Sexual and Urological Problems among men with Diabetes Mellitus type 2 in Al-Najaf center for Diabetes and Endocrine

Alaa Sabeeh Mahel al Khuzaai; Fatima Wanas Khudair

Abstract:

Diabetes is one of the biggest health problems in the world. About 4.6%, or approximately 285 million people are with diabetes in 2010 in the world. The projections indicate an increase in the number of diabetes cases which reaches in 2030 to 7.7% or about 439 million. A descriptive design cross-sectional study was applied to identify the sexual and urologic problems among men with diabetes mellitus type II, and to examine the risk factor that develops sexual and urological problems. The study was conducted from 20st September 2016to 20th August 2016. By using a non-probability sampling to technique (purposive sample) based on the criteria of (married, diagnosis for more than 10 years, free of heart disease, and chemotherapy), a questionnaire is composed of four parts: the first part includes questions regarding the socio-demographic characteristics of participants. The second part includes questions concerning medical history. The third part considers the sexual problems that are divided into four questions and the last part includes urological problems questions . The results indicate that 68(48.9%) of the sample were with poor sexual activity, while, on other hand, urological problems were asymptomatic 102 (73.4%) . The study concludes that the age which is over (40) years and the lack of physical exercise can develop sexual problems among patients with diabetes type II.. The recommendations have been reached based on the outcome of the current study encourage diabetic patients to reveal the problems of sexuality and seek treatment and not-concealment as a stigma and the establishment of sessions to raise awareness of how to control the high blood sugar levels of diabetic patients.

Key words: sexual, urological, men, diabetes mellitus.

1. INTRODUCTION

Diabetes is one of the biggest health problems in the world. About 4.6%, or approximately 285 million people are with diabetes in 2010 in the world, The projections indicate an increase in the number of diabetes cases which reaches in 2030 to 7.7% or about 439 million (4). Regardless of the improved treatment of diabetes in these days, it is considered to be the leading cause of diseases and deaths, which has an important impact on the value of life and the ability of the patient to work, adding the high cost of health care provided to them. Expectations indicate that in 2025 the number doubles for people to be 76% in low-income countries (2),(1). The unhealthy practices and beliefs for diabetics can increase the severity of the disease and its complications. It is possible that diabetes affects the quality of life for patients and their production (1). Statistics show that the number of men with diabetes reached 215.2 million in 2015, and it is projected to increase in 2040 to 328.4 million men with diabetes. The number of people with diabetes in urban areas is 269.7 million in 2015, while the number of people with diabetes is increasing by 477.9 million in 2040. In rural areas, the number of rural areas is statistically significant in 2015, reaching 145.1 million worldwide, with the expectation that this figure will increase to 20% in the year 2040 (5) . This means every 6 seconds 1 person dies due to diabetes and about 5 million deaths in 2015 (5) . In Iraq, the studies conducted in 2008 indicate that there is a large percentage of people with type 2 diabetes. The study indicated that the population of Iraq is about 27 million and the rate of diabetic patients is about 2 million, or 7.43% of the total population of Iraq (6). After that, a study was conducted in 2011. The prevalence of diabetes in Iraq also reached 3.5 million with the occurrence of diabetes in the province of Najaf about 1445 patients (7). Some Statistics recorded in 2015 that the incidence of diabetes in the province of Najaf has reached the 2335 patients (8). Diabetes patients suffer from many complications. The most important complications are sexual problems. Diabetes is the leading cause of erectile dysfunction and more than 28% of men who suffer from erectile dysfunction were due to diabetes. Men with diabetes today have entered into programs of encouragement in excellent control To avoid complications that are persistent due to diabetes, but acute injury especially high blood sugar diuretic uncontrollable erectile dysfunction (9) .Erectile Dysfunction Research for men who own diabetes has been estimated as a proportion of 20-71% (10). Erectile dysfunction of men with diabetes has an important effect on the quality of life (10). The prevalence of sexual

disorders in diabetics, which include desire, orgasm, and ejaculation is unclear (11). There are about 3 million patients suffering from sexual problems around the world. Despite this large percentage, about 1% of them have been treated (29). The most common complication is urinary problems associated with diabetes. Many studies have indicated that these problems increase with age. The urinary problems of the diabetic patients are more severe in their early stages, and result in costs and exhaustion the urinary problems include bladder dysfunction , urinary tract infections, and prostate enlargement. These complications can affect the quality of life for men with diabetes 10). About 80% of diabetic patients suffer from problems in the lower urinary tract (20). A complication of diabetes is diabetes bladder dysfunction, which is common and disturbing to both the urinary tract and diabetes bladder dysfunction, that does not threaten the patient's life but has the effect of raising the quality of life of the patient (20). Other problems with diabetes are prostate problems, especially for those who do not have good treatment , Diabetes has a significant effect on the flow of blood and can destroy the blood vessels and nerves that follow the symptoms of prostate diseases such as prostate enlargement (12).

Objectives of the study:

1-To identify the sexual and urologic problems among men with diabetes mellitus type II.

2-To examine the risk factor that develops sexual and urological problems.

2. Materials and Methods:

A descriptive design cross sectional study was carried out, so as to get the listed objectives, during the period from 20 September 2016 to 7 September 2017.

Ethical consideration

The participants answered of the question of the current study and its goals and then a voluntary verbal consent was obtained in order to participate in the study beside, the confidentiality of information which taken or obtained from participants will be saved. in addition, an ethical approval was obtained from the ethical committee of research in the Faculty of Nursing/University of Kufa regarding the confidentiality and anonymity of participants.

Setting of the study

The study was conducted in Al- Najaf Center for Diabetes and Endocrine in Al-Najaf city.

Sample of the study

A non-probability sampling technique is (purposive sample) of 139 patients with Type II of diabetes Mellitus in Al- Najaf Center for Diabetes and Endocrine center based on the criteria of patients (diagnosis with 10 year, free of heart disease, married and free of chemo-therapy). then by using SPSS (SPSS → Data → Select cases).

Instrument of the study

By studying related literatures and studies the questionnaire was made ready and reformed depending on previous studies. It was divided into four main parts (part one contained demographic information, part two included questions related medical history, part three which consist of Sexual problems with DM, and part four including questions that determine of urological problems with DM). The total number of questions for this tool was 35 questions (question related to demographic 9 , questions to the medical history 2 but questions related to sexual problems 15 and questions related to urological problems 7) .

The Results:

TABLE (1) PATIENTS' DEMOGRAPHIC DATA

DEMOGRAPHIC DATA	RATING AND INTERVALS	FREQUENCY	PERCENT
AGE / YEARS	30-44	11	7.9
	45-54	43	30.9
	55-64	46	33.1

	65 AND MORE	39	28.1
OCCUPATION	GOVERNMENTAL	16	11.5
	PRIVATE WORKER	3	2.2
	FREE WORKER	28	20.1
	RETIRED	40	28.8
	STUDENT	1	0.7
	JOBLESS	51	36.7
LEVELS OF EDUCATION	ILLITERATE	14	10.1
	ABLE TO READ	2	1.4
	ABLE TO READ AND WRITE	10	7.2
	PRIMARY SCHOOL	49	35.3
	SECONDARY SCHOOL	46	33.1
	COLLEGE OF INSTITUTE	18	12.9
NO. OF FAMILY MEMBERS	1-2	39	28.1
	3-5	57	41
	6-8	24	17.3
	9 AND MORE	19	13.7
NO. OF ROOMS	1-2	90	64.7
	3-5	44	31.7
	6 AND MORE	5	3.6
INCOME	ENOUGH	11	7.9
	ENOUGH TO WHAT LIMIT	67	48.2
	NOT ENOUGH	61	43.9
RESIDENCE AREA	RURAL	26	18.8
	URBAN	113	81.2
ALCOHOL INTAKE	YES	1	0.7
	NO	138	99.3

Smoking	Yes	27	19.4
	No	112	80.6

Continue table (1)

This table depicts the demographical characteristics of the diabetic patients who were included in the study. One third (33,1%) of patients is with age ranging from (55-64)years. Regarding the diabetic patients occupation approximately, one third of patients is with jobless (36,7%).(35,3%) of Diabetic patients are primary school graduate. Concerning the numbers of family members, about (41%) are with (3-5); two thirds (64,7%) of them have (1-2) numbers of room in home, while (48,2%) of them are with income that is enough to their limits. Regarding the residence area, the majority of patients (81,2%) are from urban residency. The great majority of patients (99,3%) are without alcohol intake and some simple percentage, around (19.4%) are with smoking .

Table (2) Patients' medical history

Medical history	Rating and intervals	Frequency	Percent
BMI	Underweight	28	20.1
	Normal weight	58	41.7
	Overweight	49	35.3
	Obese	4	2.9
Physical activity	Heavy	7	5
	Moderate	11	7.9
	Light	110	79.1
	Sitting	11	7.9

This table shows the medical history which includes the body mass index that records (41.7%) of patients with normal weight and the great majority of them are with physical activity, while (79.1%) are with light activity.

Table (3) Patients' Sexual Problems

Items	Rating	Freq.	%
Erectile functions			
1. How often were you able to get an erection during sexual activity?	Without sexual activity	67	48.2
	A little pit	41	29.5

	Sometimes	7	5
	Most of time	23	16.5
	Always	1	0.7
2. When you had erections with sexual stimulation, how often were your erections hard enough for penetration?	Without sexual activity	67	48.2
	A little pit	41	29.5
	Sometimes	7	5
	Most of time	23	16.5
	Always	1	0.7
3. When you attempted intercourse, how often were you able to penetrate your partner?	Without sexual activity	67	48.2
	A little pit	38	27.3
	Sometimes	9	6.5
	Most of time	23	16.5
	Always	2	1.4
4. During sexual intercourse, how often were you able to maintain your erection after you had penetrated your partner?	Without sexual activity	67	48.2
	A little pit	41	29.5
	Sometimes	5	3.6
	Most of time	23	16.5
	Always	3	2.2
5. During sexual intercourse, how difficult was it to maintain your erection to completion of intercourse?	Without sexual activity	67	48.2
	Barely without sexual activity	10	7.2
	A little pit	29	20.9
	Sometimes	7	5
	Most of time	17	12.2
	Always	9	6.5
6. How do you rate your confidence that you can get and keep your erection?	Barely without sexual activity	91	65.5
	A little pit	15	10.8

	SOMETIMES	9	6.5
	MOST OF TIME	8	5.8
	ALWAYS	16	11.5
INTERCOURSE			
1. HOW MANY TIMES HAVE YOU ATTEMPTED SEXUAL INTERCOURSE?	NO ATTEMPT	67	48.2
	1-2 TIME	11	7.9
	3-4 TIME	31	22.3
	5-6 TIME	11	7.9
	7-10 TIME	16	11.5
	11-20 TIME	3	2.2
2. WHEN YOU ATTEMPTED SEXUAL INTERCOURSE HOW OFTEN WAS IT SATISFACTORY FOR YOU?	DID NOT ATTEMPT INTERCOURSE	67	48.2
	ALMOST ALWAYS OR ALWAYS	1	0.7
	MOST TIME	42	30.2
	SOME TIME	6	4.3
	A FEW TIME	21	15.1
	ALMOST NEVER OR NEVER	2	1.4
3. HOW MUCH HAVE YOU ENJOYED SEXUAL INTERCOURSE?	NO INTER COURSE	67	48.2
	VERY HIGHLY ENJOYABLE	2	1.4
	HIGHLY ENJOYABLE	39	28.1
	FAIRLY ENJOYABLE	10	7.2
	NOT VERY ENJOYABLE	9	6.5
	NO ENJOYABLE	12	8.6
ORGASM			
1. WHEN YOU HAD SEXUAL STIMULATION OR INTERCOURSE, HOW OFTEN DID YOU EJACULATE?	NO SEXUAL STIMULATION	64	46
	MOST TIME	31	22.3
	SOME TIME	3	2.2

	A FEW TIME	36	25.9
	ALMOST NEVER OR NEVER	5	3.6
2. WHEN YOU HAD SEXUAL STIMULATION OR INTERCOURSE, HOW OFTEN DID YOU HAVE THE FEELING OF ORGASM (WITH OR WITHOUT EJACULATION)?	NO SEXUAL STIMULATION	3	2.2
	MOST TIMES	66	47.5
	SOME TIME	39	28.1
	A FEW TIME	5	3.6
	ALMOST NEVER OR NEVER	26	18.7
DESIRE			
1. HOW OFTEN HAVE YOU FELT SEXUAL DESIRE?	ALMOST ALWAYS OR ALWAYS	21	15.1
	MOST TIMES	42	30.2
	SOME TIMES	28	20.1
	A FEW TIMES	43	30.9
	ALMOST NEVER OR NEVER	5	3.6
2. HOW WOULD YOU RATE YOUR LEVEL OF SEXUAL DESIRE?	VERY HIGH	17	12.2
	HIGH	20	14.4
	MODERATE	45	32.4
	LOW	38	27.3
	VERY LOW OR NOT AT ALL	19	13.7
OVERALL			
1. HOW SATISFIED HAVE YOU BEEN WITH YOUR OVERALL SEX LIFE?	VERY SATISFIED	97	69.8
	MODERATELY SATISFIED	14	10.1
	ABOUT EQUALLY SATISFIED AND DISSATISFIED	6	4.3
	MODERATELY DISSATISFIED	5	3.6
	VERY DISSATISFIED	17	12.2
2. HOW SATISFIED HAVE YOU BEEN WITH YOUR SEXUAL RELATIONSHIP WITH YOUR PARTNER?	VERY SATISFIED	100	71.9
	MODERATELY SATISFIED	13	9.4

	About equally satisfied and dissatisfied	6	4.3
	Moderately dissatisfied	3	2.2
	Very dissatisfied	17	12.2

These tables (3) describe the sexual problems among diabetic patients and it is divided in five parts, part one (erectile functions) have 6 questions (question one (48.2%) without sexual activity and this percentage in another questions is excluded, while the final question that (65.5%) parley without sexual activity). Part two (intercourse) included 3 questions and the questions with the same answer are (48.2%) without sexual activity . Part three (orgasm) included 2 questions (question one about (46%) with almost time, while question two (47.5%) with some time). Part four (desire) included one question that records (30.9%) with low desire. Part five (overall sexual activity) included two questions (question one approximately (69.8%) with very satisfied and question two (71.9%) with the same result).

Table (4) overall assessment of Patients' Sexual activity

Main Domain	Levels	Frequency	Percent	M.S.	Assessment
Overall Sexual Activity	Poor	68	48.9	1.75	Failure
	Fair	46	33.1		
	Good	25	18		
	Total	139	100		

Mean of scores (2.5), pass (m.s. 2.5 and more), failure (m.s. less than 2.5). This table presents that all domains of sexual activity are failed .

Table (5) association between overall assessment of Patients' Sexual Problems and some of their demographic and medical data

Demographic And Medical Data	Chi-Square Value	D.F	P-Value	Sig.
Age / Years	32.124	6	0.001	HS
Occupation	41.868	10	0.001	HS
Levels Of Education	23.705	10	0.008	HS
Number Of Family Members	1.773	6	0.939	NS
Monthly Income	6.302	4	0.178	NS
Residency	3.963	4	0.411	NS
Alcohol Intake	2.036	2	0.361	NS

SMOKING	0.917	2	0.632	NS
BMI	11.225	6	0.082	NS
PHYSICAL ACTIVITY	27.791	6	0.001	HS

THIS TABLE DEPICTS THE IS A HIGHLY SIGNIFICANT RELATIONSHIP BETWEEN SEXUAL PROBLEMS AND VARIABLE (AGE, OCCUPATION , LEVEL OF EDUCATION ,PHYSICAL ACTIVITY). ON OTHER HAND NO RELATIONSHIP EXISTS WITH (NUMBER OF FAMILY MEMBERS, MONTHLY INCOME, RESIDENCY, ALCOHOL INTAKE, SMOKING AND BMI).

TABLE (6) ANALYSIS OF VARIANCE (ANOVA) OF THE OVERALL ASSESSMENT OF PATIENTS' SEXUAL PROBLEMS ACCORDING TO THEIR AGE, OCCUPATION, LEVELS OF EDUCATION, AND PHYSICAL ACTIVITY

SELECTED VARIABLES	RATING AND INTERVALS	N	MEAN	STD. DEVIATION	F	P-VALUE
AGE / YEARS	30-44	11	3.5879	1.31346	13.452	0.001
	45-54	43	2.2767	1.33966		
	55-64	46	1.9464	1.07429		
	65 AND MORE	39	1.2812	0.84372		
OCCUPATION	GOVERNMENTAL	16	3.2312	1.37445	9.22	0.001
	PRIVATE WORKER	3	1.3111	0.48113		
	FREE WORKER	28	2.5571	1.14948		
	RETIRED	40	1.7717	1.07879		
	STUDENT	1	4.4333	.		
	JOBLESS	51	1.4575	1.05523		
LEVELS OF EDUCATION	ILLITERATE	14	1.069	0.51031	2.722	0.022
	ABLE TO READ	2	1.9	1.36707		
	ABLE TO READ AND WRITE	10	1.4967	1.2022		
	PRIMARY SCHOOL	49	1.9762	1.27757		
	SECONDARY SCHOOL	46	2.2181	1.11157		
	COLLEGE OF INSTITUTE	18	2.4593	1.71527		
PHYSICAL ACTIVITY	HEAVY	7	3.4571	1.27827	12.19	0.001

	Moderate	11	3.5364	1.32895		
	Light	110	1.7761	1.12151		
	Sitting	11	1.6727	1.04113		

This table reveals that the p-value for each variable age (65 and more) is more affected than other.The (private worker) also more affected, while the (illiterate) is highly significant. In (sitting position) and (unable to work) also are more significant with sexual activity.

Table (7) overall assessment of Patients' Urological Problems

Main Domain	Clinical Manifestation	Frequency	Percent	M.S.	Assessment
Urinary Symptoms	Symptomatic	37	26.6	2.77	Asymptomatic
	Asymptomatic	102	73.4		
	Total	139	100		

This table records that the majority of patients (73,4%) were with asymptomatic urological problems.

Table (8) association between overall assessment of Patients' Urological Problems and some of their demographic and medical data

demographic and medical data	chi-square value	df	p-value	Sig.
Age / Years	10.669	3	0.014	S
Occupation	11.676	5	0.04	S
Levels Of Education	6.133	5	0.293	NS
Monthly Income	0.604	2	0.739	NS
Residency	0.993	2	0.609	NS
Alcohol Intake	0.993	1	0.319	NS
Smoking	3.564	1	0.059	NS
BMI	3.717	3	0.294	NS
Physical Activity	4.681	3	0.197	NS

This table presents a significant relationship between the variables of age, occupation and patient's urological problems, while no significant relationship with variable of (level of education, monthly income, residency, alcohol intake, smoking, BMI and physical activity).

TABLE (9) ANALYSIS OF VARIANCE (ANOVA) OF THE OVERALL ASSESSMENT OF PATIENTS' UROLOGICAL PROBLEMS ACCORDING TO THEIR AGE AND OCCUPATION

VARIABLES	RATING AND INTERVALS	N	MEAN	STD. DEVIATION	F	P-VALUE
AGE / YEARS	30-44	11	1.4805	0.55429	4.51	0.005 HS
	45-54	43	2.6844	1.31802		
	55-64	46	2.7919	1.30643		
	65 AND MORE	39	3.2271	1.73413		
OCCUPATION	GOVERNMENTAL	16	1.9375	0.69979	3.619	0.004 HS
	PRIVATE WORKER	3	4.2381	1.21499		
	FREE WORKER	28	2.2398	1.26828		
	RETIRED	40	2.9393	1.62493		
	STUDENT	1	1.5714	.		
	JOBLESS	51	3.1457	1.42814		

THIS TABLE EXPLAINS THE HIGHEST OF UROLOGICAL PROBLEMS IN PATIENTS WITH AGE (65 AND MORE) AND AMONG PRIVATE WORKER.

1. Discussion:

Throughout the course of the data analysis, the present study included a group of (139) patients with type 2 DM who attend AL Najaf Center for Diabetes and Endocrine. The study results indicate that the age (ranges55-64) years of (33.1%). The advance age is consider of main the cause for many diseases, such as DM. The hazards of DM the are increased with aging because of hormonal distribution .This study result is similar to the study that is conducted by Ayele ,et al., (2012) who stated that the aging person more affected by DM. Regarding to the occupational more than one third of Diabetic patients were jobless. This results can be interpreted by factor of age, physical ability and patient health status. Edition them to the less of their job. Concerning the educational level, (35%) of them were primary school graduates. According to the socio-economic status the number of family member ranges (3-5) about (41 %), the number of room ranges (1-2) around (64.7%). This study records higher percentages (48.2%) with income enough to the limits. Accordingly, we conclude that the socio-economic status is satisfactory by comparing the number of family members and number of rooms in the house with the income limit. Regarding residency, the current study results show that the majority of sample (81,2%) live in urban areas. This result is in agreement with Elyasi, et al.(2015). They indicated that the majority (75.5%) of the diabetic patients were

living in urban areas. These results can be interpreted of DM that refer to the DM incidence increases in people who live in urban area, than those in rural. Also, those individuals in rural residential areas often practice daily physical exercises when compared with those in urban. So, they are less risky for diabetes than urban residents. Furthermore, the rural residents live in a good environment free of noises, pollution, and psychological stressors so they are free prone to get DM because of the danger reasons that are common in town than countryside area e.g. psychological stress (Al-bayati.,2014). According to Alcohol consumption, the great majority of the sample (99.3%) do not consume alcohol. This result reflects the reality of Al-Najaf culture as a religious one with of conservatory traditions and culture. This finding agrees with the result Loverock (2011) and Abass (2013) they concluded that (97%) of the study sample presents are non-alcohoic. The study noted majority of patients (80.6%) non-smoker and this result agreement with the result of study by (Abass, 2013) and (Bashar, 2015) which recording majority of patient non-smoker. Emphasized tobaccos can rise the blood glucose level and causes insulin resistance. Heavy smokers increase their danger of developing DM when they are compared with non-smokers. Furthermore, the use of tobacco can speed up the damage of blood vessels in uncontrolled DM, leading to heart diseases and increasing the albumin urea that causes nephropathy (David, 2009). Table two shows the medical history which include (body mass index and physical activity). This study noted that more than one third of patient (41%)with normal body mass index and this result is interpreted by the fact that most patients with DM continue on use metformin, that one of side effect of this drug work as a skinning .this result conflicting of study result that conducted by Faisal,et al; in (2006) which record higher percentage of patient with DM obese . While this study show majority of patients with light physical activity and this result agree with the age of the sample who were from urban residence that without any exercise or heavy work. The majority of patients who suffer from diabetes have sexual problems, these problems in erection activity. This can be due to several reasons, the most important of which is the weakness in the process of the transmission of nerve irritation due to high blood sugar level as long as possible. It can cause chronic inflammation of the peripheral nerves, including the nerves that feed the pelvis and the Erectile Dysfunction, and thus directly affect the response of the nerves that follow the erection activity. And also in the incidence of diabetes is often accompanied by high cholesterol and lipid triglycerides, which leads to atherosclerosis and increase the concentration of sugar in the tissues and this can lead to the occurrence of damage to the blood vessels that feed the penis, which affects the erection process and add the negative psychological effects that The patient suffers from diabetes, which also affects the performance of sexual and include the process of ED, the failure of the four phases (Desire, Arousal, Orgasm, and Resolution). All these and other reasons make diabetes an important factor in the process of ED and many studies have indicated that diabetes is a major factor in ED, which supports the results of the study has registered. Faisal, et al;(2006) noted high prevalence of Diabetic patients suffer from sexual problems. As well as Khaleeq, et al ;(2001(that show patients with DM have erectile dysfunction specially that be poor control . While study results that done by Kamaldep,et al; (2016) say DM is a growing public health leading disease, which causes cardiovascular, psychological, and sexual dysfunctions . But Sexual dysfunction is a major concern in men with T2DM this result by Giovanni,et al (2016). In this study noted that the majority of diabetics are suffering from impotence and this result is observed in conformity with the results of the studies that have been mentioned above and find that the sexual impotence. The current study findings presented, that there was no significant relationship between diabetic patients' socio-demographic characteristics (number of family members, income, residence, alcohol intake, smoking, and BMI). While find significant relationship between (age, occupation, level of education, and physical activity). The relationship between age and sexual problems among patients with DM consider normally because the age one of the common factor that effect on the sexual health activity because aging person exposed to atherosclerosis and other disease that lead insufficient of nerve impulses . this result agreement with study result that conducted in (2006) by Fasial ,et al; which reported the age effected on sexual activity . our study noted (65 and older) years which exposed to sexual problems more and this result consider normally also because age important factor in sexual health activity and with aging decrease ability to sexual intercourse. As well as, this study show significant relationship between sexual activity and occupation, which reported private worker that high significant than other ,because work in the private area continues for long hours and be tired throughout

this time. This is a self-limiting factor that greatly affects the physical and psychological activities, especially the sexual status, and is not ready or unable to practice sexual intercourse with partner. This result reinforced by(Anson and Behdin., 2016) who found association between occupation and sexual activity. Also, this study noted good association between sexual activity and level of education , which found illiterate patients that more suffering from sexual problems, and this result can be interpreted to the poor education for patient can develop sexual problems. They do not care much about controlling their blood sugar levels, their eating habits are unhealthy, their lack of interest in exercising, and the lack of seeking care, except in cases of necessity, ignorance in all these things, have negative impacts on their public health and sexual health of patient with DM. Current result agreement with result study by (Zhao, et al., 2013) who stated that high association between level of education and sexual problems. Well, This study also found a significant relationship between the sexual problems of diabetics and physical activity. It was recorded that the people who are in the position of sitting are more susceptible to DM problem may be to not work or exercise and this effect on sexual activity and this result coming similar to result of study by (Stephenson,et al.,2014) who stated that good relationship between physical activity and sexual problems. Current study which found non-significant between (number of family members, number of room, income, residence, alcohol intake, smoking and BMI) with sexual activity. In this study, the majority of patients with diabetes are without symptoms of urological problems and this result is normal because the patients with diabetes are constantly connected with doctors specialists in this field and the ongoing visit to the health institutions and treatment of any show in the urinary system quickly and not aggravated as well as patients are able to expressing their urinary problems easily reverses the sexual problems which are considered to be a stigma, especially in the Eastern society.this result similar to (Rosen, et al ., 2003) who stated that of diabetic patients not suffering from urological problems. Our study shows the relationship between urological problems with demographic and medical data which found significant association with (age and occupation), the relationship with age that patients (65 and more) years that more effected and this may be because of age that play an important role in health of all organs of the body, reinforced by the study that conduct in (2003 by Rosen, et al) who found that relationship between urological problems and (age, occupation). As well as found significant relationship with occupation, which jobless that be more impacted than other and this may be because the patients that don't work and low movement that lead to elevated of glucose in the blood and lead to more urological problems, and this agreement of study (Azam, et al.,2013) who found association between jobless and urological problems.

Conclusion:

According to these results:

the risk factor of age over (40) years and a lack of physical exercise can be develop a sexual problems among patients with diabetes type 2.

Recommendations:

The following recommendations have been reached based on the outcome of the current study :

1-Encourage diabetic patients to reveal the problems of sexuality and seek treatment and not-concealment as a stigma.

2-The establishment of sessions to raise awareness of how to control the high blood sugar levels of diabetic patients.

3-Organizing awareness sessions on the complications of diabetes and the onset of the effects of sexual and urinary activities of diabetic patients.

4- Raising awareness about the importance of sexual activities and their impact on the life of the patient.

References:

1. Ayele, K., Tesfa,B., Abebe, l., Tilahun,t., Girma,E.(2012),Self -care behavior among patients with diabetes in harari, eastern ethiopia: the health belief model perspective, plos one , 7(4).

2. Hailu, E., mariam, W.,Belachew, T.and Birhanu, z. (2012), Self-care practice and glycaemic control amongst adults with diabetes at the jimma university specialized hospital in south-west ethiopia, afr j prm health care fam med., 4(1).

3. Oleiwi,s.(2012), Determination of type 2 diabetes clients' life skills who attended al-nasiriyha diabetic and

endocrinology center. university of baghdad thesis.

4. Padma, k., Bele,S., Bodhare, T.and Valsangkar, S.(2012), Evaluation of knowledge and self-care practices in diabetic patients and their role in disease management, national journal of community medicine, 3(1).

5. IDF diabetes atlas. (2015), seventh edition.

6. Mansour, a. (2008), patients' opinion on the barriers to diabetes control in areas of conflicts: the Iraqi example, conflict and health, 2(7).

7. Ministry of health (MOH). (2011),Healthy life statistical director. statistical count of chronic disease morbidity and mortality from 2006 – 2011.

8. Al-Najaf Al-Ashraf health directorate (AAHD).,(2015).al-sadder medical city, statistical department.

9. Rehman,k., Mbbs, ms., Beshay,E.and Carrier, S. (2001), diabetes and male sexual function, 1(1).

10. Jeanette,S., Wessells,H., Michael,B., Stuart,S., Walter,e.,Anne,E., William,D.,Stephen,k.and kevin,T. (2005),Urologic complications of diabetes, diabetes care, 28(1).

11. Birder, l. and De groat, w. (2007), mechanisms of disease: involvement of the urothelium in bladder dysfunction. nat. clin. pract. urol. 4.

12. Stamatiou, k.,lardas,m., kostakos,e., koutsonasios,v. and michail,e. (2009), the impact of diabetes type 2 in the pathogenesis of benign prostatic hyperplasia: a review. hindawi.com.

13. Elyasi, F.; Kashi, Z.; Tasfieh, B.; Bahar, A.; Khademloo, M.: Sexual Dysfunction in Women with Type 2 Diabetes Mellitus, Iran J Med Sci May, 2015, 40 (3), p.p. : 206-213.

14. AL-Bayati, D. (2014), Assessment of Factors Affecting on Patients' Adherence to Therapeutic Recommendations after Ischemic Heart Diseases in Al-Najaf City, Unpublished thesis, College of Nursing, University of Baghdad,.

15. Loverock, MD.(2011), Drinking Alcohol for Diabetes patient . My Medical Journey, 21(2).

16. Abbas, A.(2013), Evaluation of Health Protective Behaviors for Diabetic Patients (Type II) in AL-Najaf Center For Diabetes and Endocrinology, College of Nursing, University of Baghdad, unpublished thesis

17. Bashar.(2015),impact of diabetes mellitus type 2 patients attitude of self-care activates in AL-Najaf center for diabetes and endocrine

18. David, M.: Health Habits for people with Diabetes , Group Health Cooperative, 2009.

19. Faisal, a., khatib, s., Jarrah,s., Shegem,m., Bateiha, m., abu-ali, m., ajlouni,F.(2006), sexual dysfunction among jordanian men with diabetes,saudi med j , 27(3).

20. Firouz Daneshgari, Guiming Liu, Lori Birder, Ann T. Hanna-Mitchell and Samuel ChackoFirouz Daneshgari, Guiming Liu, Lori Birder, Ann T. Hanna-Mitchell and Samuel Chacko(2009) Diabetic Bladder Dysfunction: Current Translational Knowledge, american urological

association,182.

21. Khaleeq Rehman MBBS MS, Evette Beshay MD PhD, Serge Carrier MD FRCSC,(2001) Diabetes and male sexual function, Sex Reprod Med Vol 1 No 1

22. Kamaldeep Singh1, Savita Devi1 and Pranay P Pankaj2,(2016),

Diabetes Associated Male Reproductive Dysfunctions: Prevalence, Diagnosis and Risk Factors, Int J Drug Dev & Res Volume 8(2)

23. Giovanni Corona1*, Carlo B. Giorda2, Domenico Cucinotta3, Piero Guida4, Elisa Nada5, SUBITO-DE Study Group(2016),sexual dysfunction in type 2 diabetes mellitus at diagnosis.plos one journal .

24. Anson ,KC.and Behdin, N.(2016), Impact of Diabetes Mellitus on Occupational Health Outcomes in Canada.

25. Zhao ,C., Wang, YN., Yang, Y., Chen, LJ., Liu, HR. and Song, H.(2013), Relationship between occupational stress and type 2 diabetes mellitus. 31(2). 67

26. Stephenson, EJ., Smiles, W.and Hawley, JA.(2014), The relationship between exercise,nutrition and type 2 diabetes.60(10).

27. Rosen ,R., Altwein, J., Boyle, P., Kirby, RS., Lukacs, B., Meuleman, E., O'Leary, MP., Puppo, P., Robertson, C.and Giuliano, F.(2003), Lower urinary tract symptoms and male sexual dysfunction: the multinational survey of the aging male .44(6).

28. Azam Raoofi,1 Maryam Ghavami,1 Maryam Shahhamzeh,1 Mahmood Ghasemi,1 Rostam Hedartabar,1 and Leili Salehi,(2013), The Impact of Demographic Factors and Blood Sugar Control on the Incidence of Urinary Tract Infections in Khorramabad , Journal List Iran Red Crescent Med J,18(5).

29. Mosayeb Fallahi1, Hassan Mozaffari-Khosravi1,2*, Mohammad Afkhami-Ardekani2,3, Ali Dehghani,(2014), Evaluation of Sexual Function in Men with Diabetes Mellitus Type 2- Yazd Diabetes Research Center, iranian journal of diabetes and obesity, volume 6, number 3.