



Dr Gwendolyn Mensah (Ghana)

Managing women with gestational diabetes: clinical realities in Ghana



MANAGING WOMEN WITH GESTATIONAL DIABETES: CLINICAL REALITIES IN GHANA

PRESENTATION BY DR. GWENDOLYN MENSAH
(PHD, MPhil, FGCNM, BA, RM, SRN)



UNIVERSITY OF GHANA

SCOPE OF PRESENTATION

- Introduction and Background of the study
- Purpose of the study
- Objectives of the study
- Research methodology
- Findings
- Implications
- Recommendations
- Limitations
- Conclusions

INTRODUCTION AND BACKGROUND OF THE STUDY

- GDM is defined as “any degree of glucose intolerance with onset or first recognition during pregnancy” (American Diabetes Association [ADA], 2010)
- The prevalence rates of GDM as reported by the ADA (2011) are:
 - GDM is detected in 2% to 10% of pregnancies in the United States
 - 5% to 10% of these women are found to have type 2 diabetes mellitus directly after delivery
 - There is a 35% to 60% chance of progressing to type 2 diabetes mellitus in the next 10 to 20 years
- GDM in Sub-Saharan Africa – 14% (Mwanri, Kinabo, Ramaiya & Feskens, 2015)

INTRODUCTION AND BACKGROUND OF THE STUDY CONT'D

The end of the pregnancy may be the beginning of other stressors

- The possibility of future health risks, such as type 2 diabetes mellitus (Callaghan, 2010; Damm et al., 2016)
- The neonate might experience respiratory distress syndrome because the lungs are immature
- Excessive foetal growth exposes the neonate to an increased lifetime risk of developing diabetes mellitus and obesity (Metzger et al., 2007; Barbour, 2019)

PURPOSE OF THE STUDY

- The study aimed at exploring and describing the perceptions of nurses and midwives and of women with a history of GDM concerning the nursing management of GDM, in order to render them best nursing care in the management of GDM

OBJECTIVES OF THE STUDY

- To explore and describe the perceptions of professional nurses and midwives regarding the nursing management of GDM
- To explore and describe the perceptions of women with a history of GDM regarding the nursing management they received after being diagnosed with GDM

METHODS

- **The research design used:** Qualitative, exploratory, descriptive and contextualised approach
- **Research setting:** Military Health Institutions in Ghana
- **Ethical considerations:**
 - Ethical approval from the Research Ethics Committee (Human) [REC-H], of the Nelson Mandela University (NMU)
 - Institutional review Board of the 37 Military Hospital, Accra, Ghana

RESEARCH DESIGN AND METHODS

CONT'D

- **Target population:**
 - Professional nurses and midwives who work at the FOPD, the maternity wards and MRSs of Military Health Institutions in Ghana
 - Women with a history of GDM who attended antenatal clinics and who delivered their babies in the same institutions

RESEARCH DESIGN AND METHODS

CONT'D

- **Sampling technique:** Purposive sampling method
- **Sample size:** Fifteen (15) participants
 - Midwives - 8
 - Women with the history of GDM - 7
- **Data collection tool:** Semi-structured interview guide
- **Data collection method:** In-depth interviews
- **Data analysis:** Content analysis
- **Rigour:** Member checking, field notes, detailed descriptions

PROFILE OF PARTICIPANTS

- **Age Range of Participants**
 - Midwives = 32 years - 50 years
 - Women with a history of GDM = 28 years – 45 years
- **Years as a nurse/midwife** = 2 years – 12 years
- **Number of children of the women** = 1 - 4
- **Family history of diabetes**
 - Yes = 2
 - No = 5
- **Number of times having GDM**
 - Twice (2 participants)
 - Once (5 participants)

FINDINGS

MAJOR THEME

SUB-THEMES

1. Aspects that are critical to the management and compliance of women with GDM

I think education is very, very important because if there is somebody who doesn't know anything about it and the person is not well educated, there are a lot of things she wouldn't do... So I think the education is very, very important..." (W1).

I first have to check my sugar level. ... but during the afternoon, I only have to check it but I don't take injections. At first, I didn't know anything about it. So the nurses around helped me to know how to go about it. So afterwards, I started doing it on my own..." (W5)

"financial aspect of it is ...something else because if you're not having a good job, you're not having money, you can't manage it; with the strips and all that, even the insulin is very expensive. Let me put it this way, it's an expensive illness yes, it's very expensive." (W5)

- 1.1 Education of all pregnant women on GDM in the pre-natal period.
- 1.2 Emotional/psychological experiences of women provide insights into how to better manage their reactions.
- 1.3 Involving the patients in their management.
- 1.4 Consistent engagement with relatives and significant others.
- 1.5 Cultural issues need to be considered.
- 1.6 Socio-economic challenges impact on the management of GDM.
- 1.7 Lifestyle changes are critical to the management of GDM.

FINDINGS CONT'D

MAJOR THEME	SUB-THEMES
<p>2. The importance of optimising quality of care by professional nurses and midwives in the management of women with GDM was emphasised.</p> <p><i>From their routine investigations, umm, ...they do the fasting blood sugar and then they continue with the OGTT, to screen them further. They screen them further to see if um they are ... really suffering from the GDM. Then they will take it from there.” (PNM8)</i></p> <p><i>“the dietician, the nurses, the doctors, they were always around me trying to know what my problem is, what I am thinking and all that and I think it was the best...yes, it was the best The psychologist was also brought in” (W5)</i></p>	<ol style="list-style-type: none">1. The need for appropriate care based.2. Education for students and in-service education for professional nurses and midwives.3. Early screening and detection of GDM is critical.4. An inter-professional team approach.5. Guidelines for the management of GDM are needed.

FINDINGS CONT'D

MAJOR THEMES	SUB-THEMES
<p>3. Inadequate healthcare resources compromise the management of women with GDM</p>	<p>3.1 Medical consumable shortages</p> <p>3.2 Human resources are limited</p> <p>3.3 Infrastructural layouts are inadequate</p>

“Well, the challenge we have most is the non-availability of the strips, on the ward. We have some that we use in cases of emergencies but for the management, the patient has to buy and for some of them it’s so expensive. When they buy and it’s finished, it takes some time for them to buy it ... So that’s the challenge that we face most times.” (PNM8)

It will be best if the nurses are able to check whatever they [women with GDM] eat whilst on admission. But one thing is the nurse to patient ratio, the gap is too much. So whilst you are there doing something else, the patient is eating whatever she feels like eating. So before you get there, she’s eaten and there isn't much you can do about it.” (PNM2)

DISCUSSION

- Lack of information on GDM before diagnosis causes stress and anxiety in these women; this is consistent with studies conducted by Hirst et al. (2012); Bandyopadhyay et al. (2011).
- The involvement of women with GDM in their own management contributes to a successful pregnancy and post-delivery outcome; corroborates with studies by Persson, Winkvist and Mogren (2010) , Carolan, Steele and Margetts (2010).
- Some of the professional nurses and midwives believed that they required in-service training to update their knowledge on current trends of management of women with GDM. This was evident in a research by Edwards et al. (2014); Carolan *et al.* (2010).

IMPLICATIONS TO PRACTICE

- If nurses and midwives, clients and their significant others are better educated on GDM, the nurses can offer better care of the GDM client
- The clients and their significant others will be more compliant to management directives that they are given

CONCLUSION

- It became evident in this research study that, for successful management and compliance of women with GDM to treatment:
 - The women must be encouraged to take an active part in the management of their condition
 - Self-monitoring of blood glucose level, lifestyle modification, administration of Insulin or oral hypoglycaemic medication and the maintenance of an ideal body weight must be ensured
 - The healthcare resources such as medical consumables, human resources and infrastructural layout of the healthcare facility must be available and adequate

LIMITATIONS OF THE STUDY

- The small sample size of 15 participants could not be considered a good representation of all gestational diabetes patients in Ghana and nurses and midwives
- The study could have been conducted in other non-military health institutions in Ghana since some of them did not have guidelines for the nursing management of GDM

RECOMMENDATIONS

Recommendations for this research study are made for practice, education and nursing research

- In-service educational programmes can be organised for professional nurses and midwives
- Midwifery/nursing students should be educated on the current management of GDM based on available evidence
- Professional nurses and midwives must be encouraged to conduct research:
 - to maintain high standards of care for patients and also increase the knowledge base in nursing and midwifery
 - on dietary intake and exercise in the African context

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