

# PUBLIC AND SOCIAL HEALTH

## Psychosocial aspects of pregnant women living with diabetes

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### Abstract

A pregnant woman is exposed to a number of stress factors that can affect the pregnancy, maternal health and well-being of the foetus. Among these are the biological, social/environmental and psychological factors. The biological factors include medical condition of the pregnant woman, most notable is the gestational diabetes. The increased glucose levels can cause detrimental effect on the foetus and also cause maternal distress. This factor becomes more complicated if the woman is exposed to environmental stressors. The result is evident in the form of complications during pregnancy and psychological effects like depression and anxiety. Appropriate steps are important to address these issues in order to maintain the mother and prospective child's well-being.

**Keywords:** Stress, Diabetes and mental health, Pregnancy and mental health, Gestational diabetes, Postpartum depression.

### Introduction

Pregnancy is a crucial stage in the life of a woman as it involves a number of physiological changes in the body. There is a hormonal role that dominates the entire pregnancy cycle. Apart from this the psychological factors play a major role during this period. The stress about well-being of the developing child and anticipatory anxiety of the labour, delivery and possible complications of pregnancy pose a huge emotional burden on women. This anxiety is further compounded if there is a previous history of complications or risk factors identified or if the said pregnancy is the first one. At the same time, the social responsibilities and obligations are the crucial factors that can make a woman very vulnerable to psychological fragility. In some of the developing countries, women carry a huge social burden while looking after the

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responsibilities of house-hold more so in rural areas. It is an established fact that maternal stress in pregnancy may have an effect on the offspring that may include preterm birth, miscarriage, delayed mental development of the child and emotional problems etc.<sup>1</sup>

If the pregnancy is already at risk with an associated medical problem, this could pose additional stress on prospective mother and may further augment the psychosocial burden. Gestational diabetes is one common medical issues that needs special consideration.

### Diabetes in Pregnancy

Gestational Diabetes which is associated with elevated glucose levels may pose significant risk throughout the pregnancy.<sup>2</sup> If the diabetes was present before conception, then there is a further caution in terms of pre-existing complications like vascular pathology, hypertension and kidney disease. A careful management plan in order to avoid risk to the foetus would become a priority. Any emotional upheaval or psychological burden in terms of stress on top of gestational diabetes can lead to mental health problems like depression and anxiety. This in turn would take its toll on pregnancy process, outcome and postpartum complications.

### Depression and Anxiety in Pregnancy

A study by De Groot et al,<sup>3</sup> demonstrated a significant and consistent association of diabetes complications and depressive symptoms. Another study<sup>4</sup> found that gestational diabetes had a profound effect on the respondents resulting in fear, depression and anxiety. The respondents viewed diabetes with a number of adverse complications. This was compounded with compliance of diabetic regimen and health care providers approach. The general symptoms expressed are low mood, lack of energy, lack of interest, crying episodes, fear about the outcome of pregnancy, panic attacks and irrational fears. Research on animal studies have shown that high levels of stress in a mother during pregnancy could affect brain function and

behaviour in the offspring and lowering of IQ.<sup>5</sup>

### Psychosocial Stress during Pregnancy

Stresses are of various kinds that can make a woman more vulnerable. Asian women are required to perform their social role that include looking after the needs of family which involves husband, other children and probably the members of extended family. Abusive relationship and excessive social demands can lead to risk for the pregnancy. Woods et al<sup>6</sup> report that high levels of stress were associated with maternal factors known to contribute to poor pregnancy outcomes. Brunton P<sup>7</sup> discussed prenatal social stress and its impact on maternal behaviour indicating potential for negative phenotypes to be transmitted to future generations.

### Vulnerability for Women in Developing Countries — Focus on Pakistan

Within the context of social expectations from women, there are multiple factors that influence woman's psyche. In a country like Pakistan, the large chunk of population live in rural areas. Despite diminishing divide between urban and rural life because of the media influence, still the cultural mind set of the people and inadequate health care facilities play a pivotal role. Poverty is a detrimental reality that affects proper care and nutrition of the pregnant women. Incomplete antenatal monitoring leads to medical oversight, living conditions, illiteracy with faulty cultural beliefs including pressure on bearing male gender baby adds to stress that in turn disturbs the hypothalamic-pituitary-adrenal axis leading to disturbance in glucose levels and promoting gestational diabetes. Monitoring of glucose levels throughout pregnancy in order to prevent complications for both mother and baby is of vital importance. Many a times, adequate management is not put into practice which increase the morbidity and mortality among pregnant women.

### Crucial Steps

A number of steps are necessary to promote smooth sailing in terms of well-being during pregnancy are important:

- 1- Social support and resiliency in cultural mind-set.
- 2- Adequate and well-planned medical management.
- 3- Adequate ante-natal care.
- 4- Improvement in literacy level among women.
- 5- Supportive psychotherapy and counselling.

6- Need for improved mental health services in the vulnerable population of rural women.<sup>8</sup>

7- Provision of gender specific diabetes education with a holistic approach is essential. Preventive educational plans must be cultural-specific.<sup>9</sup>

8- Guidelines to follow include strengthening of health care teams, recruiting trained mental health professionals, focus on psychosocial history, use of specific questionnaires to detect depression and anxiety, choice of appropriate medications and family counselling and education are important.<sup>10</sup>

### Conclusion

It is concluded that psychosocial stress among women living with gestational diabetes can lead to physical and mental health morbidity which could adversely affect both mother and child. A holistic approach involving bio-psycho-social-cultural and spiritual intervention would definitely be helpful in preventing complications and ensuring a smooth and healthy pregnancy outcome.

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