

Quality of life among School Children Suffering from Juvenile Diabetes

Thesis

*Submitted in partial Fulfillment of the master Degree in
Community Health Nursing*

By

Warda Abd El Moaty Azab

A. Sc. Faculty of Nursing – Ain Shams University (2004)

Supervised By

Prof. Dr. Suheir A.H. Mekhemar

Professor of Community Health Nursing
Faculty of Nursing - Ain Shams University

Dr. Nevine Gamal Andrawes

Assistant Professor of Pediatrics
Faculty of Medicine- Ain Shams University

Dr. Ferial Fouad Melika

Lecturer of Community Health Nursing
Faculty of Nursing - Ain Shams University

*Faculty of Nursing
Ain shams University*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لَسْبَدَانِكَ لَا عِلْمَ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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Dedication

*This work is dedicated to the most
important*

Persons in my life.....

*To My father, My Mother, ,My husband, My Friends,
My Kids and All My Family Members for
Their:*

Effort,

Encouragement,

Cooperation

&

Support

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List of Abbreviations

Abbr. Full-term

WHO	:	World health organization
CDC	:	Centers for Disease Control and Prevention
ADA	:	American Diabetes Association
ISPAD	:	International Society of pediatric and Adolescent Diabetes
DM	:	Diabetes Mellitus
IGT	:	Impaired Glucose Tolerance
IFG	:	Impaired Fasting Glucose
BG	:	Blood Glucose
BMI	:	Body Mass Index
ESRD	:	End- Stage Renal Disease
DSPN	:	Distal Symmetrical Poly-Neuropathies
OGTT	:	Oral Glucose Tolerance Test
CSII	:	Continuous Subcutaneous Insulin Infusion
QOL	:	Quality of Life
ICA	:	Islet Cell Antibodies
DKA	:	Diabetes Keto Acidosis
1DM	:	Type 1Diabetes Mellitus
IFG	:	Impaired Fasting Glucose
DCCT	:	Diabetes Control and Complications Trial

mmol/L	:	Millimoles per Liter
mg/dl	:	Milligrams per Deciliter
HbA1c	:	Glycated Haemoglobin
DSPS	:	Distal Symmetrical Poly-neuropathies
OGTT	:	Oral Glucose Tolerance Test
LDL	:	Low Density Lipoprotein
FDA	:	Food And Drug Administration
USA	:	United States of American
HRQOL	:	Health- Related Quality of Life
BCG	:	Bacillus Calmette Guerin
DPT	:	Diabetes Prevention Trial
NGSP	:	National Glyco-hemoglobin Standardization Program

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ABSTRACT

Juvenile diabetes is one of the most common pediatric chronic condition and has potentially life-threatening sequel. It has profound effects on children physical, mental, emotional, social, and psychological health status that in turn can effect on quality of life. **Aim:** this study amid to assess the quality of life of the children suffering from juvenile diabetes and assess factors affecting the quality of life among children suffering from juvenile diabetes. **Study design:** A descriptive analytical research design. **Setting:** this study was carried in outpatient clinic for diabetes in Ain shams University Hospital. **Sample:** A purposive sample of 100 children who have juvenile diabetes at age 8-12 years and confirmed diagnosis since 6 months or more. **Tools:** Two tools were used for data collection. First tool: Questionnaire sheet it was developed by the researcher it constricted 4 parts part 1 socio-demographic data and child history part 2 knowledge's about quality of life, part 3 Diabetes specific quality of life scale, and part 4 knowledge's about diabetes. Second tool physical examination sheet . **Results:** Accordance to factors affecting quality of life of children suffering from juvenile diabetes medical, economical, psychological, and social factors were the main factors affective quality of life, and the majority of children suffering from juvenile diabetes had average level in quality of life while more than third had poor quality of life. **Conclusions:** an inverse relationship between the quality of life dimensions and knowledge about diabetes in children suffering from juvenile diabetes where statistically significant for all dimensions. **Recommendations:** Continuous assessment for diabetic children's knowledge about diabetes mellitus and its control, change misconception, provide them with updated knowledge and develop their abilities for demonstration of therapeutic regimen to achieve high quality of life.

Key words: School children, Juvenile diabetes, preventive measures, management, community health nurse role

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Introduction

Diabetes 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 different organs, especially the eyes, kidneys, nerves, heart, and blood vessels (*American Diabetes Association, 2011*).

Juvenile diabetes (sometimes called insulin-dependent, juvenile or childhood-onset diabetes) occurs when the pancreas does not produce enough insulin, a hormone that regulates blood sugar. The cause is not known, but it is thought to be the result of a combination of genetic and environmental factors. Many countries are documenting higher numbers of newly diagnosed cases of type 1 diabetes, particularly in younger children. Interestingly, some disease patterns among children resemble infectious disease epidemics. Currently, there is no known way to prevent type 1 diabetes (*WHO, 2011*).

Defining quality of life is not easy, and at present there is no conclusive theoretical description for it. In a wider sense, the self-perceived quality of life involves a broad array of social, physical, mental, health-related and even economic dimensions. A good quality of life could also be defined as an overall satisfaction with daily life and a general sense of well-

being. The health- related quality of life is a narrower concept often considered to comprise only those aspects of life directly affected by a particular illness or its treatment. Regardless of the definition, it is obvious that health-related quality of life is influenced by personal beliefs and perceptions and the current life situation (**Kurppa et al., 2011**).

Diabetes affecting quality of life most studies report worse quality of life for people with diabetes compared to general population, especially regarding physical functioning and well –being. When the comparison group is people with other chronic diseases, the picture is less clear, with relative quality of life varying by quality of life domains and medical condition with which diabetes is being compared (**Peyrot & Rubin, 2009**).

There is a worldwide increase in the incidence of juvenile diabetes. It affects approximately 1 in 400-600 children and adolescents in the united states of American (USA) develop juvenile diabetes. Juvenile diabetes accounts for 5 to10percent of all diagnosed cases of diabetes mellitus (DM) in the USA (**CDC, 2012**). **Hanson et al (2008)** stated that the number of pediatric population with juvenile diabetes is unknown, although it is estimated that about 80,000 children develop the disease each year globally.