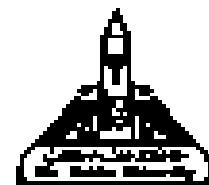


Faculty of Nursing
Ain Shams University

(2013)



Evidence-Based Guidelines for Care of Children With Type 2 Diabetes

Thesis

*Submitted in Partial Fulfillment of the Requirements
of Master Degree in Nursing Sciences
(Pediatric Nursing)*

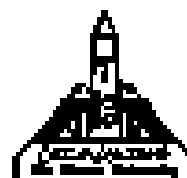
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Wafaa Ibrahim Mohamed

Abstract

Abstract

The aim of the present study is to assess nurses performance regarding care of children with T2D and design an evidence-based guidelines booklet for nurses regarding care of children with T2D.

The study was conducted in the outpatient pediatric clinics at

El-Demerdash Hospital affiliated to Ain Shams University Hospitals ; Abo-El-Rish Hospital affiliated to Cairo University Hospitals and National Diabetes Institute . The sample including(40)nurses working in the previously mentioned settings. was permanent staff, have at least one year experience in diabetic clinic. Data were obtained through an interview with the studied nurses using two tools; structured interviewing questionnaire to gather data regarding socio-demographic characteristics of the study sample, knowledge about the disease. The results of the study revealed that slightly more than half of studied nurses were in the age group of 20-40 years with mean age was 24.72 ± 7.52 and the majority of them were females. 75% of the studied nurses have satisfactory knowledge about T2D. Moreover , the majority (80%) of the studied nurses have competent skills about performance of T2D. while 20% of them were incompetent . In conclusion , the majority of studied nurses were have highly statistical significance between sex of the studied nurses and their total knowledge . in addition to there is statistical significance between years of experience of the studied nurses and their total knowledge and attended of training program and their total knowledge . while there is no statistical significance between socio- demographic characteristics of the study sample and their total performance. The study recommended a continuous educational training program concerning care of diabetic children is highly recommended.

Keywords : Type 2 diabetes ,Evidence-Based guidelines.

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Abbreviations

List of Abbreviations

<i>Abbreviation</i>	
<i>AAP</i>	<i>American Academy of Pediatrics</i>
<i>ADA</i>	<i>American Diabetes Association</i>
<i>BMI</i>	<i>Body mass Index</i>
<i>CDA</i>	<i>Canadian Diabetes Association</i>
<i>CDACPG</i>	<i>Canadian Diabetes Association Clinical Practice Guidelines</i>
<i>CDACPGE</i>	<i>Canadian Diabetes Association Clinical Practice Guidelines Expert Committee</i>
<i>CVP</i>	<i>Central Venous Pressure</i>
<i>CVD</i>	<i>Cardiovascular Disease</i>
<i>CDC</i>	<i>Center for Disease Control and Prevention</i>
<i>X</i>	<i>Chi-Square Test</i>
<i>DKA</i>	<i>Diabetes Ketoacidosis</i>
<i>DM</i>	<i>Diabetes Mellitus</i>
<i>DPPRG</i>	<i>Diabetes Prevention Program Research Group</i>
<i>DPP</i>	<i>Diabetic Prevention Program</i>
<i>DI</i>	<i>Disposition Index</i>
<i>ECG</i>	<i>Electro-Cardiogram</i>
<i>EE</i>	<i>Energy Expenditure</i>
<i>EI</i>	<i>Energy Intake</i>
<i>EAG</i>	<i>Estimated Average Glucose</i>
<i>EBN</i>	<i>Evidence-Based Nursing</i>
<i>EBP</i>	<i>Evidence-Based Practice</i>
<i>FBS</i>	<i>Fasting Blood Sugar</i>
<i>FDA</i>	<i>Federation Diabetes Association</i>
<i>GI</i>	<i>Gastro-Intestinal</i>
<i>HbA1C</i>	<i>Glycated Hemoglobin</i>
<i>HHNS</i>	<i>Hyperglycemic hyperosmolar non-ketotic syndrome</i>
<i>IFG</i>	<i>Impaired Fasting Glucose</i>
<i>IGT</i>	<i>Impaired Glucose Tolerance</i>
<i>IDDM</i>	<i>Insulin-Dependent Diabetes Mellitus</i>

IDF	<i>International Diabetes Foundation</i>
IEC	<i>International Expert Committee</i>
ISPAD	<i>International Society for Pediatric and Adolescent Diabetes</i>
IV	<i>Intravenous</i>
IHD	<i>Ischemic Heart Disease</i>
KF	<i>Kidney Failure</i>
Mmol/L	<i>Milliomles pe liter</i>
Mmg/dL	<i>Milligrames per deciliter</i>
MOH	<i>Minisetry of Health and Population</i>
NCCC	<i>National Collaborating Center for Chronic Conditions</i>
NDEP	<i>National Diabetes Education Programe</i>
NHS	<i>National Health Service</i>
NICE	<i>National Institute for Clinical Excellence</i>
NIDDD	<i>National Institute of Diabetes and Digestive Disease</i>
NIH	<i>National Institute of Health</i>
NICUs	<i>Neonatal Intensive Care Units</i>
NKHC	<i>Non-Ketotic Hyperglycemia Coma</i>
NGT	<i>Normal Glucose Tolerance</i>
OGT	<i>Oral Glucose Tolerance</i>
PCD	<i>Public Consultation Daft</i>
RCTs	<i>Randomized Controlled Trails</i>
RBS	<i>Randomb Blood Sugar</i>
RBCs	<i>Red Blood Cells</i>
RF	<i>Renal Failure</i>
RWHOC	<i>Repot of a World Health Organization Consulation</i>
SPSS	<i>Statistical Package for Social Sciences</i>
T1D	<i>Type 1 Diabetes</i>
T2D	<i>Type 2 Diabetes</i>
U.K	<i>United Kingdom</i>
USA	<i>United States of America</i>
WHO	<i>World Health Organization</i>

Operational definitions

Acanthosis nigricans is a brown to black, poorly defined, velvety hyperpigmentation of the skin. It is usually found in body folds,^[1] such as the posterior and lateral folds of the neck, the armpits, groin, navel, forehead, and other areas. **Habif, Thomas P. (2009).**

An algorithm (pronounced AL-go-rith-um) is a procedure or formula for solving a problem. The word derives from the name of the mathematician, Mohammed ibn-Musa al-Khwarizmi, who was part of the royal court in Baghdad and who lived from about 780 to 850. Al-Khwarizmi's work is the likely source for the word *algebra* as well. **Fouad Tawfiq and Ali(October 2007)**

Introduction

Diabetes is a syndrome with disordered metabolism and inappropriate hyperglycemia due to either deficiency of insulin secretion or to a combination of insulin resistance and inadequate insulin secretion (*Lawrence et al. 2002*). There are two main types of diabetes mellitus (DM) exist, insulin-dependent diabetes mellitus (IDDM) also known as type 1 diabetes (T1DM) and non-insulin dependent diabetes mellitus (NIDDM) also known as type 2 diabetes (T2DM) (*World Health Organization [WHO], 1999*).

Type 2 diabetes mellitus (T2DM) in children is an emotionally charged issue and emerging public health problem. It is an important cause of morbidity and mortality. Its prevalence appears to be increasing. It is lifelong (chronic) disease that develops when the pancreas cannot produce enough insulin or the body is unable to use it (*Dowshen & Ben-Elmehrik, 2004; National Institute of Diabetes & Digestive Diseases [NIIDDD], 2005*).

According to *Holmes et al., (2007)* and *Bahgat et al., (2010)* T2D is still less common than type 1 diabetes mellitus (T1DM) in United Kingdom (U.K) children. In United States of America (USA), a dramatic increase in the incidence of T2DM in children has been noted. However, compared with previous prevalence data, the frequency of T2DM appears to be increasing. Incidence among ethnic minorities is far higher than in whites, as previously described in the United States (U.S). Increased adiposity and family history of T2D were strongly associated with the diagnosis of T2D in U.K. children (*Alberdi et al., 2004*).
