



INTERVENTIONS OF BODY IMAGE DISORDER AMONG ADOLESCENT: A LITERATURE REVIEW

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ABSTRACT

Adolescence represents the transition from childhood to adulthood and is associated with physical and social changes. Adolescence is a critical period in the development of body image. Critical events or sequences of events such as temptation and rejection can cause body image misperceptions or disturbances. The aim of this literature review is to identify interventions that nurses can do to overcome the problem of body image disorders in adolescents. The method used in the search is the literature study method with a series that includes searching for journal articles using certain keywords from the PubMed and CINAHL databases in the 2018 - 2023 period. The search results obtained 445 articles discussing body image disturbance interventions in adolescents, but only five articles that can meet the inclusion criteria. The results of the study showed that five interventions can be used to treat body image disorders in adolescents, namely application-based interventions (BodiMojo), Healthy Body Image (HBI) interventions, puberty education based on health belief models, application-based Cognitive-behavioral Therapy (CBT), and universal wellness programs. The five interventions proved to be effective in overcoming body image disorders in adolescents.

Keywords: adolescent; body image disorder; intervention

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INTRODUCTION

The term teenager comes from the Latin, adolescent, which means to grow into an adult. Adolescence is a different phase of the developmental cycle of human life (Feldman & Elliott, 1990; Spear & Kulbok, 2004). Among humans, adolescence is a complex, multi-system transition process that involves progressing from childhood immaturity and social dependence to adult life with goals and expectations fulfilled for developmental potential, personal agency, and social accountability (Curtis, 2015; Graber & Brooks-Gunn, 1996; Greenfield, Keller, Fuligni, & Maynard, 2003; L. Steinberg & Silk, 2002).

The physical development of adolescence is the easiest to recognize, namely the metamorphosis of puberty behind the real transformation of a "child" into an "adult". Sexual growth and maturity are influenced by various factors including gender, race, body mass, environmental influences, and overall health status (L. D. Steinberg, 2014; Styne, 2004). The accepted median age for onset of puberty was simplified to 11 years, with boys starting between 9 and 13.5 years, and girls between 7 and 13 years (Curtis, 2015).

According to the official WHO website, adolescence is an important time to develop and maintain social and emotional habits that are important for mental health. This includes adopting a healthy sleep pattern; doing regular exercise; developing coping, problem-solving,

and interpersonal skills; and learning to manage emotions. It is estimated that 10-20% of adolescents globally experience mental health conditions, but these conditions remain underdiagnosed and untreated (Kessler et al., 2012; WHO, 2020). Riskesdas 2018 data shows that the prevalence of mental-emotional disorders aged 15 years overreaches around 6.1% of the total population of Indonesia. It should also be noted that psychosocial problems are a common problem in society (Maulana et al., 2019).

Adolescence represents the transition from childhood to adulthood and is associated with physical and social changes. Adolescence is a critical period in the development of body image. Body image is a component of personal identity. Body image is a person's figure based on anthropometric measurements, contours, and body shape; and also feelings that are correlated with factors that affect satisfaction with the body or certain parts of the body. Body image includes cognitive: thoughts and beliefs about the body, perceptual: how people perceive the size and shape of the body and body parts, affective: feelings about the body, and behavior: actions people take to examine, change, or hide their bodies (Hosseini, 2020).

Disturbed body image may manifest as perceptual (i.e. distortion) and conceptual (i.e. body dissatisfaction) disturbances. Perceptual disturbances involve failure to accurately evaluate a person's body size. Body dissatisfaction includes attitudes or affective perceptions of one's body and negative feelings and cognitions. Disturbed body image is thought to also manifest at the behavioral level, such as body avoidance, body examination, or diet. A negative body image typically indicates dissatisfaction with one's body or body parts and engaging in behaviors such as checking mirrors frequently, weighing oneself, or avoiding public situations. Negative body image is often measured as body dissatisfaction. Body dissatisfaction is caused by a mismatch between the perception of body image and the ideal image (Hosseini, 2020). According to Steg et al., poor body image can be associated with problems with self-esteem, depression, anxiety, and eating disorders. Many studies state that body image disturbance is a risk factor in the development of depression, suicidal ideation, and social anxiety (Bearman & Stice, 2008; Satghare, Mahesh, Abdin, Chong, & Subramaniam, 2019).

Body image in adolescents is also under the influence of parents. The parent-adolescent relationship has a significant influence on the development of adolescent body dissatisfaction. Research has shown that adolescents with better parent-adolescent relationships are less likely to experience body dissatisfaction. Body image in people aged 14 to 27 years is strongly influenced by their peers. Critical events or sequences of events such as temptation and rejection can lead to body image misperceptions. Research has found that the more often you are teased about your size and weight while growing up, the more likely you are to experience body image distortion and body dissatisfaction during adulthood (Curtis, 2015). Research has shown that body image dissatisfaction that occurs during late childhood and adolescence is associated with increased negative affect. Many teenagers of normal weight compare themselves to media images of very thin men and women and consider themselves fat and overweight (Latiff, Muhamad, & Rahman, 2018).

In addition, adolescents can be greatly influenced by media messages, appearance standards, societal attractiveness, and current socio-cultural trends. For example, a study by Lee et al reported that 61.4% of adolescent girls thought that being slim was the ideal body shape for a woman, and 64.3% had tried to lose weight (Choi & Kim, 2017; Mueller, Pearson, Muller, Frank, & Turner, 2010). Other studies have found that for being thin or of normal weight, adolescent girls strive to lose weight more often than their male counterparts and use

unhealthy weight loss behaviors, such as self-starvation and drug use, more frequently. In addition, several studies have found that adolescents' unhealthy weight loss behavior is linked to their distorted perception of body image. This distorted perception can lead to serious health consequences for adolescents because those who overestimate their body size may engage in unnecessary weight loss behavior (Hosseini, 2020). Because body dissatisfaction has been associated to negative health outcomes (Neumark-Sztainer et al., 2006), preventative measures are required (Stice, Rohde, Shaw, & Gau, 2011). Effective programs reduce body image concerns by addressing risk factors such as internalization of the thin body ideal, low self-esteem, body comparison, and appearance conversation, with average effect sizes of .14 and follow-up periods of more than a year (Bearman & Stice, 2008; Richardson & Paxton, 2010).

Many studies have been carried out on body image disturbance interventions, but from the many studies, no literature specifically understands the problems being studied and provides an overview regarding body image disturbance interventions in adolescents. Therefore, this study focuses on the intervention of body image disorders experienced by adolescents. The aim of this literature study is to identify interventions that nurses can do to overcome the problem of body image disorders in adolescents.

METHOD

The writing method used is the literature study method with a series that includes searching for journal articles using predetermined keywords, eliminating journal articles based on established inclusion and exclusion criteria, and synthesizing the results of journal articles into article review tables. Sources of literature reviews that were reviewed were research journal articles from PubMed and CINAHL. The keywords used are body image, adolescent, and clinical trial. Inclusion criteria from sources collected have published categories from 2018 - 2023 and are in English with the types of articles randomized controlled trials, clinical trials, evidence-based practice, and research articles with a minimum number of respondents of 30 people in each control and intervention group. Meanwhile, the exclusion criteria used in this study were observational studies.

RESULTS

The results of the literature review obtained six journals that match the inclusion criteria. Several interventions can be used to treat body image disorders in adolescents. According to research, an app called BodiMojo can be a cost-effective intervention to build a positive body image. This mobile application intervention is based on self-compassion to promote a positive body image (Rodgers et al., 2018). Some journals state that the HBI intervention has proven to be effective in having a positive impact on increasing the level of Quality of Life and body image in male and female school adolescents (Sundgot-Borgen et al., 2019). The results of other studies also prove the effectiveness and efficiency of pubertal health teaching based on the Health Belief Model in improving the perceived body image of adolescent girls (Barkhordari-Sharifabad, Vaziri-Yazdi, & Barkhordari-Sharifabad, 2020).

Table 1.
Literature Review Summary

Authors, Year	Intervention	Methods	Sample	Findings
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(Rodgers et al., 2018)	BodiMojo	RCT	274	These findings show that Bodi Mojo is a cost-effective mobile application that can promote positive body image.
(Sundgot-Borgen et al., 2019)	HBI (<i>Health Body Image</i>).	Cluster-Randomized Controlled.	2446	The HBI intervention has proven to be effective in having a positive impact on increasing the level of Quality of Life and body image in male and female school adolescents.
(Barkhordari-Sharifabad et al., 2020)	Teaching puberty health concepts based on the Health Belief Model.	Quasi-eksperimental	60	The results of the study prove the effectiveness and efficiency of pubertal health teaching based on the Health Belief Model in improving the perceived body image of adolescent girls.
(Aboody, Siev, & Doron, 2020)	Brief cognitive training on a mobile application	RCT	90	These results underscore the potential usefulness of a brief, low-intensity, portable intervention in reducing BID symptoms and in increasing resilience to the thin-body messages often portrayed on social media.
(Agam-Bitton, Abu Ahmad, & Golan, 2018)	Universal wellness program.	RCT	259	These results provide preliminary evidence demonstrating the advantages of mixed-gender settings over women-only settings for providing prevention programs to adolescents aged 13 to 14 years to improve media literacy, self-esteem, and positive body image.

DISCUSSION

In this literature study, several interventions were found that can be used to overcome the problem of body image disorders in adolescents. Based on the articles that have been obtained, adolescence is a period of high risk for experiencing body image disorders. The use of mobile technology application-based interventions has been identified as having a high potential for success in this age group, one of which is BodiMojo. BodiMojo is an application developed for mobile phones (iOS) which is designed with three active components, namely intervention messages delivered twice a day through the application; mood tracking and emotional regulation; and a gratitude journal. The intervention message is distributed in content that focuses on three pillars, namely compassion which consists of caring, self-kindness, and general humanity. The second is related to body image content, media literacy, and peer influence such as fat talk and ridicule based on appearance, and the third is related to healthy lifestyle content such as eating carefully, sleep hygiene, and physical activity. Daily intervention messages come in the form of affirmations, behavioral tips, or psychoeducation, and some contain links to quizzes or meditation audio. Overall, this article states that bodimojo is a mobile platform for the promotion of positive body image so that it can improve body image and self-love in adolescents and adults. This brief intervention delivered by phone twice a day was sufficient to create changes in cognition and emotion-related appearance, as well as to increase self-compassion. BodiMojo is considered a mobile-based intervention that is very cost-effective, easy to disseminate and has a wide reach (Rodgers et al., 2018).

Another study stated that education on the concept of pubertal health based on the belief model of the health belief model can improve body image in adolescent girls. This intervention consisted of eight sessions with a time of 45 minutes/session. The first three sessions are to form an awareness stage that provides knowledge about puberty and hygiene issues. The next three sessions discuss the specific risks and consequences and common

illnesses caused by the lack of observation of pubertal health, the severity of the risk, and the sensitivity of these complications. The seventh session formed aspects of perceived benefits so that they could adopt preventive behavior. Finally, to find out the obstacles felt during the intervention period. By providing an intervention in the form of puberty education for adolescent girls based on the health belief model, providing a clearer understanding of their bodies, increasing their self-esteem and self-confidence, and increasing their enthusiasm for life and motivation to succeed. By focusing on perceptions, thoughts, and increasing beliefs about the usefulness and implementation of the program and understanding the barriers, education about the concept of pubertal health based on HBM helps students to have a more realistic body image (Barkhordari-Sharifabad et al., 2020).

Healthy Body Image (HBI) intervention is a multi-component health promotion intervention that focuses on the positive realization and quality of life-related to health and uses an interactive educational approach. The HBI intervention is intended to facilitate awareness regarding how attitudes toward the body and lifestyle choices obtained through various social channels are learned, and shape the attitudes, feelings, and lifestyles of adolescents. By strengthening the ability to filter media information, reduce unhealthy comparisons, and promote positive self-talk, it is easier to increase body acceptance which can lead to better psychological well-being. In addition, improving self-care and a healthy conscious lifestyle can improve physiological health. Another reason for using HBI interventions is to promote interaction between boys and girls and to reflect cross-gender sociocultural influences on realistic real-life settings. Based on the articles obtained, the mixed gender approach is considered important for girls although it does not affect boys. This may reflect that boys are inherently more accepting of their bodies, and therefore have lower potential for improvement compared to girls. So this intervention has a positive effect on health-related quality of life and improves body image in girls (Sundgot-Borgen et al., 2019).

In addition, intervention called CBT (Cognitive Behavioral Therapy) shows the potential benefit of this relatively short, low-intensity intervention. , and is portable in reducing BID (Body Image Dissatisfaction) symptoms and can also increase resistance to the thin-ideal message that is often portrayed on social media. This conclusion was obtained based on a randomized trial of a sample of 90 women, then evaluated the effects of a CBT-based mobile application designed to increase resistance to body image triggers and reduce symptoms of Body Image Dissatisfaction. In this test, the CBT mobile app was assessed on a sample who used the app for approximately 4 minutes of daily exercise for two weeks. After observing, the results, participants who used the application showed increased resistance and reduced BID symptoms. This effect was rated moderate to large and was maintained at 1 month of follow-up (Aboody et al., 2020).

Then, there is also research related to body image which is based on a school-based universal wellness program commonly called the "In Favor of Myself" program. This research aims to examine the hypothesis that the method of providing universal wellness programs in women-only groups will show advantages over mixed-gender groups. This study was conducted by observing as many as 259 girls (mean 13.82 ± 0.64 years) which were divided into a female-only intervention group, a mixed-gender intervention and a waiting list control group. These participants were asked to complete a self-report questionnaire at baseline, post-intervention (2 months), and at follow-up (3 months). This questionnaire examines changes in self-esteem, media literacy, body image, and risk factors for eating disorders. Based on this study, it was found that higher program satisfaction was reported in the mixed-gender group (91%) vs. the female-only group (79%). This indicates that there are advantages in mixed-gender settings

compared to women-only settings to provide a program to prevent body image disorders in adolescents aged 13 to 14 years to increase media literacy, self-esteem, and positive body image (Agam-Bitton et al., 2018).

CONCLUSION

There are various interventions used to treat body image disorders. Of the 445 articles related to body image disturbance interventions found through Ebsco Cinahl and Pubmed, five articles were taken that were considered relevant to the search criteria. The five articles discuss application-based interventions (BodiMojo), Healthy Body Image (HBI) interventions, puberty education based on health belief models, application-based Cognitive-behavioral Therapy (CBT), and universal wellness programs that have proven effective in overcoming body image disorders in adolescents. In the search results of the five interventions, the majority discussed application-based education. Of course, this can be useful for nurses during a pandemic because it can be done remotely. Nurses can perform and choose from the five interventions to fulfill their roles as caregivers, consultants, and educators to overcome the problems experienced by adolescents with misperceptions and misconceptions of their body image.

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