Esc Anna Nery 2021;25(4):e20200270

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The relationship between women with diabetes and their body: the risk of diabulimia

A relação entre a mulher com diabetes e o seu corpo: o risco da diabulimia

La relación entre mujeres con diabetes y su cuerpo: el riesgo de diabulimia

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Submitted on 07/26/2020.
Accepted on 01/29/2021.

DOI:https://doi.org/10.1590/2177-9465-EAN-2020-0270

Abstract

Objective: to understand the relationship that women with diabulimia have with the body. **Method:** a qualitative research, developed with the Thematic Oral History Method, with four women between 18 and 30 years of age who reported diabulimia. **Results:** women's relationship with their bodies has been guided by the social pressure of female thinness that distorts self-image, generates dissatisfaction with the body and diminishes self-esteem. Weight loss is proportionally associated with increased social acceptance and justifies the use of harmful methods to health such as reducing the dose or suspending the use of insulin. The narrators showed to know the risks, but admitted to repeat it in certain contexts. **Final considerations and implications for practice:** the desire that women with Diabetes Mellitus have to lose weight needs to be incorporated into the strategies of care with the attention of health professionals to subjectivity, acting to recognize and prevent eating disorders in women with diabetes and minimize the adoption of actions harmful to health.

Keywords: Diabetes Mellitus; Eating Disorders and Food Ingestion; Bulimia Nervosa; Diabetic Cetoacidosis; Nursing.

Resumo

Objetivo: compreender a relação que as mulheres com diabulimia têm com o corpo. **Método:** pesquisa qualitativa, desenvolvida com o Método da História Oral Temática, com quatro mulheres entre 18 e 30 anos que autorreferiram diabulimia. **Resultados:** a relação das mulheres com o seu corpo foi pautada pela pressão social de magreza feminina que distorce a autoimagem, gera insatisfação com o corpo e a diminuição da autoestima. A perda de peso é proporcionalmente associada ao aumento da aceitação social e justifica a utilização de métodos deletérios à saúde como a diminuição da dose ou a suspensão do uso de insulina. As narradoras demonstraram conhecer os riscos, mas admitiram repeti-la em determinados contextos. **Considerações finais e implicações para a prática:** o desejo que as mulheres com Diabetes Mellitus têm de perder peso precisa ser incorporado às estratégias de cuidado com a atenção dos profissionais da saúde à subjetividade, atuando para reconhecer e prevenir os transtornos alimentares em mulheres com diabetes e minimizar a adoção de ações prejudiciais à saúde.

Palavras-chave: Diabetes Mellitus; Transtornos da Alimentação e da Ingestão de Alimentos; Bulimia Nervosa; Cetoacidose Diabética; Enfermagem.

Resumen

Objetivo: comprender la relación que tienen las mujeres con diabulimia con el cuerpo. **Método:** investigación cualitativa, desarrollada con el Método de Historia Oral Temática, con cuatro mujeres entre 18 y 30 años que autoinformado diabulimia. **Resultados:** la relación de la mujer con su cuerpo estuvo guiada por la presión social de la delgadez femenina que distorsiona la imagen de sí misma, genera insatisfacción con el cuerpo y la disminución de la autoestima. La pérdida de peso se asocia proporcionalmente con una mayor aceptación social y justifica el uso de métodos nocivos para la salud, como reducir la dosis o suspender el uso de insulina. Los narradores demostraron conocer los riesgos, pero admitieron repetirlo en determinados contextos. **Consideraciones finales e implicaciones para la práctica:** el deseo que tienen las mujeres con Diabetes Mellitus de adelgazar debe incorporarse a las estrategias de atención con la atención de los profesionales de la salud a la subjetividad, actuando para reconocer y prevenir los trastornos alimentarios en mujeres con diabetes y minimizar la adopción de acciones nocivas para la salud.

Palabras clave: Diabetes Mellitus.; Transtornos de Alimentación y de la Ingestión de Alimentos; Bulimia Nerviosa; Cetoacidosis Diabética; Enfermagem.

INTRODUCTION

Diabetes Mellitus (DM) is a chronic condition that has several clinical complications and is among the major causes of morbidity and mortality in Brazil and worldwide. It is estimated that, worldwide, diabetes mellitus affects approximately 463 million people aged between 20 and 79 years, with more than 87% of deaths occurring in low and middle income countries, probably due to social vulnerabilities that generate inequalities in timely diagnosis and access to health care, support network and appropriate treatments in special situations. It is estimated that 232 million people in the world have not yet been diagnosed with DM. Among the countries, Brazil is the fifth country in number of people with diabetes, with approximately 16.8 million people aged between 20 and 79 years with Type 2 Diabetes Mellitus (DM2).[1]

Children and adolescents live with Type 1 Diabetes Mellitus (DM1) and there are about 1.1 million of them in the world1, making it essential to implement public policies specific to this group that include not only drug treatment and prevention of complications in the body, but also care in the social and psychological dimensions and its repercussions on families.

From a systematic review, it was possible to identify the association between bullying victimization and the presence of DM1 in the comparison between people living with or without chronic conditions. The recognition of situations of violence, of various kinds, from early childhood, makes it essential to develop strategies for monitoring children and young people and aimed at raising awareness of society, healthy interpersonal relationships and promoting health and stress in families.[2]

There is evidence of the relationship between the person with DM and psychiatric comorbidities, especially depression and eating disorders (EDs), which can interfere with metabolic control and increase the complications of diabetes. Among the several factors associated between DM and EDs, the psychological aspects related to diabetes, as well as the dietary restrictions, play an important role in the expression of inadequate eating behaviors in this population.[3,4] Studies have pointed out as risk factors the female gender, overweight/obesity, omission or reduction of insulin and dissatisfaction with the body.[5]

It is noteworthy that young adults with chronic diet-related health conditions, such as DM, are more likely to develop eating disorders, with compensatory behaviors to maintain or reduce body weight such as the adoption of excessive sports practices and/or the use of medications. These people also tend to present more depressive and anxiety symptoms, if compared with people without chronic conditions.[6]

A study involving 282 people with DM1, aged ≥18, identified that eating and eating disorders, depression and anxiety were more prevalent in women, especially adolescents and youths. The EDs were identified in 20.3% of participants, while depression and anxiety were present in 6.2% and 19.0%, respectively, alerting health professionals, especially primary health care, about the need for interdisciplinary attention beyond drug treatment.[7]

Practices such as the reduction or omission of insulin use by people with DM1 have been recognized as diabulimia. They are associated with concern about weight and body image, personal and society acceptance, generating greater satisfaction with body image and self-esteem.[8]

The reduction or suppression of insulin leads to hyperglycemia, polyuria and metabolic changes that produce, as a consequence, a reduction in body weight. In detail, insulin sensitive tissues, as they cannot use glucose, start to metabolize mainly fats instead of carbohydrates, leading to severe cases of diabetic ketoacidosis with need for hospital admission. As insulin is an anabolic hormone, its deficiency favors catabolic processes such as lipolysis, proteolysis and glycogenolysis. The weight reduction caused by this process can be accompanied by dehydration, nausea, emesis, as well as microvascular complications due to diabetes and the risk of death.[9] The omission of the insulin dose alone can cause the early onset (four years or less of illness) of chronic complications such as retinopathy, neuropathy and nephropathy.[9,10]

Due to the potential health problems of diabulimia and its higher incidence in young women who report dissatisfaction with their body image,[11] it is necessary to study the social construction of this disease and the beauty patterns that condition such behaviors.

The current standard of beauty is largely strengthened by the media, responsible for cultural validation and human objectification, turning human aesthetic standards into extremely expensive and almost always unattainable merchandise for the vast majority of people.[12] The so-called beauty industry generates absurd profits, acting in different ways, offering from products for low-calorie diets, cosmetics, physical activities focused on the aesthetic issue to the progressive increase of aesthetic surgical procedures.[13,14] Despite cultural and economic differences between countries, the globalization process and instant access to information tend to unify consumption patterns related to beauty, just like other goods available worldwide.

From the social construction on the female body, women look for ways of body improvement to reach this standard, both to satisfy their self-esteem and for social acceptance.[15] Weight loss becomes mandatory and obesity becomes negligence and irresponsibility of the person.[14,16]

Scholars[17] have argued that dissatisfaction with weight is closely related to the cultural emphasis on thinness and the social stigma attributed to those who do not fit this pattern, especially among people with obesity. In this sense, the current aesthetic pattern of beauty and the excessive concern of society with a very thin female image are the main factors associated with the worsening of EDs and the difficulties arising from obesity, as well as the increase in the level of body dissatisfaction.[18,19]

Such scenario needs to be recognized by health professionals when attending people with diabetes. The risk for the development of ED can be early detected through an empathetic, supportive and collaborative relationship that allows the understanding of individual anguishes, sufferings and desires.[20] The relevance of this investigation focuses on the risks of health problems caused by diabulimia.

Thus, this article aims to understand the relationship that a woman with diabulimia has with her body.

METHOD

Study with qualitative approach, of the type Oral History, in its thematic modality, for corresponding to a more restricted narration of the interviewee about a certain theme. Oral History returns the story to people in their own words. And, by giving them a past, it also helps them to walk towards a future built by themselves.[21]

The Oral History Method is built by talking with people about the experience and the memory that each one has about facts and values that interest the researcher. Through the narrative about a lived reality, it is possible to grasp the most global social relations.[22] The presence of the past in people's immediate present is the raison d'être of Oral History. To this extent, it not only offers a change in the concept of history, but also guarantees social meaning to the lives of deponents and readers, who come to understand the historical sequence and feel part of the context in which they live.[23]

The dissemination of the research project was done in a discussion group in the FACEBOOK® social network called DIABETES E DIABULIMIA. At the time of recruitment and selection of participants, the group had 266 women. The criteria for inclusion of the participants of the study were: being a woman; being between 18 and 30 years old; self-referring diagnosis of diabetes and diabulimia and participating in the discussion group DIABETES AND DIABULIMIA.

The possible participants were informed about the objectives, methodology and ways of disseminating the research and signed the Free and Informed Consent Term (online). The participants who showed interest were contacted by message by the main researcher and, afterwards, the interviews were scheduled. There was no refusal to participate, however, one of the possible interviewees did not participate due to incompatibility of time and another died due to diabulimia before the interview. Thus, four women with DM1 and diabulimia composed this study.

The interviews were developed with a semi-structured script containing questions related to personal identification and data related to DM1, the relationship with the body itself and diabetes, the history related to the use of insulin, the vision and attitudes of family and health professionals regarding ED, the history of complications and feelings related to ED.

The research project was approved by the Research Ethics Committee (REC) of the Federal University of São Paulo, on May 20, 2015, under Opinion No. 1,051,956/15. The data were collected by the interview technique of the main author after the approval of the REC. The research data were collected between May and August 2015.

The face-to-face interviews were conducted with three participants who lived in the city of São Paulo, Brazil, one at the Federal University of São Paulo and two on Paulista Avenue. One participant resided in the State of Bahia, Brazil, and was interviewed via telephone. The interviews were conducted in a single meeting and lasted between one hour and 30 minutes and two hours each. It should be noted that a quiet and reserved environment was provided, with no interference in the interviews, which were recorded in audio files.

For the data analysis, the Discourse Analysis method was applied through the following steps: (1) ordering of the data obtained through the interviews; (2) classification of the data obtained in the texts (empirical and theoretical), seeking to relate the analytical categories (theoretical) and the empirical ones; (3) reordering of the interviews, adopting the resource used in the relational analysis; (4) carrying out a critical relational analysis between the empirical data obtained in the interviews and the analytical categories selected by the researcher, seeking to understand and answer the questions elaborated during the construction phase of the object of study.[22]

The analysis process gave rise to two analytical categories: (1) Women's relationship with the body, self-esteem and social standards of beauty; (2) Women's relationship with diabulimia and its implications.

The term narrator was chosen to ensure the confidentiality of the names of the women who participated in the study.

RESULTS

Study participants

Narrator 1 (N1), 30 years old, with DM1 for 13 years, using a continuous insulin infusion system for nine months, has already received nutritional guidance, however, has not adhered, practices physical activity, has peripheral neuropathy, is a physiotherapist, married, heterosexual and has a child.

Narrator 2 (N2), 27 years old, with DM1 for 16 years, using human intermediate action insulin (NPH) and human fast action insulin (regular), has already received nutritional guidance, but has adherence that oscillates according to day-to-day situations. Sedentary, has peripheral neuropathy, works as operational administrative assistant, is single, heterosexual and has no children.

Narrator 3 (N3), 19 years old, with DM1 for eight years, using a continuous insulin infusion system, has already received nutritional guidance, but without following it in its entirety. Sedentary, without complications, she is a student of nursing, single, heterosexual and has no children.

Narrator 4 (N4), 25 years old, with DM1 for 19 years, using glargine insulin and lyspro, has already received nutritional guidance, but without adherence. Sedentary, without complications, she is a fashion student, single, bisexual and has no children.

Women's relationship with the body, self-esteem and social standards of beauty

The results of this research revealed that the relationship of these women with their own bodies is conflictive. They are held hostage to the social imposition of female thinness as the only socially accepted standard of beauty. Such subjection leads to a chronic state of dissatisfaction with one's own body and an intense desire to lose weight.

> *Look, it's very important, for me, to have the body that I want, it's very important.* (N1)

> *Well, I don't feel good with my body because, so, today, all that is worth more is the appearance. Not that I'm fat, today, I think I'm too thin and with a little belly like this half, let's say, defective. I eat everything whole: brown rice; wholemeal bread; light butter, I like these things a lot. But I think that, if I did more exercises, if I had a more rigid diet, who knows, I might even conquer a certain type of body close to what I want.* (N2)

> *Look, it's very important, for me, I believe that every woman suffers with her own body and has something in it that she would like to change. The difference for us, women with diabetes, is that when it comes to weight, it's much simpler.* (N4)

The process of not accepting one's own body image leads to a decrease in self-esteem. All the narrators pointed out the perception that they are overweight or that their body forms differ from the slimness standards imposed by society, interfering directly in self-esteem. This perception is also conditioned by situations in which the woman needs to expose herself and be socially accepted.

> *There are hours that I care a lot and there are hours that I am "shitting and walking" for that, so, it varies a lot. I'm sure that if the social pressure with the woman's body were less, it would affect me less because we are very judged. So, the opinion of the others in our society ends up being very important, so, like, ah, if you are taxed as chubby or as out of the beauty standard, it moves, at least, with me, it moves a lot with my self-esteem, so, I don't know, I think it is very important; if I didn't have all this pressure, if the chubby was in fashion, I think everybody would stay, he would be chubby, he understood, then, nobody would care about this.* (N3)

> *My problems were much more related to my self-esteem than to my weight.* (N4)

For another interviewee, the motivation to alter the body image was related to external factors that influence the decrease of self-esteem, such as: not fitting the standard of beauty conveyed by the media; not finding clothes that fit properly or not being inserted in a loving relationship. Such situations were pointed out as responsible for the recurrence of the ED.

> *I've greatly reduced [the suspension of insulin use], but I assume that, once in a lifetime, I still do it when I want to go out, I want to put on clothes that are tight, when I see that I'm a little fat, overweight and I'm not able to lose weight, even doing diet and physical activity, so I go there and do the same process.* (N2)

From the body dissatisfaction and the consequent search for the body within the social standards, women with diabetes can see faster ways to reach their goals, despite all the negative consequences this may have for their health. This situation generates an inversion of priorities in which the self-image becomes more important than the health condition of these women.

> *I have used my diabetes to lose weight. When I was 13, I started not to take enough insulin and go bad on purpose to start losing weight, like, because I thought it was better than taking care of my diabetes and keep getting fat.* (N3)

Women's relationship with diabulimia and its implications

Among the women who participated in this study, it was noted that they thought only they knew how to use diabetes to lose weight.

> *She [doctor] never told me this existed, like never, you know? For me, I was the only one who had done that in life until months ago. I don't know, I swear to you, I was the only one who had known about this tactic of life.* (N3)

> *Once, from doing so much, I started to think: is it only me who does this? And I went searching the internet, and when I put it there on Google®, several people appeared, several stories with this same problem and that's when I even discovered the name because I didn't know* (N2)

Women had difficulty to define exactly when they started to decrease the dose or to suspend the use of insulin in order to lose weight. This process of manipulation of the treatment was accompanied by guilt for the non-fulfillment of the orientation received by the professionals and fear of interruption of the assistance received in the public service.

> *I was afraid to stop taking insulin. There was a lot of pressure on me to control my blood glucose, since, unlike the private doctors, at the school hospital, I was threatened to lose my treatment if I didn't do things right and that also implied me receiving the lispro insulin, which was more expensive and the health post did not provide.* (N4)

The feeling of guilt is not related to the possible health damage caused by the suspension of treatment. For another narrator, the feeling of guilt did not even exist.

> *I never felt guilty because of having done that, it was something like that, kind of natural. When I realized, I was already doing it, and when I stopped, I stopped and said: Mine! How so? No! It's wrong, so let's do the right thing. Feeling guilty, regretting, something like this never happened.* (N3)

The motivation to stop the use of insulin was evidenced and related to body image by one of the young women.

> *I cannot get rid of this desire and every time I look in the mirror I feel motivated to stop taking insulin again.* (N4)

Besides diabetes and the concern with their own bodies, these women work, study, have double work hours and many other responsibilities. Such factors were pointed out as hindrances to self-care, because they do not always manage to conciliate their desires and needs of care with the rhythm of life they take.

> *The rhythm of life I lead does not help me at all to take care of my diabetes or my body. It's very heavy, the rhythm we have in college is very fast, there's no time left for anything, much less to take care of us, and it's very difficult, we have to organize ourselves. This thing of ah, I'm going to eat every three hours and I'm going to take pre and postprandial exams, man! You're in the middle of the class, you won't remember the postprandial and you won't remember the food three hours later. I don't know, it's very hard to be regressed this way.* (N3)
>
> *My life is not just about diabetes and not even taking care of me, unfortunately.* (N4)

DISCUSSION

Based on the results and the theoretical-conceptual paths traveled, there is a possibility, among many others, to understand diabulimia from the relationship that women with diabetes establish with their bodies. It is worth mentioning that most of the studies related to the theme of ED,[24] and especially of diabulimia, have, as focus, the biological dimension of the process of illness. The social and subjective dimensions need to be valued to increase the power of care offered to this population.

The results of this study corroborate the scientific literature on the relationship between EDs and social skills in adolescents by pointing out that the main reason for dissatisfaction with body image and low self-esteem in women is directly related to social pressure in favor of a pattern of female beauty with the exaltation of excessive thinness.[18]

The motivations for changing the body image are derived from socio-cultural norms that vary according to location and historical period and are increasingly dynamic and globalized as a result of the Internet and social media. Those who do not fit into normal patterns run the risk of suffering processes of social exclusion[17,24] and it matters little if such patterns are dystopian and not consistent for most people.

Culturally, misconceptions are built that overweight is incompatible with beauty and health. Social pressure against overweight and obesity can contribute to different levels of body image distortion.[25] This social context that distorts self-image is linked to the risk of developing EDs for the general population with a higher incidence on the young female gender.[8,25]

Weight loss is stimulated by different communication media and is usually valued as an achievement in itself without taking into account that health is also related to well-being and the pleasure associated with eating. The result of this process is low self-esteem, dissatisfaction with the body, and a willingness to perform inconsequent diets that can cause health problems. When dealing with young women with DM1, the scenario is even more worrying.

A review study, which had as its primary source blogs of people with DM1 who reported living with the phenomenon of diabulimia, confirmed similar results to this study in that it identified reports of young people experiencing exacerbated suffering, information on the reasons for the omission of insulin use, and strategies to address this important global public health condition. With restricted scientific evidence, especially in Brazil, youth reports become powerful allies for the development and promotion of expanded interventions with the population.[26]

The promotion of care and self-care in diabetes requires extrapolating the relationship that is established between patient and health professionals. Especially for children, adolescents and their families, school can be important in expanding knowledge, reducing prejudices and stigma, building alternatives to minimize the negative repercussions that the disease can have on the quality of life, besides creating a favorable environment for the promotion of physical and emotional health.[27]

A case-control study showed that 25% of women with DM1 have EDs throughout their lives, and there is a tendency to increase the incidence of these disorders even after the period corresponding to adult youth.[28]

People with diabetes and EDs or symptoms of food inadequacy (subclinical syndromes) have an increased risk of developing worse glycemic control and, consequently, a higher risk of acute emergency complications and chronic irreversible microvascular complications by diabetes.[3]

In a case-control study with young adults with and without DM1 from the perspective of EDs and dissatisfaction with the body image, it was possible to evaluate the behaviors, attitudes and feelings towards EDs and their perceptions about the body image. The results showed that there was no significant difference between the groups; however, several changes resulting from diabetes were obtained, such as the influence on food, body image and weight of young people. This trend is related to higher morbidity and mortality rates for this group and higher weight in relation to the control group. The same study also demonstrated the association between EDs with insulin misuse for weight loss. It was reported by 7.3% of participants with inadequate glycemic control, the risk of developing microvascular complications, signaling the need for further investigations and interventions with this public.[29]

In the Brazilian context, a study highlighted the increased risk of ED development in a sample of patients with DM1.[30] This risk was associated with female sex, overweight/obesity, insulin reduction or omission and dissatisfaction with the body. The study pointed out that most people who omitted to use insulin were overweight and more dissatisfied with their body image. These results corroborate the narratives of the women who participated in this study. The dissatisfaction with weight and body image was unanimously pointed out as a stimulus for the manipulation of insulin use, even being aware that this method of slimming offers risks of health aggravation.

The diabulimia phenomenon generates the restriction of circulating insulin (by the decrease or not application of the dose) and the accumulation of glucose in the bloodstream promotes constant hyperglycemia and excretion of glucose in urine, favoring weight loss, even without the adoption of food care.[30] The weight loss is directly proportional to the increase in blood glucose. Thus, losing weight, which was something so difficult, would become easier. Although there are often symptoms of ketosis, this still motivates women to remain with this behavior, presenting weight loss and an unhealthy diet in quality and quantity, however, pleasant.

Another Brazilian study identified a high prevalence of adolescents with DM1 and mental health disorders, with almost twice as many as in the control group. The main illnesses identified among all participants were depression and anxiety and, although less frequently, the presence of eating disorders. It also identified that overweight increases the likelihood of young people developing mental disorders. Although the prevalence of adolescents with mental health problems was high, only half of them received psychological care, and access to psychiatric evaluation was even more limited, indicating a gap in health care.[31]

Narratives about ways to use diabetes to lose weight and the thought of the participants that only they knew about these possibilities may be related to the little propagation of bulimia nervosa, especially in people with diabetes, in the Brazilian popular media, although it is a disorder widely studied in other countries. And, possibly, because of the little valorization of this disorder during the orientations about the care related to DM offered by health professionals, it culminates in the silent, secret and dangerous action.

The detection of risk factors and early intervention are essential in trying to improve and maintain the quality of health and well-being for children and young people.[3,29] Open and collaborative communication and a detailed understanding of the user are relevant, individually, to identify behaviors and intervene appropriately and effectively.

One study proved that women with DM1 and EDs do not use other purgative methods such as vomiting and laxatives in the same way because of the ease of handling insulin doses to induce weight loss. It also concluded that prevention and early treatment of eating disorders in young women with DM are important to reduce long-term morbidity and mortality due to inadequate metabolic control and microvascular complications. These women may present less recognized characteristics of an ED such as abandonment of diabetes treatment, unstable metabolic control, recurrent hyperglycemia and ketoacidosis, and the early onset of microvascular complications. Compared to women who are seen in psychiatric settings, women with diabetes and eating disorders may have less common symptoms and are more likely to be at normal or overweight rather than underweight.[3]

In view of the high complexity of diabetes treatment, it becomes necessary to associate medication with psychological approaches.[32] The concern with food and meal, diabetes management, together with the risk of higher body weight, negative feelings about body shape and weight, chronic hyperglycemia, depression, anxiety, shame and self-care deficiency make up a challenging scenario for the patient and the health professional in the control of the clinical picture.[33]

Still on the possibilities of treatment,[20] it was concluded that the beginning of insulin pump therapy is associated with the endorsement of reduced ED behaviors in youngsters with DM1. However, in patients who do not accept diabetes or who have other psychiatric comorbidities such as depression, the use of insulin pump may be an aggravating or triggering factor.[34]

Thus, understanding the relationship that women with DM1 establish with their bodies is an important dimension to be incorporated into the practice of assistance to this population. It is from their conceptions of beauty, self-image and self-esteem that one can identify, prevent and even treat EDs.

FINAL CONSIDERATIONS AND IMPLICATIONS FOR PRACTICE

This study allows knowing the relationship that the woman with DM1 establishes with her body. This relationship is guided by the social conception of the beautiful feminine associated to patterns of excessive thinness for the woman's body that contribute to the distortion of self-image, dissatisfaction with the body and the decrease of self-esteem, composing a favorable scenario for the emergence of EDs, in this case, diabulimia. The weight loss is proportionally associated to the increase of social acceptance and justifies the use of harmful methods to health such as the decrease of the dose or the suspension of insulin use.

For these women, non-adherence to treatment is not associated with lack of knowledge; on the contrary, they have learned how to manipulate the use of insulin in order to reduce their weight. They also demonstrated the science that such practice causes damage to health in the short and long term; even so, they signaled that, in certain contexts, they would manipulate the treatment again.

This research reinforces the influence of social determinations in the health-care process and presents a challenging scenario for health professionals. It is necessary to radicalize the interdisciplinary approach to the care of people with DM1, incorporating all the dimensions of the being at the time of negotiating the strategies of care with these patients.

The limitations of this study are related to the incipient scientific production on the subject, especially in the Brazilian context and in the subjective dimension of women with DM, which makes it difficult to discuss and compare the results. It also points out the need to deepen studies on subjective aspects that interfere in self-care practices.

Health professionals should value women's desire to lose weight and act together in strategies that do not harm their health. Open communication, without prejudice or condemnation, is essential for this relationship to be established in a sincere and effective way and, who knows, to provide better results in health care.

AUTHOR'S CONTRIBUTIONS

Study design. Letícia Braga Ribeiro. Claudia Maurício Pieper. Mônica Antar Gamba. Anderson da Silva Rosa.

Data collection. Letícia Braga Ribeiro. Claudia Maurício Pieper. Anderson da Silva Rosa.

Data analysis. Letícia Braga Ribeiro. Claudia Maurício Pieper. Mônica Antar Gamba. Anderson da Silva Rosa.

Interpretation of results. Letícia Braga Ribeiro. Claudia Maurício Pieper. Giovana Andrade Frederico. Mônica Antar Gamba. Anderson da Silva Rosa.

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Responsibility for all aspects of the content and integrity of the article published. Letícia Braga Ribeiro. Claudia Maurício Pieper. Giovana Andrade Frederico. Mônica Antar Gamba. Anderson da Silva Rosa.

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REFERENCES

1. International Diabetes Federation. IDF diabetes atlas [Internet]. 9th ed. Brussels: IDF; 2019 [citado 2020 jul 26]. Disponível em: www.diabetesatlas.org
2. Andrade CJN, Alves CAD. Relationship between bullying and type 1 diabetes mellitus in children and adolescents: a systematic review. J Pediatr. 2019;95(5):509-18. http://dx.doi.org/10.1016/j.jped.2018.10.003. PMid:30391140.
3. Pinhas-Hamiel O, Hamiel U, Levy-Shraga Y. Eating disorders in adolescents with type 1 diabetes: challenges in diagnosis and treatment. World J Diabetes. 2015;6(3):517-26. http://dx.doi.org/10.4239/wjd.v6.i3.517. PMid:25897361.
4. Gagnon C, Aimé A, Bélanger C. Eating patterns in adolescents with type 1 diabetes: associations with metabolic control, insulin omission, and eating disorder pathology. PLoS One. 2015 jul;10(11):e0141386. http://dx.doi.org/10.1016/j.appet.2017.03.035. PMid:26529593.
5. Wisting L, Rø A, Skrivarhaug T, Dahl-Jørgensen K, Rø Ø. Disturbed eating, illness perceptions, and coping among adults with type 1 diabetes on intensified insulin treatment, and their associations with metabolic control. J Health Psychol. 2019 abr;3. http://dx.doi.org/10.1177/1359105319840688. PMid:30939939.
6. Quick VM, McWilliams R, Byrd-Bredbenner C. Case-control study of disturbed eating behaviors and related psychographic characteristics in young adults with and without diet-related chronic health conditions. Eat Behav. 2012 ago;13(3):207-13. http://dx.doi.org/10.1016/j.eatbeh.2012.02.003. PMid:22664398.
7. Wisting L, Skrivarhaug T, Dahl-Jørgensen K, Rø Ø. Prevalence of disturbed eating behavior and associated symptoms of anxiety and depression among adult males and females with type 1 diabetes. J Eat Disord. 2018 set;6(1):28. http://dx.doi.org/10.1186/s40337-018-0209-z. PMid:30214804.
8. Falcão MACRM. Diabetes, perturbações alimentares e imagem corporal em jovens adultos: estudo exploratório sobre a diabulimia [dissertação]. Lisboa: Universidade de Lisboa; 2015.
9. Sociedade Brasileira de Diabetes. Diretrizes da Sociedade Brasileira de Diabetes 2019-2020. São Paulo: Editora Clannad; 2019.
10. Coleman SE, Caswell N. Diabetes and eating disorders: an exploration of 'Diabulimia'. BMC Psychol. 2020 set;8(1):101. http://dx.doi.org/10.1186/s40359-020-00468-4. PMid:32967730.
11. Araia E, Hendrieckx C, Skinner T, Pouwer F, Speight J, King RM. Gender differences in disordered eating behaviors and body dissatisfaction among adolescents with type 1 diabetes: Results from diabetes MILES youth—Australia. Int J Eat Disord. 2017 ago;50(10):1183-93. http://dx.doi.org/10.1002/eat.22746. PMid:28856699.
12. Mauss M. Sociologia e antropologia. 5. ed. São Paulo: Cosacnaify; 2015.
13. Claumann GA, Laus MF, Felden EPG, Silva DAS, Pelegrini A. Association between dissatisfaction with body image and health-related physical fitness among adolescents. Cien Saude Colet. 2019;24(4):1299-308. http://dx.doi.org/10.1590/1413-81232018244.17312017. PMid:31066833.
14. Rentz-Fernandes AR, Silveira-Viana M, De Liz CM, Andrade A. Autoestima, imagem corporal e depressão de adolescentes em diferentes estados nutricionais. Rev Salud Publica. 2017 jan-fev;19(1):66-72. http://dx.doi.org/10.15446/rsap.v19n1.47697. PMid:30137157.
15. Hosseini SA, Padhy RK. Body image distortion [Internet]. StatPearls; 2020 [citado 2020 jul 26]. Disponível em: https://www.ncbi.nlm.nih.gov/books/NBK546582/
16. Dourado CS, Fustinoni SM, Schirmer J, Brandão-Souza C. Body culture and meaning. J Hum Growth Dev. 2018;28(2):206-12. http://dx.doi.org/10.7322/jhgd.147240.
17. Rounsefell K, Gibson S, McLean S, Blair M, Molenaar A, Brennan L et al. Social media, body image and food choices in healthy young adults: a mixed methods systematic review. Nutr Diet. 2020 out;77(1):19-40. http://dx.doi.org/10.1111/1747-0080.12581. PMid:31583837.
18. Uzunian LG, Vitalle MSS. Social skills: a factor of protection against eating disorders in adolescentes. Cien Saude Colet. 2015 nov;20(11):3495-508. http://dx.doi.org/10.1590/1413-812320152011.18362014. PMid:26602727.
19. Zhang J, Zhai Y, Feng XQ, Li WR, Lyu YB, Astell-Burt T et al. Gender differences in the prevalence of overweight and obesity, associated behaviors, and weight-related perceptions in a national survey of primary school children in China. Biomed Environ Sci. 2018;31(1):1-11. PMid:29409580.
20. Young-Hyman DL, Peterson CM, Fischer S, Markowitz JT, Muir AB, Laffel LM. depressive symptoms, emotion dysregulation, and bulimic symptoms in youth with type 1 diabetes. varying interactions at diagnosis and during transition to insulin pump therapy. J Diabetes Sci Technol. 2016 maio;10(4):845-51. http://dx.doi.org/10.1177/1932296816645118. PMid:27137457.
21. Thompson P. A voz do passado: história oral. 6. ed. Rio de Janeiro: Paz e Terra; 2002.
22. Meihy JCSB, Holanda F. História oral: como fazer, como pensar. 3. ed. São Paulo: Contexto; 2013.
23. Meihy JCSB. Manual de história oral. 5. ed. São Paulo: Loyola, 2018.
24. Bloc LG, Nazareth ACP, Melo AKS, Moreira V. Transtorno de compulsão alimentar: revisão sistemática da literatura. Rev Psicol Saúde. 2019 jan-abr;11(1):3-17. http://dx.doi.org/10.20435/pssa.v11i1.617.
25. Heiman T, Olenik-Shemesh D. Perceived body appearance and eating habits: the voice of young and adult students attending higher education. Int J Environ Res Public Health. 2019 fev;16(3):451. http://dx.doi.org/10.3390/ijerph16030451. PMid:30720728.
26. Staite E, Zaremba N, Macdonald P, Allan J, Treasure J, Ismail K et al. 'Diabulima' through the lens of social media: a qualitative review and analysis of online blogs by people with Type 1 diabetes mellitus and eating disorders. Diabet Med. 2018 jun;35(10):1329-36. http://dx.doi.org/10.1111/dme.13700. PMid:29855073.
27. Holmström MR, Häggström M, Söderberg S. Being facilitators in a challenging context-school personnel's experiences of caring for youth with diabetes type 1. J Pediatr Nurs. 2018 ago;43:e114-9. http://dx.doi.org/10.1016/j.pedn.2018.08.007. PMid:30100521.
28. Pinhas-Hamiel O, Hamiel U, Greenfield Y, Boyko V, Graph-Barel C, Rachmiel M et al. Detecting intentional insulin omission for weight loss in girls with type 1 diabetes mellitus. Int J Eat Disord. 2013 maio;46(8):819-25. http://dx.doi.org/10.1002/eat.22138. PMid:23674378.
29. Falcão MA, Francisco R. Diabetes, eating disorders and body image in young adults: an exploratory study about "diabulimia". Eat Weight

Disord. 2017;22(4):675-82. http://dx.doi.org/10.1007/s40519-017-0406-9. PMid:28597360.

30. Philippi ST, Cardoso MGL, Koritar P, Alvarenga M. Risk behaviors for eating disorder in adolescents and adults with type 1 diabetes. Rev Bras Psiquiatr. 2013 abr-jun;35(2):150-6. http://dx.doi.org/10.1590/1516-4446-2012-0780. PMid:23904020.
31. Almeida MC, Claudino DA, Grigolon RB, Fleitlich-Bilyk B, Claudino AM. Psychiatric disorders in adolescents with type 1 diabetes: a case-control study. Rev Bras Psiquiatr. 2018 jul-set;40(3):284-9. http://dx.doi.org/10.1590/1516-4446-2017-2259. PMid:29412336.
32. Young-Hyman D, de Groot M, Hill-Briggs F, Gonzalez JS, Hood K, Peyrot M. Psychosocial care for people with diabetes: a position statement of the American Diabetes Association. Diabetes Care. 2016 dez;39(12):2126-40. http://dx.doi.org/10.2337/dc16-2053. PMid:27879358.
33. Eisenberg MH, Lipsky LM, Dempster KW, Liu A, Nansel TR. I should but i can't: controlled motivation and self-efficacy are related to disordered eating behaviors in adolescents with type 1 diabetes. J Adolesc Health. 2016 ago;59(5):537-42. http://dx.doi.org/10.1016/j.jadohealth.2016.06.008. PMid:27567063.
34. Prinz N, Bächle C, Becker M, Berger G, Galler A, Haberland H et al. Insulin pumps in type 1 diabetes with mental disorders: real-life clinical data indicate discrepancies to recommendations. Diabetes Technol Ther. 2016 jan;18(1):34-8. http://dx.doi.org/10.1089/dia.2015.0180. PMid:26451621.