Body image, intimacy and diabetes

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Abstract

For many people with diabetes there are visible consequences that may contribute to the development of a negative body image. However, there is a dearth of literature concerning the effect of diabetes on body image and physical intimacy. The extent of body image-related distress can lead to suboptimal glycaemic control and perpetuate the problem. This article presents a psychological model to understand the contribution of diabetes mismanagement as a coping strategy in the reduction of emotional distress. To reduce body image-related distress, it is essential that treatments integrate both psychological and diabetes-related factors. Negative body image can be treated successfully with cognitive behavioural therapy but further research is required into the triad of body image, intimacy and diabetes.

Key words

Body image, intimacy, diabetes, stigma, hypoglycaemia

Introduction

Negative body image encompasses attitudes and emotions to body perception, and is associated with fear and avoidance of physical intimacy.[1] Cognitive behavioural therapy (CBT)[2] is an evidence-based structured intervention that explores the interaction between thoughts, feelings and behaviour, and seeks to minimise the negative psychological impact on the individual. The emotional and psychological difficulties of living with diabetes, and the associated behavioural and lifestyle changes required, have been widely reported.[3–7] However, the development of appropriate diabetes services in the UK has not kept pace with the recognised need for better psychological care and treatment.[8,9]

The effects of diabetes on body image and intimacy is a topic rarely covered in the available literature. Until recently, publications covering these subjects focused on women, and prevalence data for negative body image in the general population are predominantly in the context of eating disorders.[10] This article is a synthesis of available literature and clinical practice, to illustrate the adverse impact that type 1 or type 2 diabetes can have for a small but important group of people. A cognitive-behavioural model is presented as one example of a psychological model that can be used to understand the development of negative body image, its impact on intimacy and the potential role of diabetes. The perpetuation of suboptimal diabetes control as a consequence of diabetes mismanagement due to body image distress is identified. Also, an evidence-based treatment (CBT) for negative body image is described.

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Body image and intimacy

Before reading further, reflect on your own experiences. When you look at yourself in the mirror, what are your thoughts about your general appearance, body shape, or skin? Are you completely comfortable with what you see? For many people with diabetes there are specific visible consequences of living with this condition (such as ulceration, amputation, necrobiosis, and impaired vision) that add to concerns about physical appearance.

Intimacy refers to a close personal relationship,[11] reflecting a familiar emotional connection with another, as a result of detailed knowledge and experience of that person; it demands trust, confidence, positive self-worth, openness and sharing. Physical intimacy implies sexual closeness. Body image is an individual's *subjective* opinion of his/her body or physical appearance.[12] Two key dimensions of the construct are evaluation of body satisfaction and emotion in specific situations, such as intimacy. For those dissatisfied with their body image, this self-judgement or evaluation is typically more negative than the objective judgements of others.[13]

Negative body image

Literature focuses on the evaluative components that lead to negative body image development.[10] The importance of one's response to others' expectations, in a world that makes judgements based on appearance, is described by Frank's concept of the 'mirroring body', in his sociological model of the body and illness.[14] Body image can affect the quality and frequency of sexual experiences:[15] although the first consideration of body image in men was only reported in 2004, this study provides

evidence that while both sexes report self-consciousness during sexual intimacy, they focus on different gender-related physical characteristics.[16]

Negative body image is more prevalent in women than in men, and is characterised by negative emotions (shame, disgust, anxiety, low mood), maladaptive thought processes (unfavourable self-perceptions), and avoidant and anxious checking (surveillance) behaviour patterns focused on the body, which affect everyday functioning.[38]

Many factors may individually or collectively contribute to negative body image development; general social or media pressures are particularly powerful.[17] For example, in the developed world, strong positive body attributes are thinness and being well-toned; for both sexes, overweight is viewed negatively. Family values emphasising particular physical attributes or prowess may be difficult to attain, and contribute to the development of a poor sense of self.[18] Alternatively, having a distinctive feature (*eg* ginger hair, unusual height, a disfigurement) may result in unwanted attention or humiliation.[19] When this occurs in conjunction with the evaluative component of body image, the emotional responses evoked may also adversely affect the individual's body image and self-esteem.[13]

Coping behaviours are actions taken to restore the emotional disequilibrium caused by thoughts and feelings resulting from perceived threats.[20] While coping behaviours usually reduce distress, they do not resolve perceived threats and may therefore serve to maintain negative body image perceptions.

For example, body image concerns associated with obesity are commonly accompanied by feelings of anxiety and depression (emotional component), critical thoughts such as 'I look so awful', and negative predictions such as 'there is no point buying nice clothes because I will still look fat' (evaluative component).[12] Repeating such feelings and critical thoughts contributes to further low mood and anxiety episodes. Typically, people avoid situations that cause or exacerbate emotional distress.[21] For example, an obese individual might avoid clothes shopping, thereby denying themselves the opportunity to learn that they can 'look good', or how to cope with situations where nothing fits or they receive adverse comments. Such avoidance becomes a potent maintaining factor. An alternative strategy for restoring equilibrium is to be over-vigilant, such as by monitoring weight excessively. This perpetuates the focus of concern and reinforces the belief that it is necessary to continue frequent weight monitoring to prevent the feared consequence (weight gain). This can be understood in the context of the cognitive behavioural model, in which dysfunctional beliefs influence behaviour to reduce emotional distress.

Thus, the negative body image is maintained as a direct consequence of associated thoughts and feelings, together with coping strategies adopted to reduce emotional distress. To overcome such problems, the maintaining factors must be addressed.

Intimacy and diabetes

Intimacy requires self-confidence, trust and openness – the opposite of characteristics associated with negative body image development.[12] It is natural to act in ways that reduce emotional distress and restore emotional equilibrium. In the context of feelings of anxiety this is frequently achieved by avoiding situations (or thoughts about situations) that initiate anxiety.[20]

Unsurprisingly, establishing an intimate relationship in the context of a negative body image is associated with elevated anxiety, low levels of sexual assertiveness and high levels of sexual avoidance have been associated with negative body image.[15] For example, a blogger with diabetes has commented on physical intimacy and continuous insulin infusion.[22] The blogger does not highlight the infusion pump as a problem, but acknowledges that diabetes presents additional considerations:

"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 disconnect easily?"

The powerful impact of diabetes

Diabetes-specific factors contribute substantially to the development and maintenance of a negative body image. Media representations of diabetes can be negative and value-laden, which contribute to feelings of guilt and anxiety.[23] People with diabetes report avoiding social situations, especially those associated with food,[24] and may also avoid blood glucose monitoring and insulin injecting. Overt tasks, such as injecting, also contribute to physical distinctiveness, although there are other visible consequences of diabetes. Particular experiences (such as adverse comments from others, hypoglycaemic episodes or sexual dysfunction) may trigger and maintain negative self-beliefs.

Managing body image by mismanaging diabetes

Certain diabetes-specific factors may contribute to suboptimal control as both a direct consequence of beliefs and coping strategies, and of ensuing

anxiety, depression and low self-esteem. For example, a newspaper headline might trigger anxiety about future health, from which a sense of futility and avoidance of self-care may develop; alternatively it may cause over-vigilant care, to reassure and reduce emotional distress. Either response may contribute to suboptimal diabetes control and exacerbate other difficulties.

Psychological aspects of diabetes (*eg* anxiety, depression, disordered eating) and emotional distress are associated with suboptimal diabetes control.[5–7,25] Although the mechanisms for such associations are not fully understood, the over- or under-doing of diabetes self-care behaviours (likely as a consequence of the psychological aspects) are certainly involved. Poor control may worsen factors that contribute to negative body image perceptions, and one can begin to understand how people manage their body image by mismanaging their diabetes, with potentially serious consequences.

Factors that contribute to body image perceptions

Type 2 diabetes is often associated with excess body fat. The individual has no escape from the negative profile that overweight has in the general media and in health promotion messages – some of which imply blame and lack of control on the individual's part. This may lead to feelings of guilt and self-chastising thoughts in the person with diabetes. Furthermore, some people resist moving from oral glycaemic agents to insulin because they have negative beliefs about insulin, needles and blood glucose monitoring.[26–28] Some believe that insulin causes weight gain; others have learned that maintaining high blood sugar levels through insulin under-dosing for their matched carbohydrate intake is an effective weight-loss tool.

Undue emphasis on what, when and how much to eat predisposes disordered eating behaviours at the very least; there is research evidence of sub-threshold and clinically diagnosable eating disorders, particularly binge eating in people with type 2 diabetes[29] and bulimia in young women with type 1 diabetes.[30] Although unhealthy weight control behaviours are reportedly more than twice as common in girls than in boys,[31] the prevalence of eating disorders in adolescent boys with diabetes may be increasing; they may be at greater risk of developing such behaviours, compared with nondiabetic controls.[32]

Problematic eating attitudes and being 'off-track' with blood glucose targets are frequently associated with guilt, depression and anxiety. This interaction of thoughts, feelings and actions also perpetuates the vicious cycle that results in suboptimal glycaemic control.

Reactions to the diagnosis of diabetes and its impact on daily life can be very challenging. Often they are associated with a sense of stigma about being 'different'.[33–35] The person who feels stigmatised may carry an extra burden to protect those who are also exposed to the perceived stigma.[36] For some patients, any perception that diabetes might elicit unwanted attention inhibits their execution of activities such as insulin injection or blood glucose monitoring. There may be many reasons for these behaviours, including self-protection, protecting the potential discomfort of others, feeling 'like a freak' for having to inject in social situations, or believing that injecting draws further attention to a body that is already associated with significant dissatisfaction (to avoid this, they may omit insulin doses).

In addition to overt self-management behaviours, the person with diabetes faces other visible consequences of living with the condition, such as injection-site bruising or lipohypertrophy. Visible-difference research into vitiligo and disfigurement confirms that coping with 'things that show' is very difficult.[37, 38]

Severe hypoglycaemia (requiring the assistance of another individual) was recorded in 65% of people with type 1 diabetes, intensively treated for six and a half years.[39] Also, during a six-year study of type 2 diabetes,[40] major hypoglycaemic episodes were reported in 2.4% of metformin-treated, 3.3% of sulphonylurea-treated, and 11.2% of insulin-treated people. [40] Those who have experienced 'hypos' frequently describe feeling embarrassed, foolish, vulnerable, out of control and terrified.[22, 41] People minimise the risk and unpleasantness of hypoglycaemia by engaging in over-compensatory behaviours to maintain elevated blood sugar levels: a practice that has obvious long-term health risks.[42] For example, people with diabetes have described their reluctance to engage in physical intimacy if their blood glucose levels are <15mmol:

"Instant mood ruiner as my low symptoms are crying, sweating, confusion and irritability. Not a sexy scene, trust me" (quote from female patient).[22]

"I have to run high because she is terrified I will go hypo half-way through" (quote from male patient).

As the blogger acknowledges,[22] advances in insulin delivery systems have not made living with diabetes easier for everyone.[43–45] Research suggests that women are more concerned than men about body image, social acceptance and feel more self-conscious.[43] Concerns have also been expressed about 'fashion inconveniences' such as swimwear, tight fitting clothes and garments without waistbands.[43,44]

Addressing problems

Any intervention must address both body image concerns and coping strategies that lead to poor glycaemic

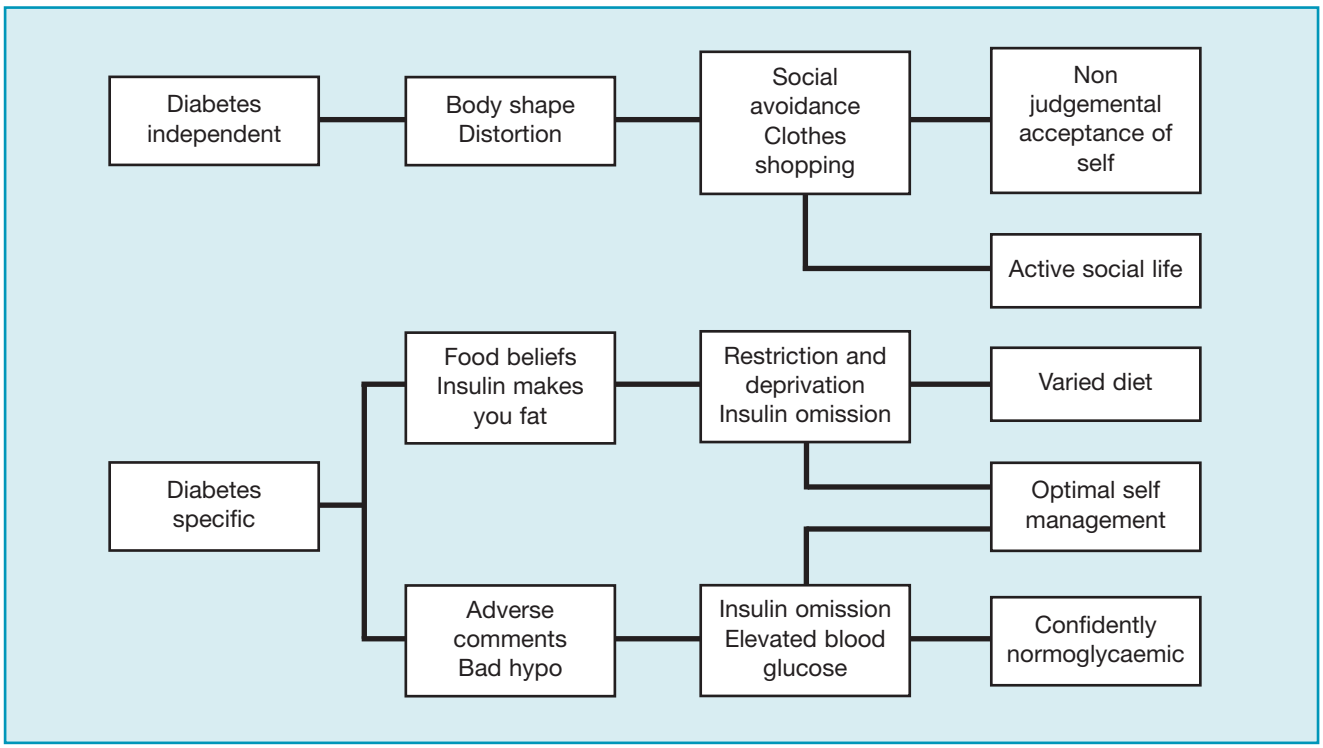

Figure 1. Treatment interventions for negative body image: diabetes-specific and independent issues

control. To manage diabetes effectively, individuals must have appropriate up-to-date knowledge and skills that use lifestyle changes, insulin dose adjustments or carbohydrate counting. Diabetes education is one approach, but many patients have poor glycaemic control due to treatment adherence-related problems. Knowledge alone is insufficient;[46,47] it is also essential to address psychological barriers.[9]

The psychological therapy most widely used for negative body image is CBT, which explores the interactions between dysfunctional thoughts, feelings and behaviours in the aetiology and maintenance of presenting problems.[10,48] CBT aims to define the perceived threat, identify the associated thoughts, feelings and coping strategies, and challenge the dysfunctional thoughts that trigger negative emotions. Specific behavioural tasks are then agreed to confront the feared activities, with the expectation of modifying the fears on the basis of experience, thereby reducing emotional distress. In the context of managing body image that is related to diabetes mismanagement, there is an implicit need for the psychological therapist to understand the complex challenges associated with this disease. Consequently, psychological services need to be an integral part of diabetes care pathways.[9,49]

Interventions must encompass both diabetes-independent (*eg* body shape distortion) and diabetes-specific (*eg* the belief 'insulin makes you fat') issues that lead to avoidance (Figure 1). It may be necessary to deal with the consequences of a critical incident (such as a severe hypoglycaemic episode that led to hypervigilance). The treatment approach should follow the CBT sequence outlined above, beginning by collecting experiential evidence to support, or challenge, beliefs. A person using social avoidance to manage their body image distress might be encouraged to increase their activities through specific behavioural tasks, with developing an active social life and non-judgemental acceptance of self as the outcomes. An individual who restricts their diet or omits insulin might be encouraged to experiment with different foods to achieve consistently improved blood glucose levels, not only through appropriate dose adjustment but also by experiencing activities with lower blood glucose levels. This creates learning opportunities for them to become confidently normoglycaemic.

Conclusions

In addition to managing symptoms and improving glycaemic control, the impact of diabetes on intimacy is an important consideration. Negative body image is associated with several aspects of diabetes and may contribute to intimacy avoidance. Common coping strategies for managing body image-related emotional distress, such as omitting insulin injections

or monitoring blood glucose excessively, result in suboptimal diabetes control. Therefore, it is essential, that treatment interventions reduce body image distress by integrating both psychological and diabetes-related factors. Do not be afraid to ask patients about the role they believe diabetes plays in their relationships.

Conflicts of interest

None.

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