

The Psychosocial Impact of Diabetes and its Management in Women: A Review of Current Status

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Received Date: 09 September 2021 | Accepted Date: 22 September 2021 | Published Date: 28 September 2021

Citation: Shweta Sharma (2021). The Psychosocial Impact of Diabetes and its Management in Women: A Review of Current Status. *Endocrinology and Disorders*. 5(7): DOI:10.31579/2640-1045/091

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Abstract

Diabetes mellitus (DM) is a chronic debilitating disease affecting 463 million people which accounts for 9.3% of the population globally as of 2019. Although diabetes affects men and women equally (prevalence in men: 9.6%, women: 9%), women are more severely impacted by its complications such as heart disease, retinopathy, and neuropathy. This gender difference in consequences of DM may be due to biological reasons, it is also a reality that globally women tend to receive less intensive care and treatment for diabetes compared to men. In low-income countries, women suffer unduly from economic, political, and social discrimination, and subsequently from poor health, lack of education, and employment.

Keywords: psychosocial impact of diabetes; womens; heart disease

Introduction

Diabetes mellitus (DM) is a chronic debilitating disease affecting 463 million people which accounts for 9.3% of the population globally as of 2019 [1]. Although diabetes affects men and women equally (prevalence in men: 9.6%, women: 9%), women are more severely impacted by its complications such as heart disease, retinopathy, and neuropathy. This gender difference in consequences of DM may be due to biological reasons, it is also a reality that globally women tend to receive less intensive care and treatment for diabetes compared to men. In low-income countries, women suffer unduly from economic, political, and social discrimination, and subsequently from poor health, lack of education, and employment [2].

The impact of DM extends beyond the physical symptoms of the disease. Complex environmental, behavioural, social, and emotional factors, recognized as psychosocial factors, greatly impact diabetic management, desired medical outcomes and overall psychological well-being [3]. This article summarizes the various aspect of psychosocial management of women with Diabetes.

Psychological aspect of living with diabetes

Fear and anxiety related to diabetes and its associated complications pose a great psychological burden on patients specially women [4]. Lifestyle

modification like weight reduction and change in dietary habits as part of overall diabetes management is also challenging for most of the patients contributing to their stress more often [5].

Psychiatric co-morbidities like depression, adjustment disorders, anxiety, eating disorders (Bulimia Nervosa) are more frequent in diabetic patients owing to various social, cultural and environmental factors [6]. These conditions create a sense of hopelessness, demotivation and lack of energy which leads to poor compliance to diabetes care, poor glycemic control and complications that further worsens the psychological stress among these patients [7]. Unemployment and discrimination at the workplace are found to be one of the many contributing factors [8].

The largest international psychosocial study (DAWN Study) included 5000 people with diabetes and 3000 diabetes healthcare professionals across 13 countries. Forty-one percent of the patients had poor psychological psychosocial well-being that negatively affected the patient's diabetes self-care and only 10 %, of them, received psychological care. The study concluded that support and care from family members, colleagues at their workplace, or groups of friends, is a critical factor for overall improvement in patient's outcome [9].

The risk factors for depression among diabetic patients include female sex, long duration of diabetes, presence of complications, poor glycemic control, family history of depression, and lower education levels [10, 11].

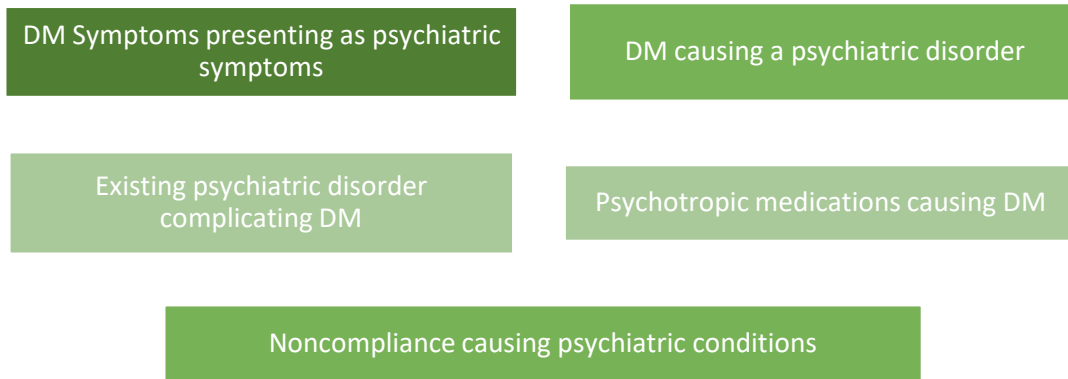


Figure 1: *Psychiatric issues and diabetes Mellitus [4].*

Pathophysiology: Psychosocial Factors and Diabetes Risk

Emerging evidence has shown that depression and type 2 diabetes share biological origins, particularly over-activation of innate immunity resulting in a cytokine-mediated inflammatory response, and potentially through dysregulation of the hypothalamic-pituitary-adrenal axis. Over the period, these pathways can lead to insulin resistance, depression, increased risk of type 2 diabetes, and cardiovascular disease [12].

The mainstay of the management of Psychiatric comorbidities is to have a multidisciplinary approach for early diagnosis, identification and comprehensive treatment followed by regular follow-ups. Psychotherapy, counselling sessions and assessment for the need for psychotropic medications form the next steps. Simple interventions like engaging patients in supportive psychotherapy where they can talk about their emotional distress, Behavior therapies, Cognitive behaviour therapy etc can be very helpful [14].

Diabetes Distress

Diabetes distress is not a psychiatric disorder but it is rather an affective state resulting from constant worry about adherence with diet, exercise, blood glucose monitoring while feeling scared, anxious, overwhelmed, at times angry and burnout. This is likely to be more common in women compared to men. It may be responsible for unfavourable treatment outcomes and poor diabetes management [13]. The first step towards its management is awareness about its presence. Efforts should be taken to screen and recognize patients for early signs of distress using tools or scales and finally understand patient's psychological stress and offer solutions to overcome those challenges [4].

Sexual dysfunction in women with diabetes

Sexual function is related to psychosocial health, both in men and women. A higher prevalence of sexual disorders has been revealed in female patients (50-80%) with T2DM which demonstrated a positive correlation with depression [14]. It is manifest as hypoactive sexual desire disorder, menstrual dysfunction, hypogonadism, dyspareunia, and polycystic ovarian syndrome [15].

Psychosocial issues during Preconception in women with diabetes

Preconception care is crucial for all women with diabetes to improve pregnancy outcomes, regardless of their socioeconomic status. Mothers with pre-gestational diabetes are at risk of congenital malformation in new-born. The American Diabetes Association recommends that the HbA1C goal should be <7% in the patient before conception is attempted.

Journey during the preconception stage in women may be full of distress, anxiety, guilt and disconnectedness. Management should include active social support, family support, sharing experiences with other women with diabetes and importantly preconception counselling which should be incorporated in the routine diabetes clinic visit for all women of childbearing potential starting at puberty to allay anxiety [16].

Cultural issues and Stigmas

Women with diabetes might face stigmas. There may be a problem of marriage due to diabetes which is true in developing countries. Sometimes, a question might arise as to whether to reveal the fact about underlying diabetes to potential future groom. Transparent discussion should be encouraged to avoid future problems. To overcome this barrier, we need immense advocacy and campaign at a societal level. Women with diabetes should also have information and access to contraception [16].

Psychosocial aspects of diabetes in pregnancy

Pregnancy is a crucial stage in the life of a woman. Apart from the physiological changes in pregnancy, psychological factors like health concerns for the developing child, anticipatory anxiety of the labour and possible complications of pregnancy poses a huge emotional burden on women. This anxiety and apprehension towards child well-being are further intensified with the diagnosis of gestational diabetes mellitus (GDM). Additionally, increased glucose levels can cause a detrimental effect on the foetus like preterm birth, miscarriage, delayed mental development of the child and thus contribute significantly to maternal distress. Psychosocial deprivation is common in women with GDM and is associated with poor pregnancy outcomes like obesity, gestational weight gain, pre-eclampsia and LGA infants. A holistic approach involving psycho-social-cultural would help prevent complications and ensure smooth and healthy pregnancy outcome [17].

Several steps can be taken to reduce the psychological burden in diabetic women during pregnancy

- Medical support: Improved mental health services and recruiting trained mental health professionals, Adequate and well-planned medical management, adequate antenatal care, strengthening of health care teams, Supportive psychotherapy and counselling.
- Social & Emotional support: resiliency in cultural mindset, self-care motivation, Family care and support

- Educational: Improvement in literacy level among women. Informational support (setting goals for diet, exercise, stress, blood glucose, and weight; postpartum management).

Future direction in women diabetic care is focused on psychological factors apart from medical and physical well-being for positive impact on the health. Furthermore, steps to create awareness to be taken especially for early screening to prevent diabetes distress. This should be considered a priority while developing a treatment plan, not an afterthought.

Conclusion

Review Summary:

1. Diabetes have a debilitating impact on psychosocial well-being of both men and women living with Diabetes
2. Most common psychosocial issues in women are related to anxiety, stress, adjustment and depression apart from social stigma
3. Managing the Psychosocial component is equally important aspect of holistic Diabetes care and must include Psychotherapy, counselling sessions and need assessment of psychotropic medications
4. Diabetes distress is emotional distress resulting from living with diabetes and the burden of relentless daily self-management and should be best managed within the context of diabetes care including self awareness
5. Signs of Diabetes burnout may include disengagement from self-care tasks (e.g. skipping insulin doses/tablets, or not monitoring blood glucose), unhealthy or uncontrolled eating, risk-taking behaviours, non-attendance at clinic consultations
6. Sexual dysfunction, Preconception duress and social stigma are other inter-related aspects of psychosocial impact of Diabetes in women which should be addressed.
7. Gestational diabetes also poses emotional burden and management must include medical, psychosocial, social and educational support to promote positive transition to motherhood.

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DOI: [10.31579/2640-1045/091](https://doi.org/10.31579/2640-1045/091)

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