Quality of Life among Mothers with Gestational Diabetes

Thesis

Submitted for partial Fulfillment Of the

Master Degree

In nursing sciences

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2017

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2017

*First, I am forever grateful to **Allah,** who always helps and cares me, and for giving me the will and strength to fulfill this work.*

*I wish to express my deepest gratitude and thanks to **Prof. Dr. Kamilia Abo Shabana,** Professor of Obstetrics Nursing, Faculty of Nursing, Ain- Shams University for her continues encouragement, support, guidance, and valuable advice toward the achievement of this study.*

*I am particularly indebted to **Prof. Dr. Mohamed Hassan** Professor of Obstetrics and Gynecological, Faculty of Medicine, Ain Shams University, for his continuous assistance, constant encouragement and advice and for the time and effort he gives me throughout this work.*

*I would like to express my deepest thanks and gratitude to **Prof. Dr. Hanan Abdelftah,** Professor of Obstetrics Nursing Faculty of Nursing, Ain Shams University, for her unlimited help, valuable guidance, continuous encouragement and forwarding her experience to help me to complete this `work.*

Last but least I would like also to express my deep gratitude and appreciation to all those who directly or indirectly helped me to complete this piece of work.

This thesis is lovingly dedicated to my family

For their support, encouragement and constant love

Have sustained me through my life

Contents

List of Abbreviations

ADA	**:**	American Diabetes Association
GD	**:**	Gestational diabetes
GDM	**:**	Gestational diabetes mellitus
HRQOL	**:**	Health-related quality of life
IADPSG	**:**	International Association of diabetes and Pregnancy study Group
NICE	**:**	National Institute for Health and Care Excellence
NIDDK	**:**	National Institute of Diabetes and Digestive and Kidney Diseases.
NPH	**:**	Insulin isophane
NST	**:**	Non-stress Test
OGTT	**:**	The oral glucose tolerance test
PG	**:**	Plasma glucose
QLRH	**:**	Quality of Life Related to Health
QOL	**:**	Quality of life
SMBG	**:**	Self mentoring blood glucose
T1DM	**:**	Type 1 diabetes mellitus
T2DM	**:**	Type 2 diabetes mellitus

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Abstract

This study aimed to study the quality of life among mothers with gestational diabetes. The study was conducted at outpatient clinics and inpatient departments of Ain Shams Maternity University Hospital. **A descriptive study design** was utilized; on a convenience sample consisting of 200 gestational diabetes mothers. **Two tools** of data collection were used: a structured interview questionnaire, and "satisfaction part" of QOL scale to evaluated satisfaction among gestational diabetes mothers. **Results** showed that, 66% of studied sample were satisfied with social/economic domain, 64% with psychological/spiritual domain and 65.5% of them were un-satisfied with health/functioning domain. There was highly significant difference between age and mother's knowledge as well as highly significant difference between education and mother's knowledge and a significant difference between area of residence and mother's knowledge. The study concluded that, the gestational diabetes disease had affected mothers' quality of life domains as health and functioning domain. **Recommendation**: Developing awareness rising program to enhance pregnant mothers' knowledge regarding promotion of their health in relation to gestational diabetes.

Keywords*:* Quality of life, gestational diabetes (GDM).

Introduction

Gestational diabetes mellitus (GDM) is common medical complication of pregnancy and a condition characterized by glucose intolerance of varying degrees of intensity, starting or being first diagnosed during pregnancy. GDM is defined by American Diabetes Association. As any degree of glucose/carbohydrate intolerance with onset or first recognition during pregnancy ***(American Diabetes Association, 2014).***

Meanwhile women who have GDM need special attention by the multidisciplinary team, because of the risks that may affect the balance of both; mother and child. This includes constant explanations about this disease, treatment and continuing health education, aiming the self-care of gestational diabetes mellitus. Gestational diabetes mellitus affects up to 14 % of all pregnancies, and it is increasing in prevalence. ***(American Diabetes Association, 2014)***.

Also pregnant women without known diabetes mellitus should be screened for GDM after 24 weeks of gestation. Early diagnosis of gestational diabetes results in a statistically significant decrease in the incidence of preeclampsia, shoulder dystocia, and macrosomia. Initial management includes glucose monitoring and lifestyle

modifications. If glucose levels remain above target values, pharmacologic therapy with metformin, glyburide, or insulin should begin ***(Garrison, 2015).***

More offer GDM associated with high levels of maternal and prenatal morbidity and mortality. Moreover, frequently, complications are observed for mothers such as: hypoglycemia, hyperglycemia, ketoacidosis, retinopathy, nephropathy, pregnancy-induced hypertension, poly-hydramnios, early labor, cesarean birth due to shoulder dystocia, for fetus and neonate congenital anomalies shoulder dystocia, hypoglycemia, respiratory distress and jaundice ***(Moore, 2017).***

Additionally the 75 gm. oral glucose tolerance test (OGTT) is required for diagnose gestational diabetes. If glycaemia is normal, the test should be re-administered at 24–28 weeks of pregnancy or when first symptoms indicative of gestational diabetes are observed. Gestational diabetes is usually diagnosed during routine screening before it causes any symptoms ***(Moyer, 2014).***

Antenatal testing is customary for women requiring medications. Induction of labor should not occur before 39 weeks in women with GDM, unless glycemic control is poor or another indication for delivery is present. otherwise indicated, scheduled cesarean delivery should be

considered only in women with an estimated fetal weight greater than 4,500 gm. Women with a history of GDM are at high risk of subsequently developing diabetes. These women should be screened six to 12 weeks postpartum for persistently abnormal glucose metabolism, and should undergo screening for diabetes every three years thereafter ***(Hartling, Dryden, Guthrie, et al., 2014).***

Furthermore gestational diabetes mellitus occurs when an expectant woman's placental hormones cause body's cells to be more resistant to insulin and, therefore, glucose absorption. As the baby continues to grow and more hormones are produced, the pancreas cannot produce enough insulin to account for the cells' resistance. About 3 to 5 percent of pregnant women in the United States develop GDM, usually after their 20^{th} week of pregnancy ***(American Diabetes Association, 2016).***

While the goal of gestational diabetes management is to ensure safe foeto-maternal outcome, prevention or delay of diabetes and cardiovascular disease in the mother and the child. The management of GDM must involves a team approach consisting of obstetrician, diabetes physician, an approach consisting of obstetrician, , a diabetes educator, dietician, midwife and pediatrician ideal for managing GDM ***(Castorino & Jovanovic, 2013).***

The goal of dietary therapy is a healthy diet and the goal of insulin therapy during pregnancy is to achieve blood glucose normal level. In gestational diabetes, early intervention with insulin or an oral agent is a key to achieving a good out come when diet therapy fails to provide adequate glycemic control ***(Friel, 2014).***

Moreover, quality of life among mothers with gestational diabetes may be affected by worries about their health and that of the child, as well as by a feeling of losing control of one's health. Gestational diabetes affects virtually all aspects of a women's life. It often leads to deterioration in the women's physical and psychological wellbeing, a change in their lifestyle and its adaptation to the illness, as well as changes in physical, professional, and social activity and also values. All of these also affect the women's quality of life ***(Nolan & Crone, 2011).***

Nurses are playing effective role in prevention, early detection and management of gestational diabetes and its complications through enhancement in the glycemic control and thus quality of life of women afflicted with gestational diabetes requires the incorporation of education in the treatment modality, aiming to teach gestational diabetes women about their disease. Educational interventions, screening high-risk group and providing health care. It is