

Knowledge, Attitude and Practice (KAP) Regarding Diabetes Mellitus (DM) Cause, Risk Factor, Prevention and Management Among Nondiabetic (Non DM) Female in Tabuk City, Saudi Arabia (KSA)

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ABSTRACT

Introduction: Diabetes mellitus has multiple types, Type Two (also known as Non-Insulin Dependent Diabetes Mellitus) most common type, accounting more than 90-95% of diabetic population. Saudi Arabia is one of the fastest developing country where diabetes mellitus is a major clinical health dilemma. Adequate knowledge about any disease can lead to disease prevention and early diagnosis. Positive knowledge, attitude and practice are fundamental for diabetic population, level of knowledge, attitude and practice to diabetes affected by social, economic status and habits.

Methods: A cross-sectional study was conducted among females at Tabuk City, KSA, The questionnaire contained questions about diabetes, Items regarding the knowledge and practice toward diagnosis, prevention and management. The analysis included descriptive statistics and graphs.

Results: A total of 194 of female participants from Tabuk city were involved in this study. Hundred forty three participates (73.7%) aged between 18-29 years old, seven participants diagnosed with diabetes, hundred seventeen participates (60%) have at least one relative diagnosed with diabetes

mellitus and, hundred sixteen participates (59.8%) stat that they have adequate knowledge about diabetes mellitus.

Conclusion: Steps such as education about diabetes prevention, diagnosis and management are required to improve the heath states of the community and to avoid diabetic complication.

Keywords: Diabetes; Tabuk; Saudi Arabia.


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Article History:

Received: 08-08-2018, Revised: 02-09-2018, Accepted: 27-09-2018

Access this article online

Website: www.ijmrp.com	Quick Response code 
DOI: 10.21276/ijmrp.2018.4.5.031	

INTRODUCTION

Diabetes mellitus is a worldwide problem .The prevalence of diabetes has estimated by World Health Organization (WHO) to be 171 million; this number expected to reach 300 million after 10 years.^{1,2} Diabetes mellitus has multiple types, Type Two (also known as Non-Insulin Dependent Diabetes Mellitus) most common type, accounting more than 90-95% of diabetic population.³ It is associated with increase both morbidity and mortality, impact patients' general health secondary to cellular insensitivity or resistance to insulin which lead to both macro-vascular and micro-vascular complications.⁵

Saudi Arabia is one of the fastest developing country where diabetes mellitus is a major clinical health dilemma. Al-Nozha et al. study show that 23.7% of the Saudi population has diabetes; more prevalent among males gender (26.2%) comparing to 21.5% among females.⁶

Adequate knowledge about any disease can lead to disease prevention and early diagnosis. Positive knowledge, attitude and

practice are fundamental for diabetic population, level of knowledge, attitude and practice to diabetes affected by social, economic status and habits.⁷

METHODOLOGY

A cross-sectional study was conducted among females at Tabuk City, KSA. The questionnaire contained questions about diabetes, Items regarding the knowledge and practice toward diagnosis, prevention and management. The analysis included descriptive statistics and graphs.

Ethical Consideration

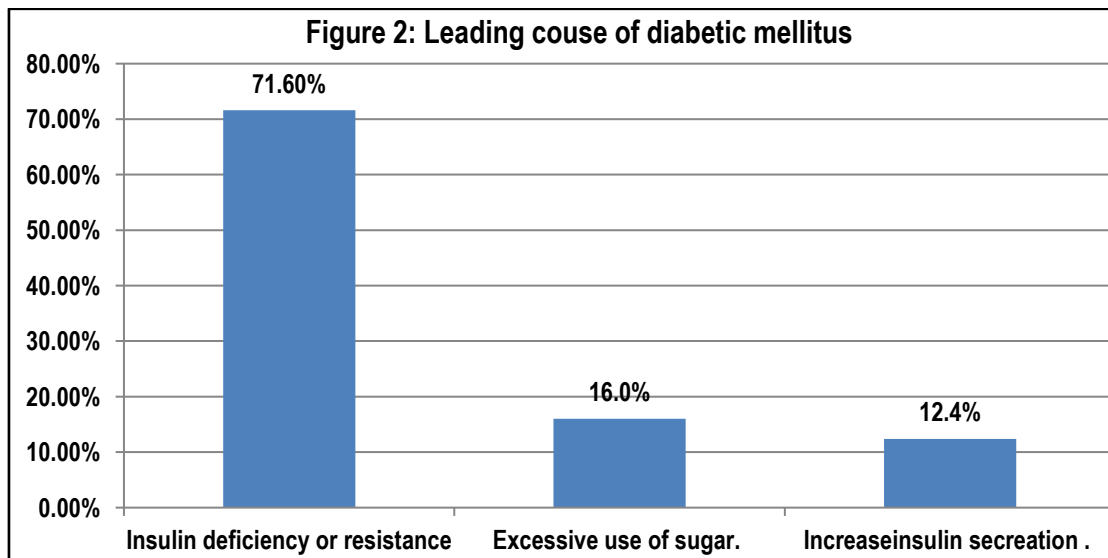
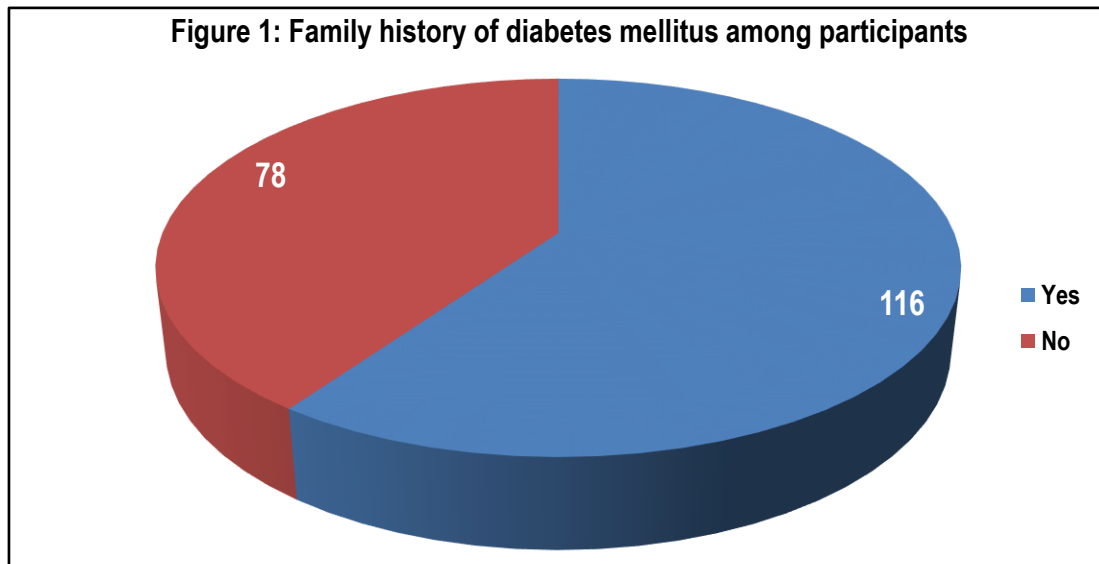
Study was explained to participants and informed consent were taken from the participants.

Statistical Analysis

The collected Data were entered and analyzed using the Statistical Package for Social Sciences (SPSS) statistical program version 19.

Table 1: General characteristics of study participants. (N=194)

		No.	%
Age	18-29 year	143	73.7%
	30-39 year	34	17.5%
	40-49 year	13	6.7%
	50-59 year	2	1%
	60 or more	2	1%
Diabetic?	Yes	7	3.6%
	No	187	96.4%
Have Knowledge about Diabetes	Yes	116	78
	No	59.8%	40.2%



RESULTS

A total of 194 of female participants from Tabuk city were involved in this study. Hundred forty three participates (73.7%) aged between 18-29 years old, seven participants diagnosed with diabetes, hundred seventeen participates (60%) have at least one relative diagnosed with diabetes mellitus and hundred sixteen participates (59.8%) stat that they have adequate knowledge about diabetes mellitus. (Table 1, Figure 1) Out of 194 participants 139 (71.6%) truly recognize that insulin deficiency or resistance

are the cause of diabetes mellitus, 91.2% identify diabetes mellitus as a chronic disease, 78.9% state that increasing hunger, thrust and urination could be symptoms of diabetes mellitus. (Figure2)

More than 95% of the participant’s stat that exercise and healthy diet prevent diabetes mellitus, Obesity can lead to diabetes mellitus and finally Diabetes can lead to multiple serious complication. On the other hand less than half of the participants do thing to prevent diabetes mellitus. (Table 2, Table 3)

Table 2: Participants knowledge about diabetic mellitus.

	Yes		No	
	Number	Percentage	Number	Percentage
Obesity leads to diabetes mellitus.	186	95.9%	8	4.1%
Exercise prevents diabetes mellitus.	187	96.4%	7	3.6%
Diabetes can lead to serious complication.	186	95.9%	8	4.1%
Healthy diet prevents diabetes mellitus.	190	97.9%	4	2.1%

Table 3: Participants practice toward diabetic mellitus.

	Yes		No	
	Number	Percentage	Number	Percentage
Do any screening test for diabetes mellitus.	77	38.7%	117	60.3%
Do regular checkup for diabetes mellitus.	33	17%	161	83%
do regular exercise to prevent diabetes mellitus.	89	45.9%	105	54.1%
Follow healthy diet prevents diabetes mellitus.	42	21.6%	152	78.4%

DISCUSSION

The important of public awareness regarding diabetes diagnosis, prevention and management is established in multiple studies.⁸⁻¹⁰ Regarding assessment of knowledge more than two-third correctly identify cause of diabetes but some of wrong believe such as diabetes caused by increase insulin were detected. According to risk factor and prevention method, most of the participant knew that obesity can lead to diabetes and regular exercise, eating healthy diet can prevent diabetes. Minority of participants do regular exercise, eating healthy diet, doing checkup and screaming for diabetes.

CONCLUSION

Steps such as education about diabetes prevention, diagnosis and management are required to improve the health states of the community and to avoid diabetic complication.

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Source of Support: Nil. **Conflict of Interest:** None Declared.

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Cite this article as: Wafa Hammad Albalawi, Reem Eid Alhawiti, Afrah Dhaifallah Alanazi, Bayan Ibrahim Alaradi, Maram Atallah Albalawi, Ibrahim Mahmoud Ajwah, Waad Mohammed Alhawiti. Knowledge, Attitude and Practice (KAP) Regarding Diabetes Mellitus (DM) Cause, Risk Factor, Prevention and Management Among Nondiabetic (Non DM) Female in Tabuk City, Saudi Arabia (KSA). *Int J Med Res Prof*. 2018 Sept; 4(5):133-35. DOI:10.21276/ijmrp.2018.4.5.031