

Obesity Complications and Challenges

Chapter 4

Body Shaming and Suicidal Risk in Obese Adolescents

Silvestri Maria Catena¹, Hadipour Lakmesani Abed¹, Pagano Dritto Irene¹, Giannitelli Roberta¹, Fazio Marusca¹, Cardile Emanuela¹, Muscatello Maria Rosaria Anna¹, Mento Carmela^{1}*

¹Department of Biomedical and Dental Sciences and Morphofunctional Imaging, University of Messina, Psychiatric Unit at Policlinico University Hospital, Via Consolare Valeria 1, Messina 98125, Italy.

**Correspondence to: Mento Carmela, Department of Biomedical and Dental Sciences and Morphofunctional Imaging, University of Messina, Psychiatric Unit at Policlinico University Hospital, Via Consolare Valeria 1, Messina 98125, Italy.*

Email: antonio.bruno@unime.it & cmento@unime.it

Introduction

Body Shaming (BS) refers to a specific form of negative social interaction, consisting of deriding or discriminating against, for example obese individuals, because of their physical characteristics that do not reflect the aesthetic standards promoted by the mainstream media, advertisement sector, or social networks (Duarte *et al.*, 2017).

Any physical human appearance can be subject to criticism and mockery: physical size, thinness or overweight, stature, hair color, baldness, shape and size of sexual organs, and musculature among others. Moreover, diseases that impact the aesthetics of body such as acne or psoriasis can also bring about negative psychological consequences for the sufferer (Ellias-dotir *et al.*, 2016).

Previous studies show that BS can to some extent predict suicide risk. In specific, Lestari (2019) studied a sample of young females suffering from body shaming issues using a qualitative method and identified the potential effect of BS in the development of body dysmorphic disorder (BDD). Furthermore, a dominant factor was found to be the humiliation that these individuals experienced regarding their body shape, i.e., BS and thus showed an increased risk of suicide. Overall, BS can be considered a form of social aggression with a lot of negative

impacts, which if repeated over time can become a tool for (cyber)bullying on the internet or in real-life (Schlüter *et al.*, 2021).

Body shaming, body positive, and body image

The body shaming phenomenon is configured as a real cyberbullying (Duarte *et al.*, 2017). Subjects of BS can be of both sexes and almost all ages (mainly from 10 to 50 years), and their content mostly involves relatively extreme weight conditions, i.e., thinness (thin shaming) or overweight (fat shaming).

Recently, Elfitasari and colleagues (2022) investigated the effect of body shaming on social anxiety and self-esteem and showed that high levels of body shaming correspond to high levels of social anxiety and low levels of self-esteem.

Victims of BS, especially, adolescents, often show anger, low self-esteem, self-harm, BDD and eating disorders such as anorexia, bulimia, and binge eating. Being convinced that they will never be able to achieve the desired social ideal, these individuals experience strong feelings of shame that can trigger the onset of depressive symptoms (Brewis 2018; Gaffney 2017).

Internalizing the social world, in particular females seem to suffer a higher level of psychological pressure from the media that presents an ideal form of beauty and body shape, thus they are more likely to negatively judge themselves and experience dissatisfaction with their weight (Knauss *et al.*, 2008).

Dissatisfaction with one's body image generates negative feelings and experiences, such as sadness, depression, feelings of guilt and desperate attempts to improve one's perceived body image, which often does not coincide with the real body image (Tiggemann & Zaccardo, 2018; Mento *et al.*, 2021).

Concerns about body image can significantly affect a person's psychophysical well-being. Negative body image includes all cases of clinically significant discomfort related to body image dissatisfaction. Body dissatisfaction can manifest itself through frequent control of weight and body parts or by avoidant behavior such as wearing loose cloths or not going to particular places (e.g. swimming pools) to avoid comparisons with other people (Grogan 2016).

BS seems to also have contributed to social media trends such as "Thinspiration" or "Fitinspiration", which focus on promoting a lean, healthy and athletic body (Carrotte, Prichard & Lim, 2017) which can generate feelings of satisfaction or dissatisfaction and cause the individual to make radical choices when treating his/her body. Websites such as PRO ANA and PRO MIA as examples of pro-eating disorder communities websites have emerged mainly resulting from the idea of ideal beauty and body shape supporting anorexia nervosa, as weight loss has become relevant for their lives and the solution to their health problems (Mento *et al.*,

2021). In these communities, mainly teenagers talk about their physical condition and activities, and exchange advice about weight loss.

Examples of the conversation can give a general overview of the mentality and approach of these individuals:

- *“Today I only ate one bar, that is 90 kcal”*, writes a girl on the pro-ana group;
- *“Drink a lot of water during meals, chew your food well, do not go to vomit immediately but wait 5-10 minutes, tie your hair to prevent some remains from getting stuck ...”*

It can be considered a vicious cycle of strict diets, calorie calculations, and daily monitoring of eating behavior, in which the low weight of one becomes a challenge for the others.

There is no doubt that social trends such as pro ana or pro mia promote a negative approach regarding eating behavior especially in vulnerable populations, e.g., adolescents and trigger the emergence of eating disorders.

In recent years, counter-current online movements have emerged in opposition such as the “body positive” trend which is a growing on social media and seeks to challenge the dominant ideals of appearance and promote the acceptance and appreciation of all bodies and appearances (Cohen *et al.*, 2019a). The new trend is to abandon an ideal of conventional and unattainable perfection to enhance the uniqueness of one’s physical characteristics. Traditional appearance ideals such as the need to seem young, thin, and/or without physical defects are challenged and greater representation and normalization of people with traditionally stigmatized bodies are encouraged (Cohen *et al.*, 2019b; Cwynar-Horta, 2016). The body positive trend has reached media popularity especially on social networks such as Instagram (the search for the hashtag #bodypositive collects 7,069,114 posts and #bodypositivity shows 2,195,968 posts as of now- Instagram) where photos and images of overweight girls and influencers engaged in different activities, accompanied by: “fat girls can be active, fit, and even fabulous!” (Cohen *et al.*, 2019) are being shared and promoted. To support the trend, curvy models such as Ashley Graham, have been instrumental to the promotion of this trend (Cwynar-Horta, 2016). The common goal of the counter-movement is to increase the acceptance, normalization and enhancement of real but underrepresented bodies in traditional media (Saguy & Ward, 2011).

Unlike the aforementioned fitspiration and thinspiration contents, there has been reports about the favorable influence of body-positive contents on body image and self-esteem in women (Cohen *et al.*, 2019a). According to Nelson *et al.*, (2022), viewing positive body-inspired Instagram content, for example, increases levels of body appreciation and satisfaction. The shared content, actually, often aims to enhance the physical characteristics that are often denigrated such as cellulite, stomach swelling, or stretch marks, promoting them as natural

features of the human body that can also be viewed as beautiful (Cohen *et al.*, 2019b; Lazuka *et al.*, 2020).

The increase in popularity of this trend has also attracted the attention of the industries to promote their brand in response to the positive body campaigns via for example advertising with models without make-up and extra-large lines. However, there is still a lack of a truly inclusive narrative, devoid of the shared aesthetic *discrimination* (Kyla *et al.*, 2022).

Risk factors and psychological consequences

During the pandemic an increase in the incidence of eating disorder in the normal population and exacerbation of the symptoms in the clinical population has been reported, thus having consequences for the issue of body image. A variety of factors such as social isolation, sedentary lifestyle, stress, and depression, among other factors, are associated with weight gain and the risk of obesity, in adults as well as in children and adolescents (Steenblock, 2022).

The image of one's body often does not accord with one's desired image or is sometimes perceived in a distorted way, causing shame and a sense of guilt. These emotions seem to contribute to a reduction of physical activity and increased screen time, thus affect the relational sphere of the that person's life (Lucibello, 2020). Previous studies have shown that low self-esteem, suicidal ideation, and depressive symptoms are common among young people with a high body weight. Negative consequences such as weight gain, maladaptive eating behaviors and substance use, as well as poor academic performance moreover, the risk of body shaming is high among this population range (Puhl, 2020).

Actually, victimization of adolescents with obesity is more frequent than that of their peers. The individual is thus in a vicious loop of stigma, victimization, negative outcomes, risk of psychological distress, and consequent cognitive, emotional, and relational distress (Robinson, 2006) ultimately leading to psychological pain, which can then augment the risk of suicidal ideation and/or behavior (Mento *et al.*, 2020).

Suicidal Risk

Suicidality (which includes both the idea and the behavior), represents the third cause of death in the younger population thus a very serious issue in general, and even more critical in particular for individuals suffering from eating disorders in whom the risk is even substantially higher compared to the general population especially in obese male adolescents (Park & Jang, 2018; Smith *et al.*, 2018). In individuals suffering from anorexia nervosa, suicide is the second leading cause of death, and in those suffering from bulimia nervosa and binge eating disorder, risk of suicide is significantly high (Lipson & Sonnevile, 2020). It has been shown that suicide attempts in anorexia nervosa can be related to age, disease duration, low BMI, mood

disorders treated with antidepressants, phobic anxiety, and drug and alcohol abuse. While for Bulimia nervosa, the factors are linked to a general psychopathology, use of antidepressants, family history of alcohol abuse, and increased impulsive behaviors related to self-harm. Suicidality has been associated with psychiatric disorders that are comorbid with eating disorders (Pisetsky *et al.*, 2013).

Perera *et al.*, (2015) systematically analyzed the relationship between BMI and suicidal behavior, including ideation in the adult population (18 years and over). The results confirmed the hypothesis that BMI plays a significant role in psychological well-being and suicidal risk (Perera, 2015). The same relationship has also been reported in a study involving 104,907 subjects aged 12 to 15 on the relationship between body weight, suicidal ideation, and suicide attempt in low- and middle-income countries (Min-zhe Zhang, 2022).

Theoretically, weight loss should lead to an improvement in terms of psychological well-being, however, studies on the effects of bariatric surgery suggest that this is not always the case in real-life, partly due to unrealistic expectations of patients undergoing the surgery regarding the extent of the expected weight loss and the improvement of general and mental health (Homer, 2016). Consequently, even if there is a significant improvement in symptoms in the first year after the intervention, previous issues may re-emerge or exacerbate. There are studies that have shown an increase in self-harm and attempted suicide in patients undergoing bariatric surgery compared to other sex and age matched patients who had not undergone the operation (Castaneda, 2019). Depression, anxiety and suicidal risk also occur in obese adolescents, especially women (Järholm K, 2021).

Treatments cure

As highlighted in scientific literature, negative body image, caused negative emotions, guilt, hopelessness, fear, loss and a mental state caused by thwarted psychological needs, and has been supposed to be a robust predictive variable for suicide; in this condition social media, promote a negative approach to food in a vulnerable population, such as in adolescents, and these conditions can encourage the insurgence of eating disorders (Cook *et al.*, 2016).

Explaining this phenomenon connected to the use of forums and websites, for example pro ana and pro mia, is fundamental because eating disorders, are dangerous diseases, with higher incidence in the adolescence development (Mento *et al.*, 2021).

However, it is important to pay attention at online contents and will to identify danger websites and on maladaptive eating approaches among teenagers.

Considering the unfavorable prognosis for interventions targeting obesity and eating disorders in general, treatment efficacy can indeed benefit from psychological interventions such as

cognitive therapy, psychoanalysis, mindfulness and group therapy, and pharmacological treatments with atypical antipsychotics or selective serotonin reuptake inhibitors, in both inpatient and outpatient contexts (Couturier *et.al.*, 2020; Hay 2020).

- *The Cognitive behavioral therapy (CBT)*

The principal aim of most of psychological management strategies is to help patients excel in handling problems that have evolved due to maladaptive emotions, cognition, and/or behavior, rather than focusing on the reduction of the psychological problems, per se (Juarascio *et al.*, 2015). CBT is a directive therapy, adapted to individuals, couples, and groups, principally aiming to modify negative cognitions and behaviors, based on the Antecedence, Belief, and Consequence, i.e., the “A-B-C Model. It is usually of short duration, and the therapist instructs the patient, actively assuming the role of an expert counselor to facilitate the reduction and elimination of symptoms (Crowe & McKay, 2017). CBT aims to modify what the reference theory defines as negative and biased thoughts and beliefs, dysfunctional emotions, and maladaptive behaviors. The overall aim of the treatment is to help patients assume adaptive learning and desirable changes in their present lives and not focus on their distant past via problem-solving and acquisition of new coping skills (Da Luz *et al.*, 2018).

- *Interpersonal Therapy (IPT)*

In the context of obesity, IPT focuses on modifying problematic interpersonal relationships that maintain eating behavior. Interpersonal problems probably precede the onset and are also a consequence of the disorder, preventing the development of meaningful relationships. There are reports showing that IPT is effective for bulimia nervosa and binge eating disorder (Kazdin *et al.*, 2017).

- *Mindfulness therapy*

The association between depression and eating disorders has been demonstrated (Tang, 2018), that have showed a positive relationship between mindfulness and psychological health. Mindfulness is a psychological process of bringing one’s attention to experiences occurring in the present moment through the practice of meditation and other specific trainings. Mindfulness seems effective in symptom alleviation specifically in depression, stress, and anxiety (Williams *et al.*, 2008).

- *Psychoanalytic therapy*

Psychoanalytic treatment offers the possibility to let patients talk about their sufferings. Free associations, transfer and counter-transfer, and dream analysis are the basis of this treatment via a potential access to the patient’s subconscious (Biondo, 2015). In the psychoanalytic approach, the experience of psychological suffering is scaled down and mentalized, making it

affordable for patients to tolerate and live. The analyst establishes a safe emotional link that allows the possibility to express and share, and give a meaning to suffering of the patient. According to Heinamnn (1950), the analyst can go through the pain together with the patient, as the analytical matrix is represented by the relation between these 2 people; in which the analyst does not experience absence of feelings, but lack of capacity to understanding the therapeutic process. The essential instrument of psychoanalysis is the understanding of subconscious dynamics, i.e., transfer and counter-transfer, that constitute the hallmarks of the therapeutical relation.

- *Group Therapy*

This intervention's goal is to improve the patient's general state of health and reduce their risk of obesity-related complications (Gullo *et al.*,2014). Group therapy is a form of psychotherapy carried out in a group setting. The group therapeutic relationship is a broad term that includes group climate, group cohesion, and group therapeutic alliance. This therapy is a narrative autobiographical approach to weight management and at the end of the treatment, supported by other reports in the literature, the treatment is effective in helping patients monitor their maladaptive emotional responses (Gullo *et al.*, 2014).

- *Psychoeducation*

Psychoeducation in the context of obesity, provides an informative part, which aims to raise awareness regarding nutritional principles, importance of the food/emotion relationship, and the etiology of obesity and related disorders. This intervention mainly aims to provide insight regarding the factors that predispose, precipitate, or maintain the onset of obesity and eating disorders to prevent and reduce their maintenance factors (Anagarano 2007). This approach helps the patient to develop and/or increase communication skills and problem solving since it is necessary to promote guidelines and regulations for healthy eating habits in the target population (Griffiths *et al.*, 2018, Mangweth-Matzek & Hoek, 2017). Moreover, it is absolutely necessary to recognize maladaptive signs, words, beliefs, and approaches in adolescents along with specific educational programs at schools, even for teachers and parents (Mairs & Nicholls, 2016).

Conclusion

The literature indeed emphasizes our complex psychological/physiological relationship with food. Obese individuals in general and adolescents in particular are not efficiently able to manage this relationship, psychological intervention thus becomes fundamental to help them to process and counteract against the risks associated with their condition i.e. maladaptive eating habits, negative emotions, anger, guilt, depressive mood, and suicidal risk and reduce. Different studies have found that excessive body weight, and negative self-image can limit quality of life.

Identification of risk factors is a necessary action for the prevention and promotion of mental health. Although the main causes can be traced to mood disorders and use of substances, suicidality is a multifactorial phenomenon characterized by a complex interaction of psychological, biological, environmental, cultural, economic, genetic, social, and psychiatric components, among others. In the current work, the importance of psychoeducation for adolescents about nutritional principles and information on factors that can trigger and maintain eating disorders are emphasized. A comprehensive therapeutic approach can indeed play an important role in improving the quality of life of these individuals and reduce the risks associated with eating disorders, such as depressive mood, psychological pain, and suicide.

References

11. Vanderbruggen N, Matthys F, Van Laere S, Zeeuws D, Santermans L, Van den Ameele S, Crunelle CL. Self-Reported Alcohol, Tobacco, and Cannabis Use during COVID-19 Lockdown Measures: Results from a Web-Based Survey. *Eur Addict Res.* 2020;26(6):309-315. doi: 10.1159/000510822. Epub 2020 Sep 22. PMID: 32961535; PMCID: PMC7573904
2. Panno A., Carbone A. G., Massullo C., Farina B. & Imperatori C. Covid-19 Related Distress Is Associated With Alcohol Problems, Social Media and Food Addiction Symptoms: Insights From the Italian Experience During the Lockdown. *Front. Psychiatry*, 25 November 2020 Sec. Addictive Disorders. <https://doi.org/10.3389/fpsy.2020.577135>
3. Andreassen, C.S. Online Social Network Site Addiction: A Comprehensive Review. *Curr Addict Rep* 2, 175–184 (2015). <https://doi.org/10.1007/s40429-015-0056-9>
4. Krashes M. J. & Kravitz A. V. Optogenetic and Chemogenetic Insights Into the Food Addiction Hypothesis. *Front. Behav. Neurosci.*, 28 February 2014 Sec. Motivation and Reward <https://doi.org/10.3389/fnbeh.2014.00057>
5. Yekaninejad M. S., Badrooj N., Vosoughi F., Lin C. Y., Potenza M. N. & Pakpour A. H. Prevalence of food addiction in children and adolescents: a systematic review and meta-analysis. *Obesity Reviews* Volume 22, Issue 6. <https://doi.org/10.1111/obr.13183>
6. Brewis AA, Bruening M. Weight Shame, Social Connection, and Depressive Symptoms in Late Adolescence. *Int J Environ Res Public Health.* 2018 May 1;15(5):891. doi: 10.3390/ijerph15050891. PMID: 29723962; PMCID: PMC5981930.
7. Carrotte ER , Prichard I , Lim MSC “Fitspiration” on Social Media: A Content Analysis of Gendered Images *J Med Internet Res* 2017;19(3):e95 doi: 10.2196/jmir.6368
8. Cohen R., Irwin L., Newton-John T., Slater A., #bodypositivity: A content analysis of body positive accounts on Instagram, *Body Image*, Volume 29, (2019 a), Pages 47-57, ISSN 1740-1445, <https://doi.org/10.1016/j.bodyim.2019.02.007>.
9. Cohen, R., Fardouly, J., Newton-John, T., & Slater, A. (2019b). #Bopo on Instagram: An experimental investigation of the effects of viewing body positive content on young women’s mood and body image. *New Media and Society*, 21(7), 1546–1564. <https://doi.org/10.1177/1461444819826530>
10. Cwynar-Horta, J. (2016). The commodification of the body positive movement on Instagram. *Stream: Culture/Politics/Technology*, 8(2), 36-56.
11. Elfitasari, T., & Winta, M. V. I. (2022). The Role of Self-Esteem in Mediating Social Anxiety on Body Shaming Victims. *Psikostudia: Jurnal Psikologi*, 11(2), 249-258.
12. Gaffney, Katelyn J., “Negative affects that Social Media causes on Body Imaging” (2017). Undergraduate Honors

College Theses 2016-. 13. https://digitalcommons.liu.edu/post_honors_theses/13

13. Kyla N. Brathwaite & David C. DeAndrea (2022) BoPopriation: How self-promotion and corporate commodification can undermine the body positivity (BoPo) movement on Instagram, *Communication Monographs*, 89:1, 25-46, DOI: 10.1080/03637751.2021.1925939
14. Knauss, C., Paxton, SJ & Alsaker, FD Insoddisfazione per il corpo nei ragazzi e nelle ragazze adolescenti: coscienza corporea oggettivata, interiorizzazione del corpo dei media Ideale e pressione percepita dai media. *Ruoli sessuali* 59 , 633–643 (2008). <https://doi.org/10.1007/s11199-008-9474-715>.
15. Lazuka, R. F., Wick, M. R., Keel, P. K., & Harriger, J. A. (2020). Are we there yet? Progress in depicting diverse images of beauty in Instagram’s body positivity movement. *Body Image*, 34, 85–93. <https://doi.org/10.1016/j.bodyim.2020.05.001>
16. Nelson L., Harriger Jennifer A., Miller-Perrin Cindy, Rouse Steven V., The effects of body-positive Instagram posts on body image in adult women, *Body Image*, Volume 42, 2022, Pages 338-346, ISSN 1740-1445, <https://doi.org/10.1016/j.bodyim.2022.07.013>.
17. Pew Research Center. (2018). Social media use in 2018 Retrieved from. <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018>
18. Saguy, A. C., & Ward, A. (2011). Coming out as fat: Rethinking stigma. *Social Psychology Quarterly*, 74, 53–75. <http://dx.doi.org/10.1177/0190272511398190>
19. Schlüter, C., Kraag, G. & Schmidt, J. Body Shaming: an Exploratory Study on its Definition and Classification. *Int Journal of Bullying Prevention* (2021). <https://doi.org/10.1007/s42380-021-00109-3>
20. Tiggemann, M., & Zaccardo, M. (2018). ‘Strong is the new skinny’: A content analysis of #fitspiration images on Instagram. *Journal of Health Psychology*, 23, 1003–1011. <http://dx.doi.org/10.1177/1359105316639436>
21. Lucibello KM, S. C. (2020). Lucibello KM, Sabiston CM, Mediating role of body-related shame and guilt in the relationship between weight perceptions and lifestyle behaviours. Lucibello KM, Sabiston CM, O’Loughlin EK, O’Loughlin JL. Mediating role of body-related shame and guilt in the relation *Obes Sci Pract.*, Lucibello KM, Sabiston CM, O’Loughlin EK, O’Loughlin JL. Mediating role of body-related shame and guilt in the relationship betw6(4):365-372.
22. Puhl RM, L. L. (2020). Weight Stigma in Youth: Prevalence, Consequences, and Considerations for Clinical Practice. *Curr Obes Rep.*, 9(4):402-411.
23. Steenblock C, H. M. (2022). Obesity and COVID-19: What are the Consequences? *Horm Metab Res.*, 54(8):496-502.
24. Zipfel S, S. U. (2022). The hidden burden of eating disorders during the COVID-19 pandemic. *Lancet Psychiatry.*, 9(1):9-11.
25. Cook, B., Wonderlich, S. A., Mitchell, J., Thompson, R., Sherman, R., & McCallum, K. (2016). Exercise in eating disorders treatment: systematic review and proposal of guidelines. *Medicine and science in sports and exercise*, 48(7), 1408.
26. Couturier, J., Isserlin, L., Norris, M., Spettigue, W., Brouwers, M., Kimber, M., ... & Pilon, D. (2020). Canadian practice guidelines for the treatment of children and adolescents with eating disorders. *Journal of Eating Disorders*, 8(1), 1-80.
27. Da Luz, F. Q., Hay, P., Touyz, S., & Sainsbury, A. (2018). Obesity with comorbid eating disorders: associated health risks and treatment approaches. *Nutrients*, 10(7), 829.
28. Griffiths, S., Rossell, S. L., Mitchison, D., Murray, S. B., & Mond, J. M. (2018). Pathways into treatment for eating

- disorders: a quantitative examination of treatment barriers and treatment attitudes. *Eating disorders*, 26(6), 556-574.
29. Hay, P. (2020). Current approach to eating disorders: a clinical update. *Internal medicine journal*, 50(1), 24-29.
30. Juarascio, A. S., Manasse, S. M., Goldstein, S. P., Forman, E. M., & Butryn, M. L. (2015). Review of smartphone applications for the treatment of eating disorders. *European Eating Disorders Review*, 23(1), 1-11.
31. Kazdin, A. E., Fitzsimmons-Craft, E. E., & Wilfley, D. E. (2017). Addressing critical gaps in the treatment of eating disorders. *International Journal of Eating Disorders*, 50(3), 170-189.
32. Lipson, S. K., & Sonnevile, K. R. (2020). Understanding suicide risk and eating disorders in college student populations: Results from a National Study. *International journal of eating disorders*, 53(2), 229-238.
33. Lock, J., & La Via, M. C. (2015). Practice parameter for the assessment and treatment of children and adolescents with eating disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 54(5), 412-425.
34. Mairs, R., & Nicholls, D. (2016). Assessment and treatment of eating disorders in children and adolescents. *Archives of Disease in Childhood*, 101(12), 1168-1175.
35. Mangweth-Matzek, B., & Hoek, H. W. (2017). Epidemiology and treatment of eating disorders in men and women of middle and older age. *Current Opinion in Psychiatry*, 30(6), 446.
36. Mento, C., Silvestri, M. C., Muscatello, M. R. A., Rizzo, A., Celebre, L., Cedro, C., ... & Bruno, A. (2021). The role of body image in obese identity changes post bariatric surgery. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 1-10
38. Mento, C., Silvestri, M. C., Muscatello, M. R. A., Rizzo, A., Celebre, L., Praticò, M., ... & Bruno, A. (2021). Psychological impact of pro-anorexia and pro-eating disorder websites on adolescent females: a systematic review. *International Journal of Environmental Research and Public Health*, 18(4), 2186.
39. Pisetsky, E. M., Thornton, L. M., Lichtenstein, P., Pedersen, N. L., & Bulik, C. M. (2013). Suicide attempts in women with eating disorders. *Journal of abnormal psychology*, 122(4), 1042.
40. Park, S., & Jang, H. (2018). Correlations between suicide rates and the prevalence of suicide risk factors among Korean adolescents. *Psychiatry Research*, 261, 143-147.
41. Smith, A. R., Zuromski, K. L., & Dodd, D. R. (2018). Eating disorders and suicidality: what we know, what we don't know, and suggestions for future research. *Current opinion in psychology*, 22, 63-67.
42. Elliasdotir, E. L. (2016). Is body shaming predicting poor physicalhealth and is there a gender differences. 1-18.
43. Duarte, C., Gouveia, J. P., & Stubbs, R. J. (2017). The prospective associations between bullying experiences, body image. *Personality and Individual Differences*, 319-325.
44. Lestari, S. (2019). Bullying or body shaming? Young women in patient body dysmorphic disorder. *PHILANTHROPY: Journal of Psychology*, 3(1), 59-66.
45. Thomson, S. B. (2010). Sample size and grounded theory. *Journal of Administration and Governance*, 5(1), 45-52. <https://doi.org/10.1080/08870440903194015>
46. Grogan S (2016) *Body image: understanding body dissatisfaction in men, women and children*. Taylor & Francis.
47. Biondo D., (2015). Le risposte dell'analista al dolore. Dalla reazione all'elaborazione. In Lupinacci MA., Biondo D., Accetti L., Galeota M., Lucattini A., *Il dolore dell'analista. dolore psichico e metodo psicoanalitico*. Astrolabio.