



“EXPERIENCES OF GESTATIONAL DIABETES AND CARE IN WOMEN WITH GESTATIONAL DIABETES -: A REVIEW BASED ON AVAILABLE LITERATURE”

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Abstract

Gestational diabetes is a disease condition in which the blood sugar level of women increases and it will become abnormally high which will be detected during pregnancy first time. This will disappear after the childbirth gradually. Most of the women will not express any signs and symptoms of diabetes during the time of pregnancy. But some women experience the symptoms of increased urination, thirst and excessive hungry. This condition is usually treatable during pregnancy but untreated conditions may leads to fetal complications like increased fetal birth weight, low sugar in blood, stillbirth, birth injuries and later there may be a possibility of developing type-2 diabetes mellitus. Gestational Diabetes affects one in six pregnant women worldwide reported by the International Diabetes Federation in 2019. **Methods:** Qualitative studies published between 2013 and 2023 were undertaken for the narrative review. A comprehensive review of published literature and journal articles from PubMed, Google scholar, CINAHL and Medline databases was done. Search strategy specific to each database was used. During initial search 5361 titles were retrieved and after screening 10 articles were selected for full text screening. Finally 10 research articles were selected based on the inclusion criteria. **Results:** The studies reviewed shows the experiences of women with Gestational Diabetes Mellitus which includes distress and fear; realizing the changes required; learning to manage GDM; finding motivation, compliance despite limited understanding, perceptions of powerlessness and mental health deterioration, Some women expressed concern for the baby and the risk of getting diabetes after birth. **Conclusion:** The review data shows family engagement, social services input, evidence based long term management will help deal with gestational diabetes. If gestational diabetes is not treated on time properly may lead to serious complications for both the mother and the baby .The important

aspect of treating Gestational Diabetes involves educating the women regarding blood glucose monitoring, exercise, diet etc. Proper awareness and timely management can reduce the GDM complications and help dealing with gestational diabetes mellitus.

Key words: Gestational Diabetes, Gestational Diabetes Care, Experiences, Women with Gestational Diabetes.

1. INTRODUCTION

Gestational diabetes (GD) is glucose intolerance that occurs in pregnant women and is characterized by onset or detection during pregnancy. The clinical effects of GD can range from asymptomatic to severe hyperglycemia. GD is thought to arise as the result of insulin resistance due to pregnancy hormones, which is not adequately compensated by the pancreatic β -cells through increased proliferation and insulin secretion. The entire pathogenesis of the disease remains unknown, although a genetic predisposition is likely due to familial clustering and the identification of several candidate genes associated with increased risk. Non genetic factors, including maternal age, obesity, diet, and lifestyle, are also associated with GD.

Gestational diabetes mellitus (GDM) is an increasingly common condition of pregnancy. It is associated with adverse fetal, infant and maternal outcomes, as well as an increased risk of GDM in future pregnancies and type 2 diabetes for both mother and offspring (Judith Parsons et al 2015). GDM can result in an emotionally distressing pregnancy, but there is little research on the patient experience of GDM. The aim of this research review is to explore the experiences of GDM in order to improve care among women with Gestational Diabetes mellitus.

Need for the study

Diabetes is a metabolic disorder characterized by resistance to the action of insulin, insufficient insulin secretion or both. Diabetic Mellitus is the most common metabolic disorder that complicates 3-5 % of all pregnancies and is a major cause of perinatal morbidity and mortality as well as maternal morbidity. As the incidence of both obesity and Diabetes Mellitus among woman of child bearing age continues to raise well, so as the prevalence of hyperglycemia in pregnancy. Gestational Diabetes Mellitus develops in 1 in 25 pregnancies worldwide. According to American Diabetic Association Gestational Diabetes Mellitus is common condition affecting 7% of all pregnancies. Depending on the population sample and diagnostic criteria, prevalence range from 1-14 %.7. It is the most common metabolic disorder in pregnant women, associated with serious maternal and neonatal complications. This phenomenon is initially diagnosed during late pregnancy. It is predicted that the number of diabetic patients is projected to double by 2030, which will also affect pregnant women

A prospective study on the prevalence of carbohydrate intolerance of varying degree in pregnant woman in western India (Maharashtra). On 2005 -2007 the sample size were 1225 woman with average age of 25 to 40 years. The result shows that the prevalence of Gestational Diabetes Mellitus was 21.6% and concluded that Gestational Diabetes Mellitus affect one fifth of pregnant female from western India. From these studies, it clearly shows that Gestational Diabetes Mellitus drastically increasing year by year now it is a serious complication during gestational period which affect both mother and child. Gestational Diabetes Mellitus is an

intense field of research study. It shows that prevalence of Gestational Diabetes Mellitus increases by 45% but still knowledge regarding Gestational Diabetes Mellitus and self care management is very low.

Hence it was found necessary to analyze the experiences of gestational diabetes and gestational diabetes care in women with gestational diabetes to understand and meet ongoing prenatal and postpartum needs of women with gestational diabetes

1.1.Aim

The aim of this narrative review is to highlight the experiences of gestational diabetes and gestational diabetes care in women with gestational diabetes.

1.2.Objectives

1. To gain an understanding of the experiences of gestational diabetes and gestational diabetes care in women with gestational diabetes.
2. To discuss implications for best practices, health policies and future research concerning diabetes prevention in “at risk” women.

2. METHODOLOGY

2.1. Search Strategy methods

An electronic search of articles published in various journals till 2023 was conducted. Search was restricted to only English language. The database search done was Pub med, Medline, Google scholar and CINAHL.

2.2. Types of Studies:

Qualitative phenomenological research studies were included.

2.3. Type of Participants:

Women with Gestational Diabetes mellitus.

2.4. Settings:

Diabetic antenatal clinics, Obstetric clinics, wards, hospitals and rural community.

2.5. Outcomes

Improves understanding and meeting ongoing prenatal and postpartum needs of women with gestational diabetes.

2.6. Delivery of Interventions

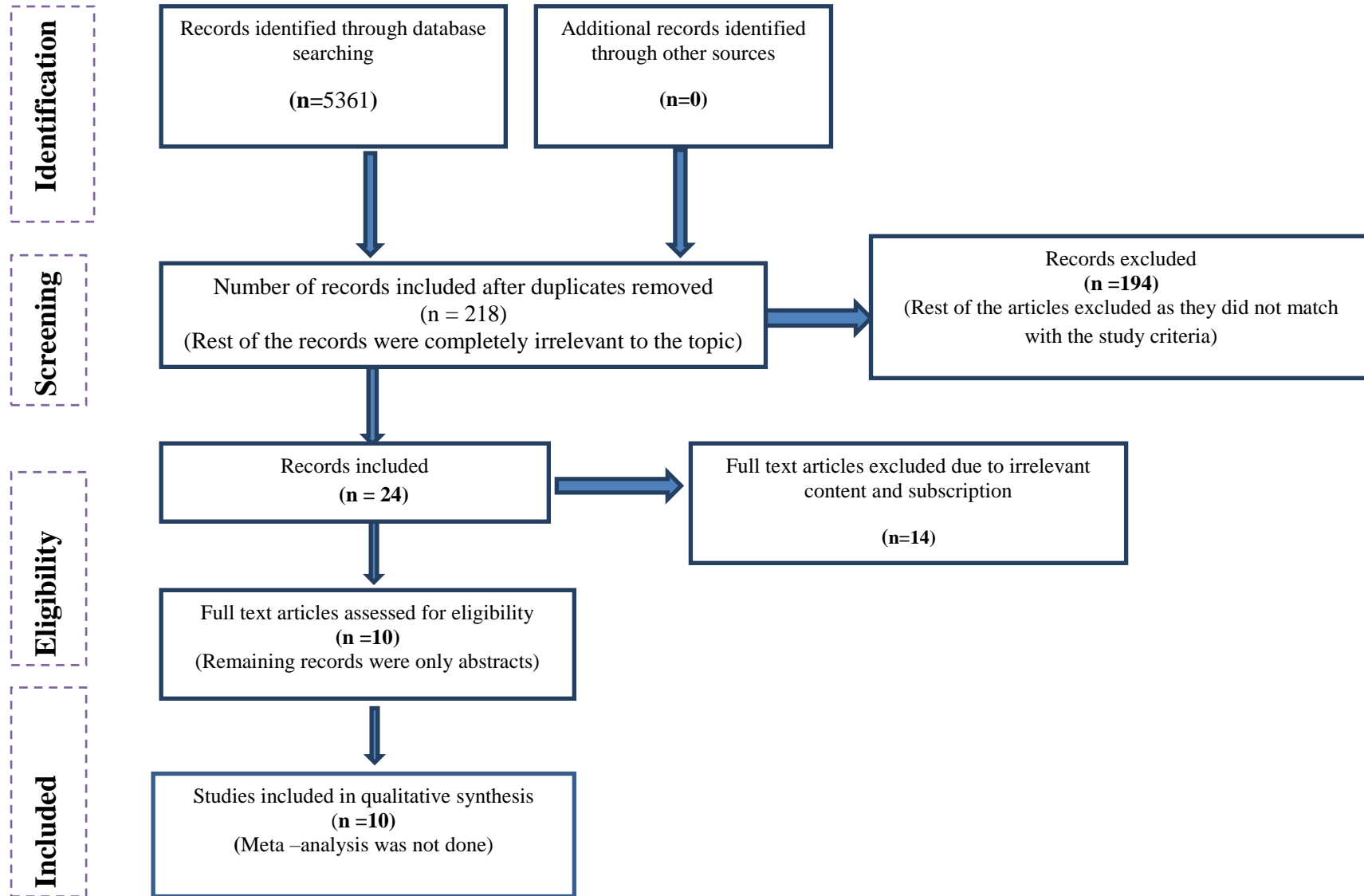
There will be no restriction on who delivered the interventions. These may include researchers.

The systematic search was conducted by framing the terms individually and in combination with all and synonyms, also according to the database. In addition to this, a manual Google scholar search was undertaken using the keywords and search synonyms from already found articles.

Initial search retrieved 5361 articles over which 218 articles were selected manually. Duplicates were removed and reviewed 24 articles for eligibility. 14 articles were excluded because of irrelevant content and subscription. Hence ten articles were screened which includes qualitative studies.

3. RESULT

3.1. PRISMA FLOW CHART



3.2. Table no.1: Data Extraction table

Sl.N and Author	Source and title	Country	Variables	Instruments	Sample and sampling technique	Design	Duration	Findings	Conclusion
1.Judith Parsons , Katherine Sparrow , Khalida Ismail , Katharine Hunt , Helen Rogers , Angus Forbes . 2015	Experiences of gestational diabetes and gestational diabetes care: a focus group and interview study.	Southeast London, UK,	Experiences of gestational diabetes and gestational diabetes care	Focused group discussion, Semi structured interview	35 women in six focused group interview, 15 women in semi structured interview. Purposive sampling technique.	Qualitative	45 minutes	This study identified seven themes: the disrupted pregnancy, projected anxiety, reproductive asceticism, women as baby machines, perceived stigma, lack of shared understanding and postpartum abandonment. These themes highlight the often distressing experience of GDM.	This study reveals the experiences of a demographically diverse group of patients with GDM. Healthcare delivery may need to be reoriented to improve the pregnancy experience and help ensure women are engaged and attentive to their own health, particularly after birth, without compromising clinical pregnancy outcomes.

2.Ida Dayyani, Helle Terkildsen Maindal, Gillian Rowlands, Stina Lou 2019	A qualitative study about the experiences of ethnic minority pregnant women with gestational diabetes	Denmark	Experiences of ethnic minority pregnant women with gestational diabetes	Semistructured, qualitative interviews	11 Women with purposive sampling technique	Qualitative	30 minutes	Three themes were identified: Reaction to the diagnosis, Everyday life and Information needs. All women felt sad and worried by the diagnosis. Some struggled to implement the recommended behaviour changes, and many lacked supports from their spouse.	Women were generally satisfied with the hospital-based information. Women with low health literacy/poor language skills seem to be most challenged by the diagnosis. Future research should examine ways to organize patient-centered health care while simultaneously supporting women's opportunity to increase health literacy. For example social network and the Internet.
3.Rachel Jarvie 2016	Lived experiences of women with co-existing BMI \geq 30 and Gestational Diabetes Mellitus	Two NHS hospital trusts in the South West of England.	Experiences of women with co-existing BMI \geq 30 and Gestational Diabetes	Series of sequential in-depth narrative interviews during pregnancy and post-birth and field	27 women with purposive sampling technique	A qualitative, sociological design.	45 minutes	Women were experiencing a number of social and economic stressors that compromised their ability to manage pregnancies complicated by maternal obesity and GDM, and make	Women with maternal obesity and GDM perceived healthcare professionals' recommendations with respect to lifestyle change as unrealistic given their constrained social/material circumstances. Frequent references to weight/lifestyle change by different HCPs were seen as stigmatizing and may be

				notes.				lifestyle changes. Women perceived themselves to be stigmatized by healthcare professionals and the general public due to their obese and gestational diabetic status.	counterproductive.
4.Mary Carolan 2013	Women's experiences of gestational diabetes self-management: a qualitative study	Diabetes Clinic in the Western Region of Melbourne .	Experiences of gestational diabetes self-management	Semi-structured interviews and one focus group.	15 women with purposive sampling technique	Qualitative phenomenological design	45 minutes	Four discrete themes emerged including: (1) the shock of diagnosis; (2) coming to terms with GDM; (3) Working it out/learning new strategies; (4) looking to the future. (5) Having a supportive	This study has shown that women undergo a process of adjustment following GDM diagnosis as they learn to self-manage their condition. The process is largely facilitated by the women's interest in maximizing fetal health which may make them receptive to interventions to improve GDM control and to prevent type 2 diabetes in the future.

								environment. Throughout, participants reported that thinking about the baby was a powerful motivator for adherence to gestational diabetes management regimens.	
5. Mary Carolan- Olah , Maria Duarte- Gardea , Juli a Lechuga , Si lvia Salinas- Lopez 2016	The experience of gestational diabetes mellitus (GDM) among Hispanic women in a U.S. border region	U.S.	Experience of gestational diabetes mellitus	In-depth interviews	18 women with purposive sampling technique	Qualitativ e phenomen ological design	30 mins	Five themes located along a path of gradual adjustment to GDM: (1) distress and fear; (2) realizing the changes required; (3) Learning to manage GDM; (4) Finding motivation; and (5)Compliance despite limited understanding.	Participants were highly motivated to act in the infant's best interest and the majority of women in the study made the necessary dietary and exercise changes to successfully manage their GDM.

6. Li Ge, Kerstin Wikby, Mikael Rask 2017	Lived experience of women with gestational diabetes mellitus living in China	China	Lived experience of women with gestational diabetes mellitus.	Qualitative interpretive interview.	62 women Snowball sampling technique.	Qualitative	45 minutes	The lived experience of the women with GDM living in China was formulated into a main theme: 'longing for caring care'. The main theme was derived from four themes: being stricken by GDM, wishing to receive caring GDM care, being left alone to struggle with GDM and trying to adjust and adapt to life with GDM.	The lack of caring care could be one of the possible reasons why the professional-patient relations were deteriorating in China. Using the health metaphor of balance and 'patient participation' and 'patient-centered' approaches may benefit women with GDM and thus improve the quality of care in China.
7. Jennifer Reid, Anneka	The experience of	New Zealand	Experience of gestational diabetes	In-depth interview.	10 women Purposive sampling	Qualitative	30 minutes	The cumulative effects of deprivation and	Participants revealed missed opportunities for appropriate diagnostic testing, treatment and

Anderson , Donna Cormack, P apaarangi Reid , Matir e Harwood 2018	gestational diabetes for indigenous Māori women living in rural New Zealand				technique.			living with GDM compounded the complexities of participant' lives including perceptions of powerlessness and mental health deterioration.	health promotion programmes for GDM. These data highlight opportunities for extended case management to include family engagement, input from social services, and evidence-based medicine and/or long-term management and prevention of T2DM.
8. Marcio Flavio et al. 2013	Gestational diabetes from the perspective of hospitalized pregnant women	Brazil	Lived experiences of women with gestational diabetes mellitus.	Open interviews and drawings	12 women Purposive sampling technique.	Qualitativ e	30 minut es	The results revealed two themes: (1) Living experiences that bring happiness and well-being, and (2) Living experiences that cause suffering.	Study showed the experience of women with gestational diabetes mellitus, thus enabling to plan and to implement intervention programs based on a participatory model of health in order to prioritize the subjective aspects involved in high-risk pregnancy
9. Kylene Abraham, N ancy Wilk. 2014.	Living with gestational diabetes in a rural	New york	Lived experiences of women with gestational	Two semi structured short interviews	10	Qualitativ e	45 minut es	Five themes emerged: Authentic emotion, Judgment, It's only a matter of time; I can't do this alone, and	Self-management of GDM is more likely to be successful if women understand GDM and believe that they can manage it. Nurses should use every opportunity to provide

	community.		diabetes mellitus					Missed opportunities. Strong emotions were experienced at the time of diagnosis.	women with GDM information and available resources.
10. Lene Toxvig a, Jane Hyldgård Nielsen a,b , Ingrid Jepsen 2022	Women's experiences with managing advice on gestational diabetes - a qualitative interview study	Denmark	Women's experience on gestational diabetes mellitus	Semi-structured interviews	Nine Purposive sampling technique	A phenomenological approach	35-60 minutes.	Three themes were created: 1) Experience of control, 2) personal strategies, and 3) unintended consequences. Women experienced that the monitoring at the outpatient clinic was associated with surveillance and safety and adopted different strategies to cope with gestational diabetes. Some women experienced feeling different and labeled due to the monitoring and their eating habits. Some	Concerning the management of gestational diabetes, some women felt that the information was not sufficiently adapted to their individual needs, thus health professionals' approach to gestational diabetes should be based on the women's perspective.

								women expressed concern for the baby and the risk of getting diabetes after birth.	
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3.3. Summary of findings:

The available literature refined to get 10 qualitative studies. The reviewed studies shows the experiences of women with Gestational Diabetes Mellitus which includes distress and fear; realizing the changes required; learning to manage GDM; finding motivation, compliance despite limited understanding, perceptions of powerlessness and mental health deterioration, Some women expressed concern for the baby and the risk of getting diabetes after birth. Some women expressed feelings of guilt; one of them reasoned that being overweight was the main reason why she had developed GDM.

4. Discussion

The review shows the women's experiences after being diagnosed with GDM during the pregnancy, so these findings will give comprehensive and depth understanding about women needs as well as the difficulties during their period of pregnancy. This will guide the health care providers to understand the women and provide individualized care and education for these women. Improved care will promote maternal and child health, and therefore, prevent future complications.

4.1. Limitations

- Database search was limited
- Search strategy was refined to experiences of gestational diabetes and gestational diabetes care in women with gestational diabetes
- Meta- analysis will give more accuracy
- Confined to area of Nursing

CONCLUSION

The review data shows family engagement, social services input, evidence based long term management will help deal with gestational diabetes. If gestational diabetes is not treated properly on time may lead to serious complications for both the mother and the baby .The important aspect of treating Gestational Diabetes involves educating the women regarding blood glucose monitoring, exercise, diet etc. Proper awareness and timely management can reduce the GDM complications and help dealing with gestational diabetes mellitus.

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