

Impact of eating disorders in adolescence: an integrative review on anorexia nervosa

Impacto dos transtornos alimentares na adolescência: uma revisão integrativa sobre a anorexia nervosa

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RESUMO

A anorexia nervosa é um dos principais transtornos alimentares de natureza psiquiátrica que acomete uma grande parte dos adolescentes em todo o mundo. O objetivo deste estudo foi identificar o impacto da anorexia nervosa na aceitação do corpo e na qualidade de vida de adolescentes. Tratou-se de uma revisão integrativa da literatura. Foram utilizados os descritores Anorexia Nervosa, Saúde Mental, Adolescente, Transtornos da Alimentação e da Ingestão de Alimentos, Saúde do Adolescente, definidos a partir dos Descritores em Ciências da Saúde da Biblioteca Virtual em Saúde e cruzados entre si nas bases Scielo, LILACS e Periódicos CAPES. Foram identificados 766 artigos completos publicados em português e após análise minuciosa, a amostra final desta revisão integrativa foi de 10 artigos científicos. Em relação aos fatores que predisõem a anorexia nervosa em adolescentes, evidenciou-se a distorção da imagem corporal, insatisfação com o corpo atual, restrição alimentar, baixa autoestima e influência da mídia. Concluiu-se que a adolescência é uma fase de risco para o desenvolvimento de transtornos alimentares e que a anorexia reduz a qualidade de vida dos adolescentes, bem como as mídias sociais influenciam para a exacerbação de comportamento de risco.

Palavras-chave: Anorexia Nervosa; Saúde Mental; Adolescente; Transtornos da Alimentação e da Ingestão de Alimentos; Saúde do Adolescente.

ABSTRACT

Anorexia nervosa is one of the major eating disorders of psychiatric nature that affects a large part of adolescents around the world. The aim of this study was to identify the impact of anorexia nervosa on body acceptability and quality of life in adolescents. It was an integrative review of the literature. The descriptors Anorexia Nervosa, Mental Health, Adolescents, Eating Disorders and Food Intake, Adolescent Health, were defined, based on the Health Sciences Descriptors of the Virtual Health Library and cross-referenced among Scielo, LILACS and Periodicals CAPES. 766 articles were published in Portuguese and after a detailed analysis, the final sample of this integrative review was 10 scientific papers. Regarding the factors predisposing to anorexia nervosa in adolescents, it was evidenced the body image distortion, dissatisfaction with the current body, food restriction, low self-esteem and media influence. It was concluded that adolescence is a risk phase for the development of eating disorders and that anorexia reduces the quality of life of adolescents, as well as social media influence the exacerbation of risk behavior.

Keywords: Anorexia Nervosa; Mental Health; Adolescent; Feeding and Eating Disorders; Adolescent Health.

NOTA

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INTRODUCTION

Adolescence is the period of transition to adulthood, full of morphological and psychosocial changes. Chronologically, this phase corresponds to the period from 10 to 19 years of age, and can be classified into three periods: initial (Pin), intermediate (Pinter) and final (Pfin). At this stage of life, changes occur in body composition, including increased body mass. Several studies have shown that overweight and obese adolescents are more likely to become dissatisfied with their body image, which increases the risk of eating disorders ⁽¹⁾.

The social pressure to achieve pre-defined patterns of beauty exerts a great influence on how individuals perceive their body in the mirror. In this perspective, the desire to reach the current beauty standard and the impossibility of transforming it into reality generates a great conflict that produces dissatisfaction with the body image ⁽²⁾.

It is known that factors such as low self-esteem and distortion of body image reinforce the incessant search for weight loss, leading to excessive physical exercise, fasting and use of laxatives or diuretics in an even more intense way ⁽³⁾.

Body image dissatisfaction is an evident problem in adolescents from different regions of the world ⁽⁴⁾. In this context, eating disorders (ED) are characterized by changes in eating behavior and occur more frequently in females. Among the most common eating disorders, we can highlight bulimia nervosa (BN), periodic eating disorder (PED) and anorexia nervosa (AN) ⁽⁵⁾.

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), EDs are characterized by a persistent eating disorder or food-related behavior that results in the consumption or altered absorption of food and which significantly impairs physical health or psychosocial functioning ⁽⁶⁾.

The occurrence of eating disorders (EDs) has increased significantly in the last 20 years, especially among adolescents between 10 and 19 years of age, with a prevalence of 90-95% among young women ⁽⁷⁾.

Anorexia nervosa, one of the main eating disorders, is a disorder of psychiatric nature and belongs to the group of food ingestion and eating disorders ⁽⁸⁾.

In AN there is an unexplained fear of gaining weight or becoming obese, even when underweight, as well as distortion of body image. The intense or morbid fear of gaining weight represents the central psychopathological aspect of anorexia nervosa ⁽⁹⁾.

In this perspective, eating disorders represent the third most common chronic mental disorder among female adolescents, and although the physiological and medical effects are well characterized, their psychological impact is still poorly understood ⁽¹⁰⁾.

However, the sociocultural impact on the eating pattern and the development of eating disorders (ED) has been studied more frequently, evaluating the family customs and the information transmitted by the mass media, since they tend to reduce considerably the quality of life of the people, impacting not only on the lives of those who are affected by the EDs but also on people around them ⁽¹¹⁾.

Thus, in order to understand the quality of life, one must take into account the self-evaluation related to satisfaction, well-being and consequent psychological achievement in various aspects and dimensions of life. Quality of life, when related to health conditions, usually refers to human limitations in the physical, social and emotional aspects, derived from dysfunctions associated to the individual's health condition ⁽¹²⁾.

In recent years, the pattern of beauty established by social media has pressured, influenced, and cost the lives of teenagers and young adults, who are often plagued by eating disorders that lead to cachexia and, consequently, to death. It should be considered that the multiple factors that trigger eating disorders are not well defined in the literature. Based on the above, the objective of the study was to identify the impact of anorexia nervosa on adolescents' lives and the main factors that predispose the onset of eating disorders. Thus, the guiding question of this study was: what is the impact of anorexia nervosa in adolescence?

METHOD

Ganong's thought ⁽¹³⁾ was used for methodological design, which describes this type of study divided into six stages, the first of which corresponds to the identification of the hypothesis or guiding question, which consists in the elaboration of the research problem and definition of the descriptors. The descriptors used were Anorexia Nervosa, Mental Health, Adolescent, Eating Disorders and Food Intake, Adolescent Health, defined from the DeSC - Health Sciences Descriptors of the Virtual Health Library.

In the second stage, the inclusion and exclusion criteria were determined, which allowed the selection of the sample. It was decided to include only studies published in the last five years, considering complete articles published in Portuguese in Brazilian journals from 2013 to 2017 and field research. Literature reviews and duplicate articles were excluded from the sampling.

In the third step, the categorization of the studies that allowed the extraction of information from the selected articles was carried out.

In the fourth step, the studies were evaluated through critical reading and the articles that composed the corpus of this study were selected.

In the fifth step, the discussion and interpretation of the data obtained

In the sixth step, the review study is presented with the synthesis of the content researched and obtained from the CAPES, LILACS and SCIELO Periodic databases.

The process of selection and search of scientific articles in databases is presented in Figure 01 below

The object-building process involved a broad review of the literature, whose main objective is to identify studies that sought to assess the complexity of anorexia nervosa, as well as the impact on the body's own acceptance, which consequently has an impact on adolescents' quality of life.

37 complete articles published in Portuguese, whether or not translated into other languages, of which 9 are indexed in the Latin American and Caribbean Literature in Health Sciences (LILACS), 17 are in CAPES journals and 11 in Scientific Electronic Library online (SciELO).

After careful analysis of the selected articles, only 4 LILACS studies, 3 CAPES Periodicals studies and 3 Scielo studies fit the pre-established inclusion and exclusion criteria, totaling a final sample of 10 studies in this research.

The selected papers had their abstracts read more than once and analyzed in depth through critical reading based on updated theoretical rationale. The 10 articles included in the study were analyzed in their entirety and the necessary information was extracted to reach the proposed objective, complementing the review analysis corpus.

RESULTS

The integrative reviews of the literature allow us to synthesize findings about a particular studied phenomenon⁽¹⁴⁾. In this perspective, the review studies consist of

organizing, clarifying and summarizing the main existing works, as well as providing complete citations covering the spectrum of relevant literature on a field⁽¹⁵⁾.

In the context of anorexia nervosa, this review was able to show that most of the studies found have a final objective in correlating the eating disorders with the body image that people perceive about their own bodies.

Regarding the articles included in this integrative review, it was observed that there was a prevalence of studies published in the years of 2013 and 2014, as presented in Table 1 below.

Regarding the main factors that predispose the appearance of anorexia nervosa in adolescents, the factors that were mentioned in the publications included in this integrative review were listed. It should be noted that these factors were also mentioned in the articles not included in this review. These factors are described in Table 2.

It is possible to observe that of the 10 articles selected, 30% (n = 3) shows as a predisposition factor for the development of anorexia nervosa, body image distortion, 20% (n = 2) dissatisfaction with the current body, 20% (n = 2) are due to food restriction, 10% (n = 1) is related to low self-esteem and the other 20% (n = 2) are influenced by the media.

DISCUSSION

A study carried out with 277 adolescents between 18 and 19 years of age in Belo Horizonte (MG), pointed out that anorexia nervosa is multifactorial, although sociocultural factors alone are insufficient to trigger this type of pathology⁽¹⁶⁾.

Self-perception of the body is the predominant factor

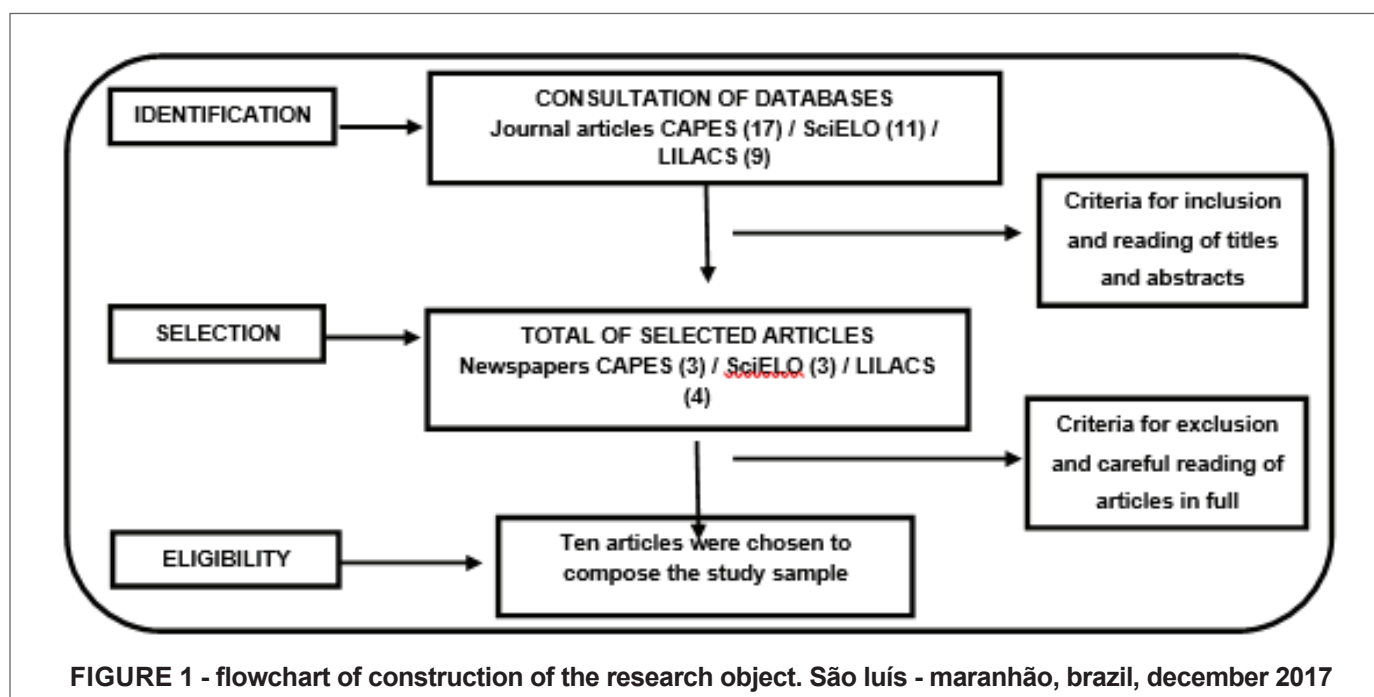


TABLE 1 – Description of studies included in the integrative review, according to the title, authors, year of publication and objective.

Nº	Title	Authors	Year	Objective
01	Dietary patterns and body image in women who do physical activity at the gym	Souza et al.	2013	To evaluate dietary patterns, physical activity and degree of dissatisfaction with body image in women who go to the gym.
02	Body dissatisfaction in schoolchildren from a city in southern Brazil	Leite et al.	2014	To estimate the prevalence of body dissatisfaction, and to verify its association with infant and maternal variables of schoolchildren in the 4th and 5th grade of municipal schools in Itajaí, Santa Catarina.
03	Analysis of the evolution of the diagnostic criteria of anorexia nervosa	Carvalho et al.	2016	To present the evolution of the diagnostic criteria for anorexia nervosa and to discuss its main alterations.
04	Relationship between nutritional status and perception of body self-image of teenagers who practice artistic gymnastics	Santos et al.	2015	To analyze the relationship between nutritional status and the perception of self-image in adolescents practicing artistic gymnastics in the municipality of São Caetano do Sul.
05	Body Image and Eating Habits in Anorexia Nervosa: An Integrative Review of Literature	Leônidas; Santos	2013	To investigate body image constructs and eating habits in anorexia nervosa (AN).
06	Eating disorders in childhood and adolescence	Gonçalves et al.	2013	To discuss eating disorders in children and adolescents regarding their characteristics and risk factors
07	Body image of adolescents from rural towns	Miranda et al.	2014	To evaluate the body image of adolescents from rural cities and their relationships with nutritional status, sex and adolescence.
08	Eating Disorders in Teenage Classical Ballet Dancers	Monteiro; Correia	2013	To analyze the prevalence of eating disorder symptoms (EDs) in teenage classical ballet dancers
09	Physical activity, body image satisfaction and eating behaviors in adolescents	Vasconcelos-Raposo et al.	2014	To verify the relationship between physical activity and satisfaction with body image and eating behaviors.
10	Influence of media and eating behavior of adolescent athletes and non-athletes in artistic gymnastics	Neves et al.	2016	To verify the influence of the media and the internalization of the ideal of thinness on the eating behavior in artistic gymnastics practitioners

TABLE 2 – Identification of the main factors that predispose to anorexia nervosa in adolescents.

Nº	Title	Authors	Year	Predisposition factor
01	Dietary patterns and body image in women attending physical activity academy	Souza et al.	2013	Distortion of body image
02	Body dissatisfaction in schoolchildren from a city in southern Brazil	Leite et al.	2014	Body dissatisfaction
03	Analysis of the evolution of the diagnostic criteria of anorexia nervosa	Carvalho et al.	2016	Food restriction
04	Relationship between nutritional status and perception of body self-image of adolescents who practice artistic gymnastics	Santos et al.	2015	Distortion of self-image
05	Body Image and Eating Habits in Anorexia Nervosa: An Integrative Review of Literature	Leônidas; Santos	2013	Low self-esteem
06	Eating disorders in childhood and adolescence	Gonçalves et al.	2013	Influence of the media
07	Body image of adolescents from rural towns	Miranda et al.	2014	Body dissatisfaction
08	Eating Disorders in Teenage Classical Ballet Dancers	Monteiro; Correia	2013	Distortion of body image
09	Physical activity, body image satisfaction and eating behaviors in adolescents	Vasconcelos-Raposo et al.	2014	Food restriction
10	Influence of media and eating behavior of adolescent athletes and non-athletes in artistic gymnastics	Neves et al.	2016	Influence of the media

in the development of disorders of this nature, as it reflects the satisfaction of people with their body and can be influenced by cultural patterns ⁽¹⁷⁾.

In a study carried out in a private school located in the municipality of São Caetano do Sul with 21 adolescents, the self-image distortion occurred in 6 cases, representing 28.57% of the total sample ⁽¹⁸⁾.

However, although eating disorders usually begin during adolescence, for some authors anorexia can be found from the age of seven years old ⁽¹⁹⁾.

In relation to gender, girls are more dissatisfied with their bodies than boys, and signs and symptoms generally begin to appear around the age of 14 or late adolescence ⁽²⁰⁾.

In this context, a study performed with classic adolescent dancers showed that 83% of them were included in some type of eating disorder ⁽²¹⁾.

On the other hand, a related study pointed out that media vehicles have contributed to the development of unreachable body profiles and that this has increased the rate of depression and development of eating disorders, since it influences body distortion, especially in adolescence ⁽²²⁾.

In addition to the factors mentioned above, anxiety is also one of the predisposing factors, as it generates emotional instability. However, a study on the prevalence of eating disorders in urban workers has shown that women have a greater predisposition to eating disorders. In this perspective, it is convenient to correlate the most frequent findings in the female sex by the fact that there is a greater discharge of hormones during adolescence and menstrual period in women ⁽²³⁾.

On the other hand, aesthetics, self-esteem and health are the reasons that most influence dissatisfaction with body image in adolescents. In a study that researched 1,381 adolescents aged 10 to 17 years in a public school in the city of Saudades in Santa Catarina, it was possible to show that more than half of these adolescents were dissatisfied with the image of their body reflected in the mirror ⁽²⁴⁾.

According to research on the association of body image and eating disorders in adolescents carried out in Minas Gerais, there was a significant number of adolescents who presented the association of two factors that are detrimental to health, such as distortion of body image and susceptibility to the development of eating disorders ⁽²⁵⁾.

A study of 5,067 adolescents from a public school in Santa Maria - RS, highlighted a prevalence of 25.3% for body image dissatisfaction. This dissatisfaction with body image was associated with the nutritional status of adolescents, where many of them were already below ideal weight, a risk factor for the development of eating disorders ⁽²⁶⁾.

Regarding the influence of the media, in a therapeutic itinerary study of adolescents with eating disorders, it was evidenced that the adolescents researched information on weight loss in websites and blogs of any nature. This information often guided healthy life practices, but it also influenced pathological behavior in relation to eating behavior ⁽²⁷⁾.

In this sense, a research conducted with teenagers and children about EDs related to the influence of social media, concluded that these social and information networks are closely related to the worship of thinness, highlighting body patterns that require exaggerated efforts for their reach and, because of the difficulties, favor the development of food problems ⁽²⁸⁾.

Another study on social media and eating disorders, under a multidisciplinary view, also concluded that social media are influential in the development of eating disorder, stressing the importance of controlling the way information related to diets and eating behaviors are transmitted, since they tend to influence the practice of diets without accompaniment of qualified professionals ⁽²⁹⁾.

When correlating all the factors identified in this integrative review, considering that distortion of body image, body dissatisfaction and distortion of self-image are only one factor, it can be inferred that all these factors are translated by low self-esteem. Thus, this combination of factors is one of the main indicators for risk behavior for anorexia nervosa ⁽³⁰⁾.

In this perspective, a recent study on perception alterations syndromes on the body of bodybuilding athletes, contributes to the present review in the sense that the search for body perfection has produced alteration of perception, such as muscle dysmorphia, bulimia and anorexia nervosa as a consequence of well-defined body worship ⁽³¹⁾.

Thus, being affected by some of the eating disorders has a considerable impact on the quality of life ⁽³²⁾.

On the quality of life of these adolescents, the research carried out with dancers on body image evaluation and eating behaviors as possible triggers of eating disorders in pre-teen dancers emphasized that although many of these people improve the symptoms of eating disorders, one large number of individuals continue to have problems with body image and also psychiatric difficulties ⁽³³⁾.

About this problem, one study concluded that problems with decreased quality of life from eating disorders increase the risk for suicide ⁽³⁴⁾.

A meta-analysis review study conducted in 2011 confirmed that mortality rates in all types of eating disorders are much higher than in other disorders of mental origin. This same research evidenced that a proportion of one suicide for every five dead with diagnosis of anorexia nervosa ⁽³⁵⁾.

Finally, a recent study on quality of life in people with anorexia nervosa has shown that these patients have difficulties related to the perception of well-being, autonomy and organization of activities that sustain life in both the personal and professional spheres⁽³⁶⁾.

A study carried out in Rio de Janeiro on eating disorders also identified the female sex with a greater predisposition to develop these health problems, corroborating the findings in the present study⁽³⁷⁾.

FINAL CONSIDERATIONS

It is concluded that adolescence is a risk phase for the development of eating disorders, since the body goes through several hormonal changes in this period, being the favorable moment for dissatisfaction with the body and its physical appearance, multidimensional impact on health.

It has been shown that dissatisfaction with the phys-

ical appearance of the body and the exaggerated search for the beauty standards stipulated by the social media, influence too much for the risk-prone behavior in relation to the adolescents and that the great majority is represented by the female sex.

However, social media has contributed to the exacerbation of inappropriate eating behaviors. It is up to the oversight agencies to better monitor the production and dissemination of advertising demands related to food and physical and mental health, in order to guarantee healthy behaviors in relation to food, physical activities and general well-being.

Studies of this nature are fundamental to recognize anorexia nervosa as a health problem that interferes in the social and educational spheres of adolescents and consequently in their quality of life, subsidizing actions of promotion and prevention of the problem in different everyday scenarios.

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