

Assessment Knowledge of Pregnant Women about Gestational Diabetes in Primary Health Care Centers at Al Nassiriya City/Iraq

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Abstract

Background: The American Diabetes Association (ADM) certified that the Gestational Diabetes Mellitus (GDM) was separated any grade of the intolerance of glucose with a nonset or fist recognition at the time of pregnancy. **Objectives:** The study aims at assessing the knowledge of pregnant women of Gestational Diabetes Mellitus (GDM), which includes screening importance, risk factors and post- partum follow-up. **Methodology:** A sample of 50 women was selected from primary health care centers in Nasiriyah. The data was collected by interviewing women. The questionnaire was designed and consisted of demographic components and variables and risk factors that contribute to gestational diabetes to pregnant women. The validity and reliability of the questionnaire was determined by conducting a pilot study. Statistical and statistical procedures were used to analyze the data. **Results:** The study results showed that most of them ranging from age (21-25) years and the highest proportion of them graduated from primary school and less, most of them housewives with enough to some extent. There were statistically important variances between the knowledge of pregnant women about gestational diabetes and demographic data at a value of p less than 0.05. **Recommendations:** Visit prenatal clinics until late pregnancy, meaning that there is little chance to educate illness on GDM and how they can help prevent it. While doctors are proactively trying to change this, the results of this study suggest that continuing education is necessary to improve awareness of GDM, and early prenatal education is likely to be important and that the Department of Health is setting up workshops on pregnancy. Nurses midwives at primary health care center

Keywords: *Assessment, Knowledge, Pregnant, Gestational Diabetes Mellitus.*

Introduction

GDM exists as a diabetes diagnosis (DM) identified in the pregnancy's second or third trimester that does not particularly match with public DM criteria in cases where women are diagnosed with GDM in the first trimester, DM must be considered thoroughly before [1]. Affecting up to 14% of all the pregnancies, Gestational diabetes depends on the diagnostic criteria applied along with the population study [2]. Acknowledging the fact that both DM and obesity are now global, the GDM prevalence is still on the rise [2, 4]. GDM that is left untreated bears a risk for both the child and the mother and is concomitant with a serious short and long term output, including obstetric and neonatal complications at the time of childbirth and complications (e.g. obstetric injury, macrosomia, caesarean section [5, 7], and DM and obesity in offspring in subsequent life [8, 10] Luckily, it has been shown by studies that quite a number of these outcomes can be

condensed by detecting and intervening early. [11, 12] Although, there still exists a worldwide shortage about the optimal path to detect and treat GDM, and criteria for diagnosis that are used are different, and many States make the use of their existing recommendations and, consequently, remain the safety and efficiency debate in treatment methods for GDM, Counting the oral blood glucose suction agent use, as well as the short and long-term consequences of offspring. Here is a description of both the current knowledge regarding GDM and the unmet requirements of this case .Revision of different treatment procedures available, diagnostic criteria, and values of GDM in offspring. Pregnancy is a unique period in the lives of women and their families. This stage, in general, is characterized by the need for adjustments, particularly with regard to identifying and defining roles, information and educational practices to better

understand changes in pregnancy and puerperal cycles [13]. In most cases, pregnancy does not appear to be anomaly, but a number of women with specific characteristics or because they have diseases such as high blood pressure or gestational diabetes (GDM) have a higher likelihood of adverse development. They can therefore be classified as high pregnant women. [14].

GDM exists as a condition categorized by intolerance of glucose with varying degrees of severity, beginning or identified primarily during pregnancy and may or may not continue after the child is born [15]. Therefore, women with GDM need special attention by a multidisciplinary team because of the risks that may affect the balance between the two. This mother and child include a permanent explanation of the disease, treatment and, above all, continuing health education for self-care. However, clinical practice has exposed that little is known about the knowledge that women with GD have and treat the disease, as well as self-care measures practiced in daily life.

Methodology

Study Objectives

The objective that this study wants to achieve is the knowledge assessment of pregnant women with gestational diabetes (GDM), including the importance of postpartum screening risk factors, and follow-up.

Design of the Study

A cross-sectional study of gestational diabetes (GDM) knowledge was performed, including the importance of postpartum screening risk factors, and follow-up. In the Endocrine Center, 15 health centers in Shebin, Karar Health Center, Al-Rasoul Health Center, Imam Hassan in Nasiriyah. Sample of the study: Objective sample of "non-probability" of (50) women attending primary health care centers.

Materials and Methods

The questionnaire was built after a comprehensive review of available literature and related studies. The study tool consists of demographic variables, reproductive variables, current pregnancy complications, immediate neonatal characteristics, dietary pattern estimation, and characteristics of prenatal and psychosocial services.

Credibility and Stability

The credibility of the tool's content was estimated by a team of (5) experts, and the stability of the elements was based on the internal consistency of the questionnaire and was evaluated by the Alpha Kronbach calculation of $K = 0.72$.

Data Analysis

Through SPSS 20, this includes frequencies, percentages, average scores, standard division and graphical presentation of data; and the analysis approach of statistical survey data including the Kai square test.

Results

Table 1: Study distribution sample according to socio demographic characteristics (n=50)

Socio demographic characteristics	Rating	No.	%
Age /years	20 and less	6	12.0
	21-25	15	30.0
	26-30	10	20.0
	31-35	9	18.0
	36-40	8	16.0
	More than 40	2	4.0
	$\bar{X} \pm SD = 28.39 \pm 6.58$		
Equal of education	graduate of Primary school & less	26	52.0
	Graduate of intermediate school	10	10.0
	Graduate of secondary school	6	12.0
	Graduate of Institute and College	8	16.0
Occupation status	Employee	4	8.0
	Housewife	32	64.0
	student	7	14.0
	Free Job	7	14.0
Resident	urban	27	54.0
	suburban	14	28.0
	rural	9	18.0
Income from woman's point of view	sufficient	9	18.0
	Sufficient to some extend	31	62.0
	Insufficient	11	22.0

Table 2: Distribution of study sample according to risk factors that subsidize to gestational diabetes mellitus (n=50)

Risk factors	NO.	%
Family history of T2DM	20	40.0
Obesity	7	14.0
Previous GDM	5	10.0
High maternal age	4	8.0
Don't know	10	20.0
Others	4	8.0

Table 3: Distribution of study sample according to gestational diabetes mellitus' long-term consequences in children who are born to mothers carrying gestational diabetes mellitus (n=50)

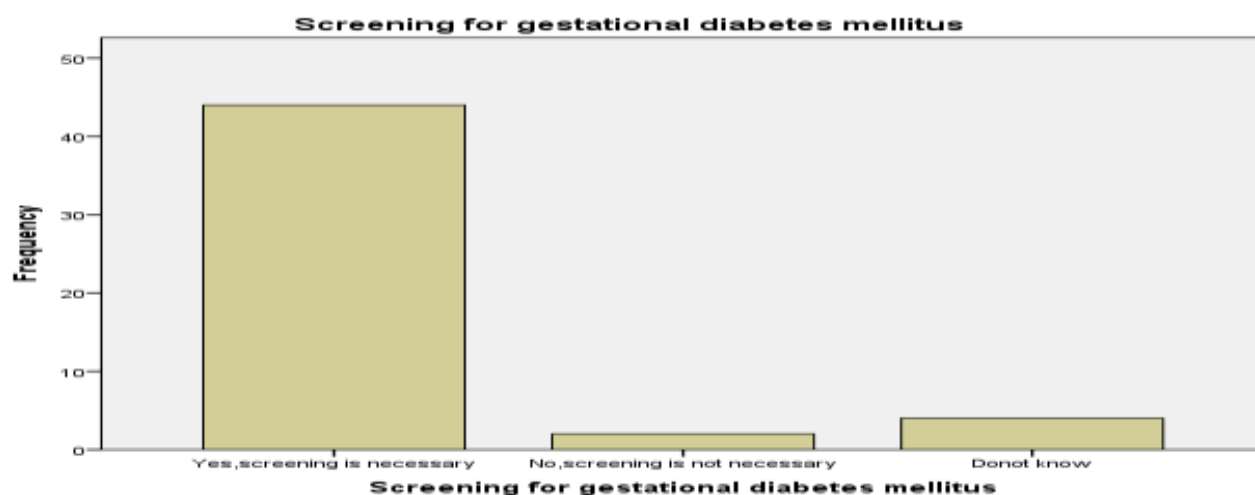
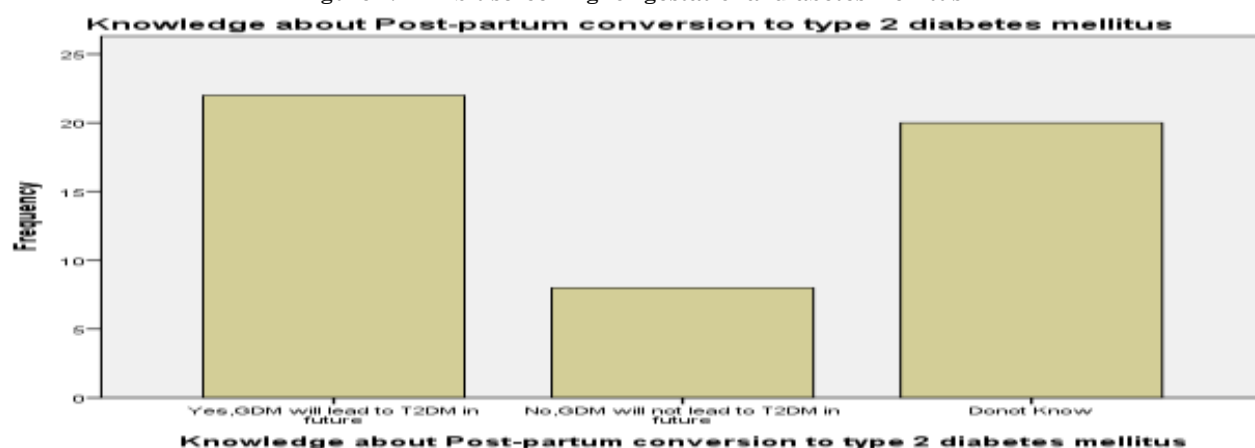
Long-term consequences of GDM in children	NO.	%
Childhood obesity	7	14.0
Glucose intolerance	4	8.0
T2DM in adolescents	10	20.0
Don't know	29	58.0

Table 4: Distribution of study sample according to long after delivery should the blood sugar test (n=50)

Time long after delivery should the blood sugare test	NO.	%
6-12 weeks	2	4.0
Within a year	4	8.0
Others	2	4.0
Don't know	42	84.0

Table 5: Differences between the Level Knowledge and the socio demographic characteristics (n=50)

Socio demographic characteristics	Level Knowledge	
	χ^2	P-value
Age	32.634	HS
Level of education	47.314	HS
Occupation status	21.540	S
Resident	14.220	S
Income from woman's point of view	22.609	S

**Figure 1: Exhibit screening for gestational diabetes mellitus****Figure 2: Exhibit information about conversion of post-partum to T2DM**

Discussion

The study exhibit that the uppermost percentage of the sample of the study is (30.0%) within the sixth age group (21-25) years .With regard to the levels of education (52%) of the sample of the study, they are graduates of primary schools and less. additionally, to (52.0%) of the sample of the study are housewives. Also (54.5%) of the study samples were taken from an urban residential area, as exposed in Table (1). The outcomes are the primary findings of this study which is that there is a scarcity of awareness about GDM among women who are pregnant, particularly in remote areas. Alongside the spread and rise of Diabetes in India, [13] GDM is rising. Even in areas that are rural, there is a rise in prevalence of GDM [15].

Consequently, the study results are a major fear. It has been regarded as a favorable condition for decades. Nevertheless, due to the smaller age of T2DM beginning among Asian Indians, the numbers will barely add up to 100% considering a few have identified more than one options. GDM: gestational diabetes, T2DM: type 2 diabetes. The results of the study indicate that most of the study sample (40%) of the family history of type 2 diabetes, (14%) of the study sample obesity, (10%) of the sample of the previous study GDM, (47.5%) do not have any kind of Abortion (31%) has two to three children (68%) with one year and less as a period between the last pregnancies (8%) and the mother's age (20%). These findings are supported, although most women believe that GDM should be tested during pregnancy, as many are quite vague about the test timing. Among women who are urban, there was a better knowledge about the requirement of blood sugar. Nevertheless, the results were not similar with women in remote areas. More than 75% of women who are rural had no idea about the long-standing results of GDM, and 56% of them within one year after birth [16].It are therefore essential that health care providers guarantee that parental cares which are received by women are advised of long-standing strategies for the prevention of diabetes. The results of the study indicate that the study sample (4%) 6-12 weeks (8%) during the year (84%) do not know that poor proficiency has been distinguished as a factor influencing adherence to drug, potentially because of the

way that these illness cannot peruse therapeutic cautioning marks and admonitions [17].

Lower amount of literacy has been visible to be associated with diabetes' poor knowledge in the United States, [18] which alternatively associates itself with poor management and self-care. Comparable findings were reported in Malaysia, where lesser knowledge was found about GDM among students of primary school. Previous research results were confirmed by the findings of this study that exposed the strong impact of education on the literacy of health. Provided that the control of blood sugar I essentially done by drug management, The efforts taken to assist the improvement of self-care via patient-specific procedures on the basis of their literacy levels. Several reasons can become the catalyst for poor knowledge among women who are pregnant. A recent research in Chennai, executed amidst a population, exposed that at a rate of 25% of the population of Chennai were unable to identify the disease called diabetes. [11] As a result, it is barely astonishing that the knowledge about GDM or diabetes at the time of pregnancy is quite limited not only in the rural areas, but also in the urban areas. To add on, even among physicians who are urban, the GDM knowledge is weak among pregnant women who are residing in areas that are rural. This increases the importance of training doctors, assisting people, the public about GDM in India, especially those residing in areas that are remote, and to understand about a lifestyle which is healthy in relation to the diet. The cultural customs usually drive the food habits [17].

As of the recent times, malnutrition as a result of poverty was a serious issue, which resulted in obesity not being regarded as a concert to diabetes. With the economy developing rapidly, obesity has turned out to become a quite significant load in both remote and urban existences. The risk factors questions exposed that most rural women were not aware of the factors that may lead to GDM. Carolan and Poth (2013) reported results that were quite similar in a qualitative study, which stated the unawareness of most women of the factors related to GDM and they also were clueless about how a change in lifestyle and diet could actually reduce the GDM risk.

A study conducted by Rhoads-Baeza and Reis (2010) displayed results which also showed that most women were incapable of relating T2DM, GDM and Family Risk Factors. [18]. The unawareness of the potential impact on the mother and child were also seen on the people who participated on the test. These results produced similar output to the ones conducted by Poth and Caroline (2013). Equally, a study by Kaptine et al. GDM has been considered by many women as a sign of adapting a lifestyle which is healthy. Most of it has also been reported to be as a perception of high risk for diabetes in the future. GDM is often declared by a lot of people to be transient who is also likely to show up at the time of pregnancy. But it is a matter of concern that the rate of GDM to T2DM evolution is on the rise. Studies have showed previously that women with GDM evolved to T2DM within 9 years after giving birth. A recent study's data exposed that up to 20% turned to T2DM as an inclusion; there exists a scarcity of support staff and trained physicians such as diabetes teachers in the rural areas. It is therefore necessary to make the doctors skilled, particularly in areas that are remote. After that, necessary educational methods should be put to use that makes women understand the seriousness of the GDM condition. Nurses, doctors and diabetics must ensure that illness can be a form of T2DM from GDM, not just a condition which is passing. Even though with a sample size of the study being constricted, these outcomes indicate the requirement for GDM's rigorous education, by training doctors and paramedics alongside the public who are

general, particularly in India's remote areas and several other developing countries.

Conclusions

The study confirms that pregnant women who are pregnant with gestational diabetes, the study results exhibit that most of their ages ranged from 21-25 years, and the highest percentage of them graduated from primary school and less, most of them housewives with some adequacy and important statistical differences between Pregnant women know about gestational diabetes and demographic data at a value of less than 0.05 p

Recommendations

Visit prenatal clinics until late pregnancy, meaning that there is little chance to educate illness on GDM and how they can help prevent it. While doctors are proactively trying to change this, the results of this study suggest that continuing education is necessary to improve awareness of GDM. Early prenatal education is likely to be important and the Health Work Administration will establish workshops on pregnancy. Nurses midwives in primary health care center.

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