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Knowledge, Attitude and Practice of Foot Care Among Diabetic Patients at UNRWA Health Centers in Gaza Strip

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Dedication

I dedicate this simple work to …

To the spirit of my father,
To my mother,
To my wife, sons and daughters,
To my brothers and sisters,

To all those who gave me every opportunity of success.

Saeed Mohammed Shaheen

Declaration

I certify that this entire thesis submitted for the degree of Master is the result of my own research, except where otherwise acknowledged, and that this thesis (or any part of the same) has not been submitted for a higher degree to any other university or institution.

Signed ……

Saeed Mohammed Shaheen

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Abstract

Diabetes is a chronic condition affects large segment of population through out the world and can cause a number of serious complications. Problems with the feet are one of the most common. Foot problems are a global problem resulting in major economic consequences for the patients and their families. Self-reported preventive practices have been linked with decreased risk for lower-extremity amputations.

The aim of this study is to investigate the level of knowledge, attitude and practices of diabetic patients about foot care at UNRWA primary health clinics of the middle area of Gaza Strip. A descriptive analytic cross sectional study was conducted for this purpose. A sample of 300 type 2 diabetic patients both males and females over 18 years old were randomly selected using systematic sampling method. Data were collected through face to face questionnaire.

The results show that the level of participants knowledge and practice of foot-self care was less than 60 % while the level of attitude toward foot-self care was more than 60%. The results of the study show statistical significance relationship between participant awareness (knowledge, attitude and Practice) about foot care and their, gender, age, marital status, educational level, work status, type of work, family income per month, number of family member, the duration of diabetes and the presence of previous foot complications as independent variables.
Participants level of knowledge about foot care: Males are having more knowledge than Females, married participants have more knowledge than widowed, employed participants are having more knowledge than unemployed ones. There are positive relationship between participant level of knowledge about foot care and their level of education, number of their families members and the duration of diabetes.
Participants level of attitude toward foot care: young diabetics show more positive attitude than old ones, married participants more than widowed and diabetics who do not have foot complications are having more positive attitude than those who have foot complications. there are positive relationship between participants level of attitude toward foot care and their level of education as well their families income per month. There are negative relationship between participants level of attitude toward foot care and the number of their families members as well the duration of diabetes.
Participants level of foot care practice: there are positive relationship between participants level of daily foot care practice and their level of education as well their families income per month.

Results show that,11 % of participants were having foot problems (ulcers or amputations). 61% of participants barriers to foot-self care were related to knowledge deficit about foot care wile 39% of the barriers were related to participants themselves, like participants do not have the time to practice foot care or they cannot do these practices alone.

The patient himself plays the crucial role in the prevention of diabetic foot disease and therefore education on foot care must provided to all people with diabetes until they can describe foot care practices and demonstrate these practices into their daily life. more attention must provided to females, old diabetics and poor ones

ملخص الدراسة

مرض السكري يعاني منه الكثير من الناس في مختلف أنحاء العالم ويسبب مضاعفات كثيرة. من أهم هذه المضاعفات الأضرار التي تصيب القدمين والتي ينتج عنها تقرح القدم أو بتر القدم. تعتبر مضاعفات القدمين مشكلة عالمية تتسبب في أضرار اقتصادي ة كبيرة لكل من المريض وأسرته ومجتمعه الذي يعيش فيه. العناية اليومية بالقدمين تعتبر وسيلة مهمة وناجحة للحد من هذه الأضرار.

الهدف من هذه الدراسة هو التعرف علي مستوى المعرفة والميول والممارسة لدى مرضى السكري بالنسبة للعناية بالقدمين في عيادات الوكالة في المحافظة الوسطى من قطاع غزة.
هذه الدراسة هي دراسة وصفية تحليلية مقطعية, أجريت على 300 مريض من النوع الثاني من مرضى السكري من كلا الجنسين والمسجلين في العيادات تم اختيارهم بطريقة العينة العشوائية المنتظمة. وقد جمعت المعلومات اللازمة من ملفات المرضى ومن الاستبيانات التي تم تعبئتها من قبل الباحث من خلال مقابلات أجريت مع المرضى في العيادات.

وقد وجد أن مستوى كلا من المعرفة والممارسة لدى المشاركين بالنسبة للعناية بالقدمين اقل من 60%، وميول المشاركين للعناية بأقدامهم أعلى من 60%.
وتبين من الدراسة وجود علاقة ذات دلالة إحصائية بين وعي المشاركين بالنسبة للعناية بالقدمين ومتغير كلا من العمر والجنس والحالة الشخصية ومستوى التعليم والعمل ومستوى الدخل الشهري للأسرة وعدد أفراد الأسرة للمشاركين ومدة المرض وكذلك وجود أو عدم وجود مضاعفات سابقة في القدمين.
مستوى المعرفة لدى المشاركين بالنسبة للعناية بالقدمين: أظهرت الدراسة أن الذكور لديهم معرفة بالعناية بالقدمين أعلى من الإناث, والمتزوجين لديهم معرفة أعلى من الأرامل, كذلك المرضى العاملين لديهم معرفة أعلى من الذين لا يعملون. كما تبين من نتائج الدراسة وجود علاقة موجبة بين مستوى المعرفة لدى المشاركين بالنسبة للعناية بالقدمين ومستوى التعليم وعدد أفراد الأسرة وكذلك مدة المرض لدى المشاركين.
ميول المشاركين بالنسبة للعناية بالقدمين: أظهرت الدراسة أن المرضى الذين تقل أعمارهم عن 45 سنة لديهم ميول للعناية بالقدمين أعلى من المرضى الذين تزيد أعمارهم عن 60 سنة, والمتزوجين لديهم ميول أعلى من الأرامل, كما أن المشاركين الذين لا يعانون من مضاعفات القدمين لديهم ميول أعلى من الذين يعانون من مضاعفات القدمين. كما تبين من الدراسة وجود علاقة موجبة بين ميول

المشاركين بالنسبة للعناية بالقدمين ومستوى التعليم وكذلك مستوى دخل العائلة الشهري لدى المشاركين. كما تبين وجود علاقة سالبة بين ميول المشاركين بالنسبة للعناية بالقدمين وعدد أفراد الأسرة وكذلك مدة المرض لدى المشاركين.
مستوى ممارسة العناية بالقدمين لدى المشاركين: أظهرت الدراسة وجود علاقة موجبة بين ممارسة المشاركين للعناية اليومية بالقدمين و مستوى التعليم وكذلك مستوى دخل الأسرة الشهري لدى المشاركين في الدراسة.

كما أظهرت النتائج أن 11% من المشاركين يعانون من مشاكل في القدمين. أما بالنسبة للمعيقات التي تمنع المشاركين من العناية بالقدمين فقد تبين أن 61% من هذه المعيقات ترجع إلى عدم المعرفة بكيفية العناية بالقدمين, وأن 39% من المعيقات ترجع إلى المشاركين أنفسهم مثل: ليس لديهم الوقت الكافي للقيام بذلك أو أنهم لا يجدون من يساعدهم.

أن الدور الأكبر للوقاية من مضاعفات القدمين يقع على مريض السكر نفسه, لذلك يجب عليه أن يتعلم الطرق الصحيحة للعناية بالقدمين وممارسة هذه الطرق في حياته اليومية. كما أن تعلم هذه الطرق يجب أن توفر لجميع مرضى السكري وخاصة الإناث وكبار السن والفقراء.

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Definitions

Attitude: Attitude is an emotion that all people get when they have other emotions. Attitude are positive, negative or neutral views of an attitude object like; person, behavior or event (Wikipedia, 2007).

Diabetes mellitus: is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. The chronic hyperglycemia of diabetes is associated with long term damage, dysfunction, and failure of various organs, especially the eyes, kidneys, nerves, heart and blood vessels (ADA,1997)**.**

Gestational diabetes mellitus: is an operational classification rather than pathophysiologic condition, identifying women who develop diabetes mellitus during gestation. Women with diabetes mellitus before pregnancy are said to have "pregestational diabetes" and are not included in this group. Women who develop type 1 diabetes mellitus during pregnancy and women with undiagnosed asymptomatic type 2 diabetes mellitus that is discovered during pregnancy are classified with gestational diabetes mellitus (ADA,1997)**.**

Knowledge: is seen as a dynamic system, organized into certain structures forming an internal relationship between man and his environment, and Learning is a change in this relationship occurring as a result of the individual interpretations often within the knowledge system (Brown, 1990).

Other Specific Types of diabetes mellitus: a group of DM includes types of diabetes mellitus of various etiologies as: persons with genetic defects of beta-cell function (maturity-onset diabetes in youth, MODY), or with defect of insulin action; persons with diseases of exocrine pancreas, such as pancreatitis; persons with dysfunction associated with other endocrinopathies; and persons with pancreatic dysfunction caused by drugs, chemicals or infections (ADA,1997)**.**

Practice: Practice is to do or to perform habitually or customarily or repeatedly in order to acquire a skill (Wikipedia, 2007)

Type 1 diabetes mellitus: is formerly called type I, Insulin Dependent Diabetes Mellitus (IDDM) or juvenile diabetes, characterized by beta cell destruction caused by autoimmune process, usually leading to absolute insulin deficiency. Over 95 percent of persons with type I diabetes mellitus develop the disease before the age of 25, with an equal incidence of both sexes and an increased prevalence in the white population (ADA,1997)**.**

Type 2 diabetes mellitus: is formerly called type II, None Insulin Dependent Diabetes Mellitus (NIDDM) or adult-onset Diabetes. This type characterized by insulin resistance in peripheral tissue and deficiency in insulin secretion. This is the most common form of diabetes mellitus and is highly associated with a family history of diabetes, older age, obesity and lake of exercise (ADA,1997)**.**

List of abbreviations

AAH	Ahli Arab Hospital
ADA	American Diabetic Association
BC	Before crest
BRFSS	Behavioral Risk Factor Surveillance System
CI	Confidence Interval
DM	Diabetes Mellitus
GDM	Gestational Diabetes Mellitus
GDP	Gross Domestic Production
GNP	Gross National Production
GS	Gaza Strip
HRQOL	Health Related Quality Of Life
IDDM	Insulin Dependent Diabetes Mellitus
LSD	Less Significance Difference
MODY	Maturity Onset Diabetes in Youth
MOH	Ministry Of Health
NCDs	Non-Communicable Diseases
NGOs	Non-Governmental Organizations
NIDDM	Non- Insulin Dependent Diabetes Mellitus
OR	Odds Ratio
PCBs	Palestinian Central Bureau of Statistics
PHC	Primary Health Care
PNA	Palestinian National Authority

RCTs	Randomized Controlled Trails
UK	United Kingdom
UKPDS	United Kingdom Prospective Diabetes Study group
UNRWA	United Nation Relieve and Work Agency
USA	United States of America
WB	West Bank
WHO	World Health Organization

Chapter (1)

Introduction