Diabetes Knowledge among Health Sciences Students in Saudi Arabia and Jordan

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Abstract

Background: Diabetes Mellitus is a serious global public health problem that has an adverse effect on the quality of life of several people.
Aims: We aimed to assess the knowledge of diabetes mellitus, and to identify knowledge deficits that are associated with this knowledge among undergraduate students in Saudi Arabia and Jordan.
Materials and Methods: A systematic random sample of 982 undergraduate students was enrolled for this cross-sectional study. A structured questionnaire was administered to the eligible students in 3 universities in both countries.
Results: The majority of students know the definition of diabetes mellitus and that it is a chronic disease. (25 %) of the Saudi students and (34 %) of the Jordanian students know that Insulin dysfunction is found in type 2 diabetes mellitus. About (30%) of all students could correctly identify the cut-off point of 126 mg/dl fasting plasma glucose. However, whereas Saudi students significantly had higher total diabetes mellitus knowledge score, higher in diagnosis, treatment, diet and exercise while, Jordanian students' scores were significantly higher in risk factor, symptoms, complication and control.
Conclusion: Students have adequate background knowledge concerning diabetes mellitus diagnosis, symptoms, risk factors, and treatment. However, areas of knowledge deficits such as diabetes mellitus control and associated complications have been identified among participants. The curricula of health sciences in the Jordanian and Saudi universities should be customized to include specific and focused information that enhance the diabetes mellitus - related knowledge among students.

Keywords: Diabetes Mellitus, Knowledge of Diabetes; Undergraduate Students; Saudi Arabia, Jordan.

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Introduction

Diabetes Mellitus (DM) is a serious global public health problem that has an adverse effect on the quality of life of diabetic people worldwide (1, 2). It is still considered as the leading cause of morbidity and mortality(3, 4). American Diabetes Association(5) defines DM as a metabolic disorder of multiple etiologies characterized by chronic hyperglycemia with disturbances of carbohydrate, fat and protein metabolism resulting from defects in insulin secretion, insulin action, or both. Diabetes is associated with reduced life expectancy; the significant morbidity associated with diabetes arises from micro vascular complications,

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increased risk of macro vascular complications (Like ischemic heart disease, stroke and peripheral vascular disease) and diminished quality of life (5).

Worldwide, the total number of diabetic patients is expected to increase from 171 million in the year 2000 to 366 million in the year 2030. According to the International Diabetes Federation (IDF), the DM prevalence worldwide already reached 366 million in the year 2011(6). In Jordan, the prevalence of type 2 DM is on the rise; data shows an increase from 13% in 1994 to 17.1% in 2008 (7). Saudi Arabia is considered as the seventh highest rate in the world in terms of diabetes incidence, with about 3.4 million people have been diagnosed with diabetes. The recent estimate of the disease has shown that 24.4% of the adult population is suffering from DM (8, 9).

The level of awareness and knowledge of diabetes is considered as an important factor for changing population behavior and increasing the opportunities for participation in any prevention and control programs of the disease(10). It is also considered as a positive indicator for the disease control and quality of life (8, 11). Improving the knowledge about diabetes risk factors for any target population will enable them to improve their attitude and thus lead to a positive change in their practices by following healthier life styles and behaviors(1). Poornima *et al.* study(12) has shown that a significant method for addressing diabetes mellitus is to create well-informed population by means of suitable information regarding the disease, symptoms, complications, control, prevention and treatment.

Knowledge is the basis of the adoption of healthy practices especially in schools and colleges. These settings are considered appropriate places to activate health awareness programs among students with regard to necessary life styles that help in the protection from some chronic illnesses such as diabetes(13). Furthermore, gaining knowledge is one of the significant factors that lead people to exhibit certain types of behavior. Insufficient information or lack in cognitive abilities may result in destructive health behaviors. Also, there is a positive correlation between the acquired knowledge and overt behavior (7).

In summary, studies on diabetes knowledge among university students are insufficient especially in the Arab world. Hence, this knowledge assessment study was undertaken. Such data are very essential to plan the health education policies. Therefore, obtaining information about the prevalence, risk factors of DM is the first step in formulating a preventive program for the disease.(8). In Jordan, diabetes is a major concern due to its extreme prevalence. However, the number of studies that addressed nursing students' knowledge about diabetes in health care professions including nursing were inadequate (14).

Aims of the Study and Research Questions

The purpose of this study is to assess knowledge of DM among university students. The specific research questions were:

1. What are the students' backgrounds as measured by diabetes knowledge scale?
2. Is there any significant difference between Saudi and Jordanian university students regarding their performance on DM knowledge scale?
3. What are the students' sources of information about DM for the two study groups (Saudi & Jordanian) students?

Materials and method

Study Design and Setting

This is a cross-sectional, descriptive approach. It was carried out at three universities, namely: Mutah University (MU) in

Al-Karak/ Jordan, AL- Ghad International College (GIC) in Abha/Saudi Arabia, and King Khalid University (KU) in Abha/Saudi Arabia. These universities are selected because their students represent diverse economic and geographic backgrounds with widely varying education/training systems. Data was collected from the participants during the summer semester of 2016/2017 academic year.

Population and Sampling

Population

The target population of this study is undergraduate students who were enrolled at Jordanian and Saudi universities in the summer semester of 2016/2017 academic year. The accessible population is Jordanian and Saudi students who studied at the previously-selected universities. The students who took part in the study are from all levels of Bachelor degrees of Nursing Science, Medical Image Technology, Clinical Laboratory Science and Emergency Medical Service. A convenience sampling method is used to select eligible students.

Sample Size

For the current study, a power analysis is conducted to determine the appropriate sample size using G power computer software program(15). The researchers used independent samples t test, and determined a small effect size of 0.20, a significance level of $\alpha = 0.05$ which is acceptable to control the risk for making a Type 1 error, and a power of 80% to reduce the risk of a Type II error(16). Subsequently, the yielded sample size equals 790. However, to overcome the problems of attrition and incomplete questionnaires, a larger sample of 982 students has been planned as a precaution(16, 17). 330 students from each university are included in the study.

Instrumentation

The Basic Information Questionnaire (BIQ)

This questionnaire has been designed to satisfy the purpose of this study. It includes information regarding demographic characteristics of the participants. These characteristics include age, gender, diabetes status of the student, family history of diabetes, source of diabetic education, specialty of education, and the year of the study of the student.

General Knowledge of Diabetes (GKD)

A structured questionnaire about the definition, causes and symptoms of DM has been administered to the participants. This tool was developed by Al-Sarayra and Khalidi(2) to assess DM-related knowledge among Jordanian University students. It consists of 40 items classified into eight factors which are: encompassing diabetes general knowledge (8 items), diabetes risk factor (3 items), diabetes symptoms (3 items), diabetes diagnosis (4 items), diabetes treatment (10 items), diabetes complications (4 items), and diabetes diet and exercise (5 items). The response options have been three: *Yes*, *No* or *I do not know*. The respondents have been awarded one point for each correct response and zero for each wrong and I do not know answers because they were considered wrong answers. The maximum possible score has been 40. The interpretation of scores is defined as *Poor* if the correct answers were (<50%) and *Good* if the correct answers are (51-100%). The reported literature available to date indicate that GKD is reliable and valid among Arab university students (2).

Validity and reliability of the instrument

The validity of the instrument is carried out through revising it by six experts from the related field of Community Health Nursing from the Faculty of Nursing in Mutah

University and AL-Ghad International Colleges, then the questionnaire is modified based on their recommendations.

Moreover, the questionnaire is pretested with a group of 30 college students in both countries to identify any problems related to question design. Also the reliability of the questionnaire is assessed by Cronbach's α coefficients with a value of 0.786 in this study.

Data Collection Procedures

One class at each of the participating universities has been chosen. The researchers have contacted the lecturers of the selected classes, provided details about the study, and determined a plan for data collection throughout their class sessions. Approximately, 330 students were selected from each university using convenience sampling technique. Data collection was conducted during the summer semester of 2016/2017 academic year. The questionnaire was administered to the students after their lecture in class and collected immediately. The response rate was 89 %.

Ethical Consideration

Ethical approval was obtained from the ethics and research committee of the intended universities before collecting the data of the study. The students were informed about the nature of the study through using student's information sheet. Participation was voluntary and verbal consent was acquired from each participant. Anonymity of all participants was maintained as no names were mentioned in the questionnaire.

Statistical Analysis

Data Analysis has been performed using the Statistical Package (V.21.0, SPSS, Chicago, Illinois, USA) for data entry and analysis. Descriptive statistics, suitable to the used measurement level, has been utilized to describe and summarize all demographic variables. Descriptive and inferential statistics are used to answer the research questions that guided this study as follows: To calculate students' knowledge regarding diabetes, mean, students' standard deviation and percentage statistics were used. To answer the second research question about the comparison between the two study groups in terms of their knowledge scores, independent samples t- test inferential statistic was used. The level of significance was set at $p \leq 0.05$ for t-test analysis. To illustrate, students' sources of DM knowledge percentage statistics are used. Moreover, grouped bar charts are employed to represent these sources.

Results

Demographic Characteristics of the participants

The BIQ questionnaires were distributed, the mean age of the students was 20.81 years (Standard deviation (SD) = 2.45), with a range of 18–45 years. The majority of the students were females (*n* = 695, 71 %), second year (*n* = 326, 34 %), not diabetic (*n* = 948, 97 %) and belonging to the extended families in which more than 5 family members live together (*n* = 735, 75 %). Most of the participants' parents in this study are educated and holding university degrees. The demographic characteristics of Saudi and Jordanian participants were summarized in Table 1.

Student General Knowledge about Diabetes

Percentage statistics were used to represent the item results of Diabetic Knowledge Test (Table 2**).** In relation to General Knowledge subscale, the data analysis results showed that (79 %) of all students know the definition of DM and (68 %) of them know that DM is a

chronic disease. However, only (25 %) of the Saudi students and (34 %) of the Jordanian students know that Insulin dysfunction is found in type 2 DM. Concerning Risk Factor subscale**,** the data analysis results showed that (72 %) of the of Saudi students know the obesity is risk factor for DM, and (72 %) of the Jordanian students recognize the same risk factor. Regarding the Symptoms subscale, analysis showed that most of the students (7 3 %) know that excessive urination is considered one symptom for diabetes. In relation to diagnosis subscale, the results illustrated that only few students (30 %) know that fasting blood sugar of 126mg/dl is Cut-off point for DM diagnosis. In relation to treatment subscale, the majority of the students (63%) know that diet therapy is considered as one mode of treatment in type 1 DM. Nevertheless, only minority of the students (28%) know that DM in pregnancy might be treated by insulin. Concerning the complication subscale, less than half of all students (49%) are aware that complications of DM may be seen in kidneys. Regarding the diet and exercise subscale, many of the students (61 %) know that exercise is recommended in type 1 DM. Lastly, concerning the control subscale, only few students (41%) recognize that HbAc1 blood test might be used for the level of evaluating blood sugar.

Comparing between the Two Study Groups Concerning Diabetes knowledge

Using independent samples *t*-test analysis (See Table 3), the results revealed that the mean of the total DM knowledge scale and the seven DM knowledge subscale scores have a statistically- significant difference between Saudi and Jordanian students. Saudi students significantly ($t = 3.86$; df = 980; $p = 0.001$) had higher total DM knowledge score (Mean = 21.64) than Jordanian students (Mean = 20.29). Moreover, Saudi students' scores were significantly ($p < 0.05$) higher in diagnosis (Mean = 2.01), treatment (Mean = 5.98) and diet and exercise (Mean = 3.11) subscales than those scores of Jordanian students. On the other hand, Jordanian students' scores were significantly ($p < 0.05$) higher in risk factor (Mean = 2.05), symptoms (Mean = 2.14), complication (Mean = 2.41) and control (Mean = 1.46) subscales than scores of Saudi students.

Sources of Information about DM

In both groups, TV was represented as a major source of knowledge on diabetes (35%) and (28%) for Saudi and Jordanian students, respectively. In addition, family and internet were considered the second source of information related to DM among Saudi students (35%) and Jordanian students (21%). However, radio was the lowest source of knowledge about DM between students for both groups (2.5%). Participants' sources of DM information in this study have been illustrated in Fig. 1.

Discussion

The study was conducted to estimate DM-related knowledge among Health Sciences university students. Identification of the areas of limited knowledge among those students represents a fundamental step towards implementation of health educational programmes that increase the general public knowledge and awareness about DM. Health education seemed to play an important role here since knowledge appeared to increase with higher educational levels (19). Moreover, this may produce enhancement in the standards of care for hospitalized clients with DM (20). In this study, the results illustrated that the participants had adequate overall knowledge about DM. These findings are consistent with

previous research studies conducted in Jazan-Saudi Arabia, Karachi-Pakistan, California-USA, and Uganda (8, 21-24). Contrarily, these findings are different from what was reported among University Nursing Students in the North of Jordan, where the overall knowledge among the study sample was low with a mean of 49.8 and SD of 13.4(14)

The high level of knowledge among our study participants may be due to the fact that health sciences university students are more educated than the general population. Therefore, their scores on the utilized DM knowledge questionnaire are high. The other reason for this may be due to the compulsory community attachment part of the health sciences student curriculum that mandates students work in communities and are expected to interact with individuals in the community and evaluate the key health problems within those communities (24).

Regardless of the overall adequate knowledge of DM, areas of deficiency have been identified among the university students participated in this study. Contrasting the good knowledge on diagnosis, symptoms and risk factors of DM, this study illustrated serious levels of knowledge deficiency about the complications and control of DM among the participants. For example, almost half of the students did not recognize that complication of DM could be seen in the kidney.

This is in congruence with a study conducted about the knowledge, attitude and practice of final year medical students in Saudi Arabia on the topics of diabetes where the respondents had a lack of knowledge of diabetic retinopathy complication (25), but was in contrast with a study performed in Saudi Arabia about Diabetes mellitus knowledge and awareness among Albaha University students reporting that almost all (100%) of the medical students agreed on diabetic complications; while only 50% of nonmedical students were aware of theses complications(26).

This deficiency of knowledge regarding complication of DM may lead the students unfavorably to misunderstand the fact that patients with DM may develop a nephropathy. Similar findings have been found in the Saudi and Jordanian literature (2, 8) these findings point to the necessity of increasing the efforts to educate health sciences students about the complications and control of DM.

In this study, findings related to risk factors questions indicated that about three quarters of the respondents agreed that obesity was a high risk factor for developing the disease. This finding agrees with the result of previous studies carried out in Nigeria(19) and Michigan University (27).

Aside from the area of deficient knowledge, the current study showed that Saudi students may know more as a whole about DM than Jordanian students. Compared with the previous studies, ours is limited here because it is the first study that compares Jordanian students with Saudi students with regard to DM knowledge. The possible explanation of these results can be outlined as follows. Firstly, differences in the socio-cultural and family environments of the students may have had an influence on the perception of diabetes-related information. In other words, the Jordanian students may have incorrect cultural beliefs about diabetes through improper parental teaching or lack of parental education. Secondly, the literature(6) indicated that the (n = 363; 56.3 %), Saudi community has higher prevalence rate of DM than the Jordanian community. Therefore, Saudi students may have more exposure to the disease through interacting with affected family members, relatives, or colleagues.

Notably, this study showed that the major

sources of information regarding DM among the students, are TV and family members which were the highest reported sources for such information. Similar findings were found in Mohieldein and colleagues (9) study where relatives and media are the most utilized sources for DM information among Saudi people in Al-Qassim region.

The finding was inconsistent with a study conducted among Chinese college students which indicated that 61.4% and 46.3% of participants received information about diabetes through books and newspapers respectively (26).

This current study has few limitations. Firstly, regarding the data collection setting, data is collected in the lecture classroom from the available students, so students who were not present at that lecture might have had different responses on the study instruments. Secondly, concerning the utilized measurement technique, using a self-report questionnaire for data collection offers many advantages, such as saving time and marinating the confidentiality. On the other hand, students may tend to provide answers in socially attractive manners.

Conclusions

This study is considered one of the first studies that report information about Saudi and Jordanian students' knowledge of DM. The study illustrated that students have adequate background knowledge concerning DM diagnosis, symptoms, risk factors and treatment. However, areas of knowledge deficits such as DM control and associated complications have been identified among the participants. It is recommended that health care professionals become more involved in campus settings of the students to improve DM-related knowledge and instill healthy lifestyle practices. Moreover, the curricula of health sciences in the Jordanian and Saudi universities should be customized to include specific and focused information that enhances the DM- related knowledge among students. This study is considered as a baseline for future national and international studies that are focused to concentrate on DM knowledge among university students.

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Table 1: Characteristics/Demographics of the Study Sample (N=982)

	Study Country		
	Saudi Arabia n=506	Jordan n=476	Total N=982
Variable	Frequency (%)	Frequency (%)	Frequency (%)
Age *	20.9 (2.60)	20.7 (2.30)	20.81 (2.45)
Gender			
Male	65 (12.8)	222 (46.6)	287 (29.20)
Female	441 (87.2)	254 (53.4)	695 (70.80)
Current university year			
1st year	115 (22.7)	170 (35.7)	285 (29.00)
2nd year	184 (36.4)	142 (29.8)	326 (33.20)
3rd year	90 (17.8)	98 (20.6)	188 (19.10)
4th year	54 (10.7)	57 (12)	111 (11.30)
5th year	6 (1.2)	8 (1.7)	14 (1.40)
6th year	57 (11.3)	1 (0.2)	58 (5.90)
Number of family member			
Less than 3 members	28 (5.5)	20 (4.2)	48 (4.90)
3 - 5 members	98 (19.4)	101 (21.2)	199 (20.30)
More than 5 members	380 (75.1)	355 (74.6)	735 (74.80)
Monthly income in SAD*			
< 8000 SAR	211 (41.7)	191 (40.1)	402 (40.90)
8000-10000 SAR	136 (26.9)	224 (47.1)	360 (36.70)
>10000 SAR	159 (31.4)	61 (12.8)	220 (22.40)
Educational Level of Father			
Illiterate (do not Read & Write)	56 (11.1)	29 (6.1)	85 (8.70)
Literate (Read & Write)	92 (18.2)	36 (7.6)	128 (13.00)
Basic	55 (10.9)	12 (2.5)	67 (6.80)
Intermediate	84 (16.6)	39 (8.2)	123 (12.50)
Secondary	82 (16.2)	175 (36.8)	257 (26.20)
Diploma	21 (4.2)	76 (16.0)	97 (9.90)
University	116 (10.9)	109 (22.9)	225 (22.90)
Educational Level of Mother			
Illiterate (do not Read & Write)	133 (26.3)	47 (9.9)	180 (18.30)
Literate (Read & Write)	93 (18.4)	35 (7.4)	128 (13.00)
Basic	70 (13.8)	15 (3.2)	85 (8.70)
Intermediate	77 (15.2)	34 (7.1)	111 (11.30)
Secondary	61 (12.1)	156 (32.8)	217 (22.10)
Diploma	16 (3.2)	107 (22.5)	123 (12.50)
University	56 (11.1)	82 (17.2)	138 (14.10)
Student Diabetic History			
Not Diabetic	486 (96)	462 (97.1)	948 (96.50)
Diabetic	20 (4)	14 (2.9)	34 (3.50)
Family Diabetic History			
Not Diabetic	266 (52.6)	335 (70.4)	601 (61.20)
Diabetic	240 (47.4)	141 (29.6)	381 (38.80)

*. For the age variable mean and standard deviation statistics were used.

Table 2. Percentage of respondents with correct answers for each item on the General Knowledge of Diabetes (GKD) of both Saudi and Jordanian Students (N=982).

Item Number	Subscale/Item	Saudi Students N (506)	Jordanian Students N (476)	Total
		Correct %	**Correct %**	**Correct %**
	General Knowledge Subscale			
1	Definition: DM is an increased blood sugar above acceptable level	71.9	85.9	78.7
2	Diabetes Mellitus is a chronic disease	64.8	70.8	67.7
6	Commonest type of DM is type 2	24.7	35.7	30.0
7	DM may be present in pregnant women	70.0	67.0	68.5
8	Insulin deficiency is found in type 1 DM	35.0	46.2	40.4
9	Insulin dysfunction is found in type 2 DM	25.3	34.0	29.5
10	Insulin deficiency is found in type 2 DM	70.4	37.8	54.6
32	Type 2 DM can be found in adolescent	48.0	48.1	48.1
	Risk Factor subscale			
3	Risk factors for DM is obesity	71.9	72.5	72.2
4	Risk factors for DM is family history	51.0	70.2	60.3
5	Risk factors for DM is excessive sugar intake	38.9	62.4	50.3
	Symptoms subscale			
11	One symptoms of DM is excessive thirst	61.1	72.3	66.5
12	One symptoms of DM is weight loss	54.0	63.9	58.8
13	One symptoms of DM is excessive urination	68.4	77.5	72.8
	Diagnosis subscale			
14	Cut-off point for DM diagnosis is fasting blood sugar of 200mg/dl	72.3	32.1	53.1
15	Cut-off point for DM diagnosis is fasting blood sugar of 126mg/dl	27.9	31.3	29.5
16	Cut-off point for DM diagnosis is fasting blood sugar of 90mg/dl	73.9	32.9	54.1
17	Urine sugar can not be used to diagnose DM	26.7	34.0	30.2
18	Mode of treatment in type 1 DM is diet therapy and insulin	60.1	65.8	62.8
19	Mode of treatment in type 1 DM is diet therapy and hypoglycemic drugs	39.3	60.1	49.4
20	Mode of treatment in type 1 DM is oral hypoglycemic drugs	57.1	44.1	50.8
21	Mode of treatment in type 1 DM is insulin alone	65.1	32.6	49.3
22	Mode of treatment in type 2 DM is diet therapy and weight reduction	46.0	46.8	46.4
23	Mode of treatment in type 2 DM is oral hypoglycemic drugs alone	68.0	29.4	49.3
24	Mode of treatment in type 2 DM is insulin	57.7	46.2	52.1
25	DM in pregnant can be treated by insulin and hypoglycemic drugs	69.0	36.8	53.4
26	DM in pregnant can be treated by insulin	27.3	29.4	28.3
27	DM in pregnant can be treated by oral hypoglycemic drugs alone	65.4	34.9	50.6
	Complication subscale			
28	Complications of DM may be seen in kidneys	42.7	57.6	49.0

29	Complications of DM may be seen in eyes	54.9	65.3	60.0
30	Complications of DM may be seen in nerves	52.2	56.1	54.1
31	Complications of DM may be seen in lower limbs (as amputation)	49.6	61.8	55.5
	Diet and exercise subscale			
36	Diet therapy means 3 meals and 3 snacks	52.6	45.2	49.0
37	Diet therapy means 2 meals and 2 snacks	70.4	37.0	54.4
38	Diet therapy means not to eat carbohydrate	68.4	40.3	54.8
39	Exercise in type 2 DM is recommended	58.5	58.0	58.2
40	Exercise in type 1 DM is recommended	61.3	60.9	61.1
	Control subscale			
33	Control of diabetes by measuring urine sugar	63.2	43.7	53.8
34	Control of diabetes by measuring HbAc1	35.2	46.2	40.5
35	Control of diabetes by measuring daily blood sugar	44.1	55.9	49.8

Table 3. Independent Samples t-Test Statistics that Compare Saudi and Jordanian Students' Diabetes Knowledge Scale and Subscales (N=982)

Scale/Subscale	Mean (SD)	t	df	p
Total knowledge scale		3.86	980	0.001*
Saudi	21.64(3.69)			
Jordanian	20.29(6.91)			
General Knowledge (0-8) [a] * subscale		-1.41	980	0.16
Saudi	4.10 (1.57)			
Jordanian	4.26 (1.85)			
Risk factor (0-3) subscale		-7.90	980	0.001*
Saudi	1.62 (0.80)			
Jordanian	2.05 (0.92)			
Symptoms (0-3) subscale		-4.50	980	0.001*
Saudi	1.83 (1.10)			
Jordanian	2.14 (1.00)			
Diagnosis (0-4) subscale		11.20	980	0.001*
Saudi	2.01 (0.66)			
Jordanian	1.30 (1.25)			
Treatment (0-10) subscale		8.39	980	0.001*
Saudi	5.98 (1.64)			
Jordanian	4.84 (2.55)			
Complications (0-4) subscale		-4.52	980	0.001*
Saudi	1.99 (1.50)			
Jordanian	2.41 (1.36)			
Diet & exercise (0-5) subscale		8.20	980	0.001*
Saudi	3.11 (1.13)			
Jordanian	2.42 (1.50)			
Control (0-3) subscale		-4.57	980	0.001*
Saudi	1.42 (0.72)			
Jordanian	1.46 (1.05)			

*. Significant at $\alpha = 0.05$ (2-tailed).

[a] *.Possible range of scores of each section indicated in parenthesis.

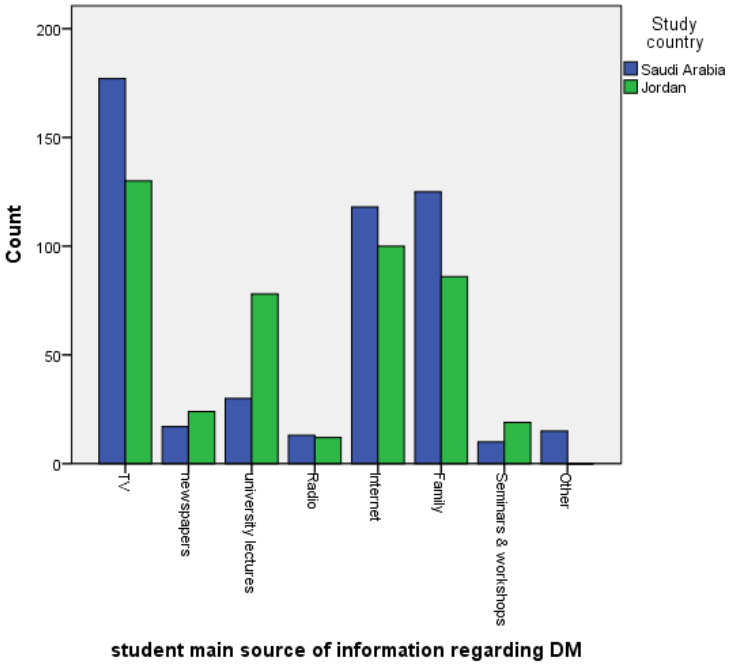
Study country
Saudi Arabia
Jordan
Count
200
150
100
50
0
TV
newspapers
university lectures
Radio
Internet
Family
Seminars & workshops
Other
student main source of information regarding DM

Figure 1

مستوى معرفة طلاب العلوم الصحية عن السكري في المملكة العربية السعودية والأردن

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الملخص

يعتبر مرض السكري مشكلة صحية عامة وعالمية خطيرة لها تأثير سلبي على جودة حياة العديد من الأشخاص. هدفت هذه الدراسة المقطعية الى تقييم معرفة مرض السكري لدى طلاب الجامعات، وتحديد أوجه النقص المعرفي الخاصة بمرض السكري في المملكة العربية السعودية والأردن حيث تم اخذ عينة من 982 طالبًا في المرحلة الجامعية مستخدمين استبيان منظم لهؤلاء الطلاب المؤهلين للدراسة من 3 جامعات في كلا البلدين.

دلت النتائج على أن غالبية الطلاب قد عرفوا مرض السكري بأنه مرض مزمن وأن 25% من الطلبة السعوديين و 34% من الطلبة الاردنيين قد حددوا أنهم يعرفون أن خلل الأنسولين موجود في داء السكري من النوع الثاني واستطاع حوالي 30٪ من جميع الطلاب التعرف على قيمة السكر الطبيعية الفاصلة في بلازما الدم.

كان لدى الطلاب السعوديين درجة أعلى من المعرفة الكلية لمرض السكري، أعلى في التشخيص والعلاج والنظام الغذائي وممارسة الرياضة في حين كانت درجات الطلاب الأردنيين أعلى بكثير في عوامل الخطر، والأعراض، والمضاعفات والسيطرة وكان الفرق ذو دلالة احصائية.

النتيجة: يمتلك الطلاب معلومات أساسية كافية عن تشخيص مرض السكري وأعراضه وعوامل الخطر والعلاج. ومع ذلك، فقد تم تحديد مجالات نقص المعرفة مثل السيطرة على مرض السكري والمضاعفات المرتبطة بها بين المشاركين. يوصى بتعديل مناهج العلوم الصحية في الجامعات الأردنية والسعودية لتتضمن معلومات محددة ومركّزة تعزز المعرفة المتعلقة بالسكري بين الطلاب.

الكلمات الدالة: السكري، مستوى معرفة السكري، طلاب الجامعات، السعودية، الأردن.