness, confidence, and pleasure derived of the good things in life. With all this being just fair, health workers need to work on it during the provision of care. Spirituality, religion and personal beliefs are analysed to have a mean score of 2.60 and a standard deviation of 1.200. Thinking, learning memory, and concentration components have a mean score of 1.53 and a standard deviation of 1.736. This component is very vital as the patient's cognition is affected, and his memories and understandings' are also affected and this can have a vast effect on the quality of life of the individual. Body image and appearance (perceived bodily impairments) is a component analysed to a mean score of 2.88 and a standard

deviation of 1.060. Self-esteem (The patient's feeling of self-efficacy) had a mean score of 2.75 and a standard deviation of 1.125. While Native feelings had a 2.50 mean score and a standard deviation of 1.250.

The level of the dependant domain (3rd domain) covers the following areas of a patient's health i.e. Activities of daily living, Dependence on medicinal substances and medical aids Mobility and Work Capacity. The analysis of this domain reveals an aggregate mean score of 2.69 and a standard deviation of 1.153 which is also perceived to be fair.

Social relation (4th domain) assessed the areas i.e social relationship, Personal relation, Sex life and Practical social support is reported to have a mean score of 2.69 and a standard deviation of 1.152. The result disagrees with the result of the study conducted by Pussari (2014) who reported that of 73 respondents 54.8% reported good perception of the social domain. Social relations as the domain of quality of life is concerned with the extent to which people feel the friendship, love and care they want from the intimate relationship(s) in their life and all pointing out that the respondents perceived all the domains as being fair, this is agreed with the result of the overall general health which also had 2.88 and is lower the result implies that the respondents perceive their QOL to fair and therefore needs to be taken care of holistically. By implication, health workers need to put more effort into the state of QOL of patients and not just focus on the treatment of the element.

The environmental domain (5th domain) examines how the patients perceive the following areas of his/her environment. Safety, Home environment, Financial resources, Opportunities for acquiring new information and skills, Recreation and leisure, Physical environment, Access to health care and transport. The result showed an aggregate mean score of 2.95 and a standard deviation of 1.034 which means the perception is fair. This result is in disagreement with the result of the study conducted by Pussari (2014) which reported that 52.1% of the respondents were reported to have a poor QOL in the environmental domain. The analysis of the response revealed an aggregate mean score of 2.95 and a standard deviation of 1.034. Which implies that the domain was perceived to be fair. However, the area of Access to health care and transport with a mean score of 3.53 and a standard deviation of 0.224 is the only component of the domain that is perceived to be good as reported by the patients. This could be because of the availability of health facilities within the Samaru community that the respondents can visit in time of need. The result is in agreement with the result of the study conducted by Spasic et.al. (2014) also revealed a low physical health domain. He further stated that health workers need to be more aware of the domain because patients need to be very active as physical activities influence the success of a therapy.

Conclusion

In conclusion, patients with type 2 diabetes in the Samaru community have a fair quality of life as is deduced from their perception of the five assed domains of quality of life.

Recommendations

It is therefore recommended that health workers need to include assessment of the QOL in their plan of care in other to provide the patients with a holistic care.

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