**Introduction**

Obstetrics is perhaps the oldest specialty in medical science. Diabetes mellitus has been known to physicians of ancient times as well. It is only in the past half century, however, that the two specialties of ancient origins, have come together to tackle the modern epidemic of pregnancy complicated by diabetes. Though the presence of diabetes in pregnancy was first described in German literature in 1826, and in English texts in 1846, the term “gestational diabetes” was used for the first time just half a century ago.[1]

**Psychosocial Aspects of Diabetes in Women**

Particularly, psychosocial aspects of diabetes management have been gaining prominence.[2,3] The Indian national guideline on psychosocial management of diabetes is one of the few national guidelines focusing on psychosocial aspects alone.[4] This broad-based guideline was formulated to provide direction to diabetes care professionals practicing in India, with an abridged form published as a book chapter.[5]

**Psychosocial Aspects of Diabetes in Pregnancy**

The psychosocial issues faced by women who are diagnosed to have diabetes in pregnancy, i.e. gestational diabetes mellitus (GDM) need to be addressed. Pregnancy is a
The unique psychosocial problems and challenges faced by women experiencing pregnancy have been documented by obstetricians. However, no mention is made of psychosocial complaints specific to pregnant women diagnosed to have diabetes. If it is clearly documented that diabetes is associated with distress, and pregnancy is in itself a stressful condition, it stands to reason that a diabetic pregnancy will be linked with significant stress.

This medical concern becomes even more important, as we understand that maternal exposure to stress, in the form of grief or bereavement, leads not only to maternal ill health, but impacts the health of the unborn fetus, increasing its chances of developing both type 1 and type 2 diabetes. Though Western work is available which highlights the existence of significant psychosocial stress, and need for better psychological care for women with pregnancy complicated by diabetes, there is a need to sensitize Indian diabetes care providers to address this aspect of medical praxis.

To tackle this issue, it was decided to prepare a brief document on Psychosocial Management of Diabetes in Pregnancy, as an Addendum to the National Psychosocial Management Guidelines, published in 2013. This Addendum follows the publication of a similar, complementary guideline, specific to the North East region of India.

**GUIDELINES FOR THE PSYCHOSOCIAL MANAGEMENT OF DIABETES IN PREGNANCY**

**General: Provision of health care**

**Recommendation - 1**
Team work among various members of the health care team caring for antenatal and postnatal women with diabetes must be strengthened. (Grade A; EL 4).

**Recommendation - 2**
If feasible, trained and qualified mental health professionals should be included as a part of the diabetes pregnancy care team. (Grade A; EL 2).

**Recommendation - 3**
All health care providers (HCPs) who deal with antenatal women should be aware of the unique psychosocial stresses that accompany pregnancy complicated by diabetes (Grade A; EL 4).

**Psychological assessment**

**Recommendation - 4**
All HCPs who deal with pregnancy complicated by diabetes should be trained in taking at least a brief psychosocial history (Grade A; EL 4).

**Recommendation - 5**
Paramedical staff such as diabetes nurses, diabetes educators and pharmacists can be utilized, after adequate training, to screen for psychosocial health (Grade A; EL 1).
Recommendation - 6
Every antenatal and postnatal woman with diabetes should be questioned about fears or anxiety related to
- Her unborn child’s health
- Her own health
- Her family/social health (Grade A; EL 1).

Psychological care
Recommendation - 7
Every antenatal and postnatal woman with diabetes should be provided psychosocial support and reassurance as a part of routine antenatal care (Grade A; EL 1).

Recommendation - 8
Adequate counseling must precede, and follow, all screening and diagnostic tests, including glucose tolerance tests, and ultrasonographic monitoring (Grade A; EL 4).

Recommendation - 9
Appropriate counseling must accompany insulin prescription. Appropriate insulin technique and site must be explained to all antenatal women with diabetes, in a trimester-specific manner (Grade A; EL 4).

Psychiatric assessment
Recommendation - 10
Each antenatal and postnatal woman with diabetes should be questioned about depression, using either generic instruments such as WHO-5 and Whooley’s two questions, or condition specific instruments such as the Edinburgh postnatal depression questionnaire and Pregnancy Experiences Scale (PES) (Grade A; EL 1).

Psychiatric care
Recommendation - 11
If psychological or psychiatric morbidity is significant, referral to qualified mental health care professionals is indicated (Grade A; EL 2).

Recommendation - 12
Psychoactive drugs antenatal and postnatal women with diabetes should be chosen with care [Table 1], keeping in mind their (Grade A; EL 2):
- Impact on glycemic control
- Teratogenic potential
- Behavioural teratogenic potential
- Transplacental exposure
- Excretion in breast milk.

Social assessment
Recommendation - 13
The attitudes of the family and community toward the diagnosis of diabetes in the antenatal patient should be enquired into (Grade A; EL 4).

| Table 1: Grouping of various psychotropic medications based on fetal safety and impact on glycaemia control |
|---------------------------------------------------------------|
| **Adverse effect on developing fetus/new born** | **Impact on glycaemia control** | **Impact on glycaemia control** |
| Anti-depressants | Little impact | Intermediate impact | High impact |
| No effect/Low effect | Fluoxetine* | Sertraline* | Bupropion* |
| Intermediate (and free from teratogenicity) | Escitalopram* | Fluvoxamine* | |
| High | | | |
| Anti-psychotics | No effect/Low effect | High potency typical anti-psychotics (e.g., Haloperidol) | Clozapine ~ Olanzapine^ |
| Intermediate (and free from teratogenicity) | Low potency typical anti-psychotics (e.g., Chlorpromazine) | Quetiapine^ |
| High | | | |
| Mood stabilisers | No effect/Low effect | Lamotrigine^ | Lithium |
| Intermediate (and free from teratogenicity) | Topiramate^ | Valproate | |
| High | | | |

Based on available literature (literature inadequate for many medicines; lack of controlled trials, favorable impact on blood glucose levels (reduction); associated with self limiting neonatal syndrome, limited literature on fetal safety, FDA category B for use during pregnancy, Associated with emergence of diabetes on long term use (>24 months), associated with neonatal syndrome; additional cardiovascular and anti-cholinergic side effectsome; additional cardiovascular mia control in spite of improvement in depression, some reports of cardiac malformations; not observed across all studies.
Social care

Recommendation - 14
Family members, including husband, mother-in-law, and other significant relatives, should be involved as active partners in providing psychosocial support to the woman with diabetes.[24] (Grade A; EL 2).

Recommendation - 16
Family members should be counseled about the potential deleterious effect of maternal stress on the health of unborn offspring (Grade A; EL 4).

Recommendation - 17
HCPs caring for women with diabetes should play a proactive role in modulating social opinions and attitudes related to gender (Grade A; EL 4).

CONCLUSION

As our understanding of GDM, and its trans-generational impact grows interest in its management is bound to increase. Optimal management of any condition, especially GDM, can be attained only by paying proper attention to, and managing, all aspects of the disease, including psychosocial issues. It is hoped that this document, which, to the best of our knowledge, is the first such attempt in the world, will help us achieve this simple aim: Achieving optimal health and outcomes for all women with GDM, and their unborn offspring.

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