

Self-Care Practice among Preparatory School Age Students with Type One Diabetes Mellitus in Urban Area

Thesis

*Submitted in Partial Fulfilment of the Requirements for
the Master Degree in (Community Health Nursing)*

By

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Ain Shams University
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سُبْحَانَكَ لَا عِلْمَ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

صدق الله العظيم

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✍ *I would like to dedicate this work to Greatest of Allah who gives me power to improve and continue as well to prophet Mohamed peace be upon him.*

✍ *This work also dedicated to individuals who give meaning to my life:*

*To My mother and My husband to
My children the cornerstone of my success*

✍ *Thank you*

Sabha Soliman Mohamed

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List of abbreviations

ADA	American Diabetic Association
BCG	Bacilli-Calmette Guerin
CSII	Continuous subcutaneous insulin infusion
DKA	Diabetic Ketoacidosis
IDM	Type II DM
IDDM	Insulindependent diabetes mellitus
MOD	Maturity onset diabetes
NIDDM	Non-insulin dependent diabetes mellitus
T1D	Type one diabetes
U.S	United states
WHO	World Health Organization

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Abstract

Diabetes mellitus type 1 (T1D) is the third most prevalent chronic disorders of childhood after bronchial asthma and mental retardation during life span. It contributes to increase child hospitalization and absence from school. **Aim of this study:** was to evaluate self- care practices among preparatory school age children with type 1 diabetes mellitus in urban area. **Research design:** a descriptive exploratory research design was used to attain the aim of the study. **Sampling:** a purposive sample includes one hundred and eighteen children from 11 to 14 years old. **Setting:** the study was carried at outpatient clinics of diabetic pediatrics in urban area at El Fayoum city and Nasr city. **Tool:** a structural interviewing questionnaire was formulated to collect data pertinent to the study, this tool include three parts; **1st** part Sociodemographic data for children and their parents, **2nd** part to assess children and their mothers knowledge regarding type 1 diabetes and **3rd** part to assess self-care practices among preparatory school age with type 1 diabetes. **Result:** the current study showed the majority of the studied students were boys had age ranged from 11 – 12 years old, 74% of them had preparatory school level, near of 72.2% had good level regarding learning level and 46.1% of them had the second rank in relation to child ranking, regarding mothers knowledge about type 1 diabetes they had poor level, 52.2% of the studied students had unsatisfactory knowledge score level in relation to T1D and 63.2% of the studied students had unsatisfactory practice score level regarding T1D self-care practice. **Conclusion:** an inverse relationship between the self-care practices dimensions and knowledge about diabetes in children suffering from type 1 diabetes where statistically significant for all dimensions. **Recommendation:** regular education programs should be provided to parents and their children with diabetes type1 as to be aquatinted them with the necessary knowledge and practices.

Keywords: Type 1 Diabetes, urban area, and self-care practices.

Introduction

Diabetes multiuse a chronic metabolic disorder in which the use of carbohydrate is impaired and that of lipid and protein is enhanced. It is caused by an absolute or relative deficiency of insulin and is characterized, in more severe cases, by chronic hyperglycemia, glycosuria, water and electrolyte loss, ketoacidosis, and coma. Diabetes mellitus type 1 (also known as type 1 diabetes; formerly insulin-dependent diabetes or juvenile diabetes) is a form of diabetes mellitus that results from the autoimmune destruction of the insulin-producing beta cells in the pancreas. The subsequent lack of insulin leads to increased glucose in blood and urine (*WHO, 2014*).

According to *Wilds, (2014)* diabetes mellitus type 1 account for between 5% and 10% of all diabetes cases. Globally, the number of people with DM type 1 is unknown, although it is estimated that about 80,000 children develop the disease each year Within the United States the number of affected persons is estimated at one to three million. The development of new cases vary by country and region; the lowest rates appear to be in Japan and China with approximately 1 person per 100,000 per year; the highest rates are found in Scandinavia where it is