Pregnancy in women with Type 1 Diabetes: bio-psychological aspects

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Abstract
The article aims to present the bio-psychosocial aspects that are found in pregnant women with type 1 diabetes. In the context of diabetes, the event conception and throughout the pregnancy are to be identified as those phenomena which are closely interrelated and are biologically and psychologically. From this interdependence generates a total transformation and reorganization of 'psychic identity and body as well as significant interpersonal relationships (parental figures, partners) to which are connected to important emotional meanings.

Key-words: pregnant; diabetes; bio-psychosocial approach

The time of diagnosis and the subsequent therapeutic path are experienced by a person with diabetes as a real traumatic event, capable of generating feelings of deep suffering. Communicating the presence of a chronic condition determines, in fact, the occurrence of an imbalance within, a break with the past, the entry into a state of total uncertainty due to the loss of integrity of the state last year. Deconstruction, then, the old self-image and imminent need to reorder a new one. This process of reformulation can affect the success of generating a compliance initial therapy almost obsessive that turns into feelings of depression and devaluation of the self that lead to fluctuating adherence to treatment. The report of the patient's body becomes, therefore, a risk factor, or force for monitoring of diabetes. Therefore, it becomes evident the need to make interventions to constant monitoring and support of people with diabetes, a therapeutic approach in educational and counselling integrated with the doctor. In the context of diabetes, the event conception and throughout the pregnancy are to be identified as those phenomena which are closely interrelated and are biologically and psychologically. From this interdependence generates a total transformation and reorganization of 'psychic identity and body as well as significant interpersonal relationships (parental figures, partners) to which are connected meanings important emotional, reverb internal and archaic fantasies and experiences related to their developmental and mother-daughter relationship.

Some psychophysiological aspects of motherhood
The experience of motherhood should be considered along a continuum within the female path characterized by the transition from child being mother, establishing itself as an experience which sees the fusion of the levels of the real, imaginary and symbolic.
Within this framework the pregnancy is, therefore, understood as the factual realization of the generating capacity virtually gained puberty which requires the deployment of all the resources to deal with the question of the use of mental
sexuality and its incorporation to 'inside the different levels of existing development. It is an experience that involves a complexity of physical and mental levels, related, primarily, gender identity and its roots in a solid configuration of the bodily self as the basis of a sense of identity. It appears clear that this event marks a crucial point in the definition and redefinition of the identity of a woman, requiring phases of deconstruction and reconstruction: it must be contextualized against the backdrop of femininity, sexuality and therefore body, physical and mental health. Therefore correspond to changes in the person changes the physical world (external) and mental (internal): then pregnancy is an "embodied" and simultaneously "psychic" and "relational". In addition, the change of mind about not only the present but also the future: in pregnant women are thoughts, feelings and images related to his own person of the future mother, but also thoughts, feelings and images-looking baby. Organic changes and hormonal changes in the value of femininity: the ideal of beauty in an attempt to become a good mother who knows how to protect and secure life. Separation from mother, identification with the foetus and subsequent separation from the foetus, physical and mental make pregnancy an evolutionary phase but also a crisis mutative which requires a reorganization of previous experiences and the integration of a new self-image through new identifications.

Becoming a mother, in fact, involves first and foremost an emotional confrontation with his mother, which can lead to feelings of anxiety, loss and feelings of guilt but also identification with the foetus and later with the baby, they need to develop the ability to welcome the child through a progressive redistribution of narcissistic and object cathexes. The desire for "self-centred" to be loved undergoes a metamorphosis through a transfer of his investment from yourself to the son who allows a woman to make a distinction between the desire for motherhood and the desire for pregnancy. While in the former prevails investment in the child, especially in the second are the narcissistic need to prove to herself that her body functions as that of the mother. At the same time the desire for motherhood is associated with the desire of the child. There is an exaggeration of the desire to make real the promises of childhood to become a mother, and the desire to find something of the living original. Pregnancy can then be seen as a good time to bind to the past through the present emotions that re-enacting the experience of a lost childhood in which he was safe with a healthy body.

**Diabetes in pregnancy**

With diabetes adds to their feelings of each pregnancy a specific connotation: the sick body, an obstacle in the relationship with others. Diabetes involves a comparison between the past and the image of the self-image of the present self. Feelings of impotence, impairment and distress accompany women during the continuous monitoring of blood glucose levels that appear to be a constant confirmation of a new self in a sick body. As part of the psychological conditions experienced by diabetic woman there are some peculiar to the female gender and more related to motherhood. The desire to have a child and motherhood are issues

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that every woman faces in his own life and, along with the motivational aspects of biological and cultural aspects are involved psychological, relational and emotional increasingly important and complex. For example, the adolescent diabetic barely pubescent, this is much more an attitude of desire in respect of marriage, compared with peers while in adult women with diabetes that of motherhood becomes a target / fundamental problem. 

And 'this is constantly the need to try to have a partner (in the diabetic woman unconjugated) and a son (the married woman), even if the need is often removed or blocked by fear, fear. In particular, in the latter, a sense of diversity and inferiority becomes central: the child is then perceived as a test, a test of normality established to prove to herself and to others, to be like other women. 

In this case, as mentioned above for the more general psychological aspects, mature a conflict: on the one hand, a need-desire for motherhood, accentuated by the perception of the child as a test to be fully woman, on the other hand, fear-fear, both for the physical integrity of themselves and their unborn child in relation to pregnancy and childbirth, and for the question (often completely absent, and often removed) to transmit to his son, a legacy pathological. The desire of pregnancy arise that disrupt the negative of lived experience of sexuality and contribute to the appearance of dismorfofobic (1) issues and feelings of rejection of his body. In addition to ease of infections due to heart blood glucose, is a state of frigidity during sexual intercourse, even if desired, due to the conflict with the fear of childbirth, which is accompanied by feelings of apprehension, anxiety and inadequacy. 

If you already have diabetes is generally perceived as an attack on their body image, a narcissistic wound that is afraid of not being able to be admired and loved, and this is hidden in pregnancy these issues become more complex. The conflict between their real picture, affected by diabetes, and their ideal image are accentuated generating depression, even serious. A typical manifestation is given by the relationship with your own body weight, in particular from the fear of gaining weight, or because of insulin therapy, or due to the increased consumption of food generated by anxiety (mainly from the fear of hypoglycemia). Therefore, pregnancy and the consequences related to it in the context of a chronic disease such as diabetes can trigger specific reactions, therapeutic or otherwise, for or against self-care. Spoke on the perception of body image can, therefore, encourage the development of coping activities. 

The dynamics of the experience of pregnancy in diabetic women revolve around the following themes: 

a) feelings about the child in relation to diabetes; 

b) feelings about themselves in relation to diabetes; feeling of loss of control over personal health; 

c) feelings about themselves and their partner; 

The postpartum in the diabetic woman: feelings towards herself and towards disease.
Feelings about the child in relation to diabetes
The feelings about the child in relation to diabetes develop in two main parts: before and after childbirth. The main concerns regarding the harmful effects of prenatal maternal disease that may have on the child, increases the concern that medical monitoring of the disease while at the same time the level of anxiety about the health of the child, which is due to be completed in the next phase, that of the post-partum, associating the onset of guilt. There has been a pervasive sense of impotence, increased by methods of communication by social and health workers are often perceived as inadequate and contributing to exacerbate the fears of patients.

Feelings about themselves in relation to diabetes
When the focus shifts to the perception of the self, pregnant women with diabetes develop concerns about the monitoring of diabetes and the future course of disease.

Feeling of loss of control over personal health
Diabetes management raises issues related to the feeling of loss of control, which is on two fronts: internal, regarding their ability to monitor the level of sugar in the blood and outside, on the support of community health workers to the overall control of the disorder. E 'can help in alleviating this loss through a constant flow of information that is as personalized as possible.

The management of the diabetic condition, can not be reduced only pathophysiological aspect. This component must be integrated into the wider dimension of self-image and the one that is returned from the environment. The common denominator is the problem of "active acceptance" of diabetes, understood as the achievement of a dynamic situational new vital equilibrium, characterized by autonomy in the management of diabetic condition and conscious living with the condition itself. The problem of acceptance, as can be facilitated in its gradual resolution of the knowledge and control provided by the methods of health education, is linked to a deep personal crisis and involves a difficult and expensive process emotional processing within. Metabolic control is, therefore, an objective to be pursued in a more comprehensive intervention designed to facilitate the evolutionary processes and the balanced integration of the personality of the diabetic. In this sense, it appears indisputable that, alongside the therapy and attention to the situation of organic diabetic, are to be considered equally with her personality, as well as the interactions and influences emotional and environmental. Only in this way, long-term and a day beyond the limits implied by the chronic, the treatment is likely to have positive results globally and effectively. The active acceptance is, therefore, influenced by several variables: the perception of control, which in turn has a direct effect on the effectiveness of management awareness, and the perception of body image. The increase in anxiety about their body image leads to a reduction in glycemic control exacerbating the problem.

Feelings about themselves and the partner
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Many people with diabetes have visible consequences that may contribute to the development of a negative body image that compromises the physical intimacy. Intimacy requires self-confidence, security, openness and other characteristics that are totally absent or present in a weak form in people who have a negative body image. This negative image often influences the emotional response, especially in women with a steady partner, causing strong anxiety and depression that subjects with diabetes try to reduce through a constant avoidance of social and intimate relations.

Although the effect of diabetes on sexual functions is caused by alterations in endocrine, neuropathic and vascular system, neuro-genetic and psychological causes can have a cumulative effect.

The postpartum in the diabetic woman: feelings regarding herself and the disease
Dissatisfaction with oneself physical shape and the own body can generate a variety of disorders related to the area of feeding behaviours (DCA) that can compromise the treatment of the disorder itself. This becomes more relevant in people with diabetes, for which the factor diet is important as a cause of a good control of the disease. In return, this dissatisfaction may result from an altered perception of body image (3) which is diagnosed as “dismorofobia”, or “body dysmorphic disorder” (DSM-III-R), which represents "an imaginary defect in appearance "(DSM IV).

This might cause in the person with the disorder a clinically significant series of self injurious behaviours in the affective-relational, with serious impacts on the quality of life, and, in particular, on the care of self sick body.

Referring more specifically to gestational diabetes, since this appears to be a predictor of a possible diagnosis of type 2 diabetes, it becomes very important to help women in the postpartum period to adopt a proper lifestyle even after pregnancy and to elaborate all psychological consequences that have been originated from the diagnosis of GDM. The multidisciplinary postpartum psycho-educative activity represents a continuum and constant monitoring during the transition from previous experience of pregnant women with GDM in the current one of a mother. After the pregnancy the mother must continue the path of a healthy nutrition to avoid the possible "baby blues" syndrome or postpartum depression (4).

The postpartum psycho-educative protocol must be a therapeutic opportunity in which the patients work together and in group, driven by comparison and support, avoiding isolation and focusing on the needs of oneself as a person, learning how to use time for one selves’ health.

In this contest, results of researches showed that the most useful interventions are those which make use of written or verbal storytelling techniques. These seems to be able to bring out, in various clinical settings, emotional and cognitive aspects activated by the disease and to identify coping strategies to deal with or prevent illness behaviours (5). In medicine, narrative therapy stands as a form of psychotherapy that emphasizes the importance of language and history in the development and expression of issues of intrapersonal and interpersonal nature. this
is particularly important in those fields, such as neurology, where the histories of patients, often compromised by a reduced ability to speak, are the key to the understanding of their illness and formulating, consequently, a correct diagnosis. Another aspect considered in the technique of narration within diabetics is the relationship with health care providers, with whom it is necessary and inevitable a more collaborative and intense relationship. Through the narration the patient is offered the opportunity to recognize and elaborate the various components of the disease, even in conflict, in order to integrate them into the wider context of life. This can help the patients to make their lives more satisfactory.

In this sense the narrative approach acts at both imaginative level, offering the possibility of incorporating new perspectives and ways of action, and at concrete level facilitating interpersonal contact moving the attention from the disorder towards other aspects life thus focusing personal resources and making them able to induce a greater self-care and adherence to treatment.

**Conclusion**

In conclusion, the participation of women in self-management of diabetes during and after pregnancy is influenced by personal, family and social beliefs, as well as perceptions about physical activity in general and in relation to health. Beliefs about the causes of disorders such as diabetes, personal vulnerability, and the value of risk, as well as the opinions of the relationship between curative care / prevention and management of diabetes in pregnancy are all factors that can affect the motivation of women to undertake and implement an effective self-management of diabetes. The cultural values, the behavioural preferences, the expectations and the cultural context are therefore primary factors with a strong influence on the perception of one’s disease and the consequent management of it.

For these reasons, the importance of awareness of the criticality of diabetes during pregnancy becomes evident. Hence, the importance of close integration between the medical role of information, education and care and the role of social context. Successful integration of these roles allows the optimization of care and psychological support for the diabetic and the family.

Finally, it is clear that to provide the basis for an effective treatment for women with diabetes and later in pregnancy and in the postpartum period is necessary not only to review the nutrition patterns, physical activity and psychosocial problems, but also to define a path of raising awareness of women feelings and their expectation from the cure, in order to achieve and ensure the mental well-being of the woman and the unborn son.

So, a major program of education and counselling targeted to all diabetic women in prolific age should be started months before the conception and possibly involving also partners and all the professionals who are in contact with the diabetic patient (6).

**Bibliografia**


**Notes**

1)The dismorofobia (from the ancient greek dis - morphe, form distorted and φόβος, phobos = fear) is a phobia that stems from a distorted view one has of their appearance, caused by an excessive preoccupation with body image.

2)Example of a blogger writing in the Shaban’s article “Body Image, Intimacy and Diabetes”: “There is a sexual element to my relationship. There is also a diabetes element to my sex.” Sex and intimacy dredges up a host of issues, diabetes notwithstanding. Is my body appealing? Am I feeling pretty? Do my arms/ass/ears look fat in this shirt/skirt/hat? Now add diabetes to the mix. Is my blood sugar at a stable level? Is there juice within reaching distance, in case of a low... Where is my pump infusion set these days? Can I dis - connect easily?”.

3)The terms “body image” refers to the mental representation of the own body as a whole and in its specific components through the perception and the feelings related to the own images. Hence, the concept of body image goes over the physical aspects focusing on the mental ones.

4)Several studies showed the high frequency of Baby blues syndrom and post-partum depression in the first months of the childbearing and their negative effects on the level of self-esteem and self-efficacy in the maternity role.


6)For further details on the recommendations for the treatment of diabetes before and during pregnancy, refer to the standard of care and the 2006 ADA Clinical Practice Guidelines of the Canadian Diabetes Association.

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