



Original Contribution

PRO ANA (1): EATING DISORDER OR A LIFESTYLE?

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ABSTRACT

Pro Ana is a way of life promoted only in a virtual space, the aim of which is to obsessively strive to achieve the target very low weight. This aspiration is perceived as the only way to achieve perfection, bodily and consequently also spiritual excellence. Anorexia is, according to the participants of this movement, a deliberately chosen lifestyle, not a disease. It is a demonstration of strength and not a proof of the existence of a mental or physical health problem. The Internet, on the other hand, is a "shelter" from the real, uncomprehending, medicalizing, disapproving world. It is on the Internet that Pro ana's portals are a place to create identity of participants of the movement.

Key words: Pro ana, eating disorders, pro anorexia movement, addiction, lifestyle

INTRODUCTION

It is difficult to deny the fact that a large part of social life is related to food and eating and for many people food is one of the greatest pleasures of life (2). It is also a common opinion that proper nutrition is one of the conditions of human health. Time deviations from previous feeding patterns are common and may be caused by both personal choice and also medical advice. However, there are cases when eating disorders take a form of pathological behavior or even illness.

Eating disorders as an addiction

Although the concept of addiction most often refers to the situation in which the interaction of a living organism and an addictive substance occurs, the problem of addiction involves a much larger area of human activity. There are different behaviors, which, due to their addictive or habitual nature, are called addictions. These include, but are not limited to, pathological gambling, computer/ internet addiction, shopping, tanning, sex, labor, working out at the gym or eating disorders. This group of addictions is most often referred to as behavioral or non-substantial. This type of addiction is characterized by the occurrence and the persistence of a certain activity, loss of

control over the time of its performance resulting in the prolongation of that time, the appearance of the abstinence syndrome in the situation of non-performance of this activity, as well as the compulsive desire to continue the activity despite its negative effect on mental functioning, social and even physical condition of a human (3).

Over the past several years, in the world and also in Poland, you may notice an increase in a number of patients diagnosed with illnesses from eating disorders. These diseases, although affecting more and more people, continue to be a matter unwillingly discussed (4). According to the ICD-10 classification (5), the term "eating disorder" includes two distinct groups: anorexia nervosa (mental anorexia) and bulimia nervosa (mental bulimia), as well as their atypical forms. The American DSM-IV classification (6) distinguishes the binge eating disorder and the syndrome of night eating (7).

Non-classified but disordered eating patterns also include orthorexia (dependence on so-called healthy foods), diabulimia (intentional manipulation of insulin doses by persons with type 1 diabetes to control body weight), bigorexia (mental disorder involving subjective lack of aesthetics of oneself's body in the sense of having insufficient muscle mass, leading for example, to compulsive exercises at the gym) or alcorexia (which involves replacing food by

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alcohol with the belief that it will keep your body lean).

Although eating disorders have been said for many years as a health problem, today this phenomenon raises many questions, and definition and diagnostic difficulties occupy a leading position among them. As Cezary Żechowski observes (8), for many years there has been the discussion as to whether eating disorders should be treated as the result of endocrinologic disorders, neurological or internal medicine disease or psychological problem. Finally, it was found that at the grounds of eating disorders there are significant changes in self-perception, striving for unrealistic self-esteem goals, imposing a rigorous diet and changing in functioning of the centers controlling an appetite. All these, together with other observations and studies, have confirmed the earlier hypotheses of physicians that eating disorders are related to mental disorders whose complications may have a significant effect on the functioning of the entire body.

It is important to mention that eating disorders sometimes also affect children, however in this case, the subclinical picture of anorexia and other forms of disorders e.g. emotional avoidance of food as well as selective eating, are more frequent (9).

Eating disorders as a lifestyle

Eating disorders as disease units are the subject of numerous scientific studies and publications; they are present in media, films or popular literature. However in this text, I would like to present the phenomenon of "Pro-Ana" movement, which promotes anorexia as a lifestyle, which is (intentionally) rather a conscious choice than a mental disorder (10). Pro Ana is also known as a conscious anorexia, and the famous words of Christopher Marlow *Quod me nutrit me destruit*, seem to be the guiding thought of its supporters.

According to French authors (11), the movement was born in the United States in 2000 (12). The Polish researcher of the phenomenon - Iwona Startek, draws attention to the two main stages of development of this movement. The first, referred to as the "first wave," began around 2001. It was then when the first, mostly English-speaking, pro-life portals were created and their main purpose was to allow anorexia sufferers to contact other patients and fight their loneliness. These pages, however, also included advice on weight loss, body care and concealment of non-eating. The movement has, however, promoted the idea

that patients should choose themselves whether and why the therapy start and that they should function like any other member of a society without being incessantly encouraged to start treatment.

Organizations promoting the fight against eating disorders started to intervene and pro-ana websites were started to be closed. These actions brought the opposite effect - the movement gained publicity and more and more new websites were launched which were mostly leaded by so called wannarexic i.e. girls who want to have anorexia and look for information on how to lose weight fast. At that time the movement gained the biggest fame with its flagship slogan: "Anorexia is not a disease, but a way of life." From this moment on, we can say about the second wave of pro-ana movement (13).

Pro ana is most often defined as a way of life, which goal is the obsessive pursuit of achieving the ultimate, very low weight. This pursuit is seen as the only way to achieve perfection (14), a bodily perfection, and what goes after it, also a spiritual perfection. Behavior repeatedly associated with anorexia, however, is, according to Pro ana participants, a demonstration of strength, not a proof of the existence of a disease: "you may already know a difference between us rexies and anorexics! If you expect respect and admiration for a lifestyle of your choice you are rexie". (15)

The Internet as a space of existence for Pro ana movement

Technological development and development of telecommunications infrastructure have enabled an intensive development of communication. The fastest growing tool came out to be the Internet.

The term "cyberspace" became popular thanks to the novel *Neuromancer* by William Gibson. The presented cyberspace has become a "place" difficult to distinguish from a real world, its alternative, existing only in the memory of computers and in the minds of its users (16). Of course, this is not the only model of perceiving a virtual reality, but sufficiently groundbreaking that you may find many references until today. Particularly noteworthy is the social dimension of cyberspace, which is crucial for the Pro Ana movement. "The Internet is not only an easy access to information or exchanging of e-mails, but also the ability to interactive communication with other people. Such way of contact can facilitate social interaction, both with friends and strangers". (17)

As the study of Rebeca Peebles (18) shows, it is the Internet which is a main space for development of the movement, and the performance of the virtual community is taking place through social media, blogs and online forums.

According to the results of the study, the fact that you can find a community in the web that glorifies anorexia and which members support each other constitutes a factor that deepens the disease. These are exactly the websites devoted to Pro ana, which abound in messages that aim to motivate to continue to lose weight or keep it low.

These websites are characterized by several important features, and the most important is a strong motivation for extreme weight loss. Interestingly, information on the negative health effects of such behaviors is not often included, which does not prevent simultaneous encouragement for starvation.

The structure of the websites includes various "chapters", all aimed at intensifying loss of weight. There is, among others, so-called "Decalogue of Ana" which is a collection of numerous injunctions and bans that are meant to give you a sense of radical slimming, and among them dreadfully sound "maxims": *Better to be skinny than healthy, Food is your enemy, Not eating and being skinny is a sign of will and success, Along with weight loss, self-confidence increases, "Fu ... food, drink tea", "If the stress burns calories, I will be a supermodel"* (19), etc.

There are also links to websites informing about the caloric value of food products as well as websites devoted to diets and physical exercises. Not less widespread is a contact to Pro ana international websites.

The next chapter is devoted to photos of extremely emaciated actresses and models, which are often so prepared that their heroines look slimmer than they really are (20).

Martyna Stochel and Małgorzata Janas-Kozik referring to the research of Harshbarger and cooperators (21) pay attention to particularly dangerous content included in the "Tips and tricks" chapter. There are, among others:

- diets and restrictive methods of calorie restriction, e.g. *If you feel bad when you eat too little, eat only hard-boiled egg, apple and drink a glass of water, it will fill you up for the whole day.*

- *mouth with a strong mouthwash or brush your teeth. The food will not taste good then, so what eat for?*

- ways of cheating, related to food: *Check the fridge when no one is around. Find products that you could eat and discard them, for example, three eggs and a piece of butter. If someone offers you something to eat, you can say that you ate three scrambled eggs and you are already full. If someone wants to check it out, the products will be missing, which will make your story credible. Do not forget about plates and cutlery!, as well as about cheating in the case of other situations, e.g. Before weighing, put coins into a bra and underpants, it will make you heavier. When weighing at the doctor's, usually you do not need to take off your underwear. If someone is watching you while eating, pretend you are eating. Then spit a food into a cup when you will be "drinking". Try not to swallow anything. Take some food in your mouth (remember and specify its taste, smell, etc.), then spit it out - you will feel more or less like you actually ate it, and the willingness for further portions will pass. Shut up in the room ensuring that you have a lot of learning. Then exercise until the evening*

- information on pharmacological drugs that help in losing weight, as well as descriptions of your own experience related to their use.

An important element of websites is the so-called pyramid of drastic weight loss, which consists of: water, pills, diet drinks, cigarettes, tea and occasionally food (22).

Via the Internet the so-called Anas of a Month are chosen, that is those girls and young women who made the greatest "progress" in slimming. Their photos along with weight and body dimensions are placed on websites. Girls also often post photos on their blogs documenting progress in losing weight, publish supporting posts and exchange experiences. An important part of the Pro ana's blog is an online diary that contains information related to the events of everyday life and an accurate description of what a given person ate during a day, including the calorie value of meals. People reading the blog have an opportunity to leave a comment, positive or negative, depending on how much its owner managed to limit the calories consumed within a day (23.) Participants of the forum have an opportunity to share their feelings and experiences, as well as find a partner in a hunger strike (24).

Participants of Pro ana movement

The Pro ana participants are primarily adolescent girls and young women between 13 and 25 years of age (25) who have decided to lose weight (26). The Polish community,

similarly as in other countries, mainly consists of people who are in the age of adolescence (27).

The overwhelming majority of people achieve BMI below the normal value (28), and almost half meet the weight criterion for anorexia (29). It is worth emphasizing, however, that various results have been obtained in various studies (30).

Disease or a lifestyle?

The Pro ana participants are defined as the virtual community (31). Lisa Hanson compares participants of the movement to communities focused on religion, and the Internet space to a kind of a confessional (32). As emphasized by Małgorzata Talarczyk and Katarzyna Nitsch, the embodiment of the disorder, especially in a dimension of religion, contributes to creating an atmosphere of sublimity and dedication to the cause (33). Regardless of existing definitions, attention is paid to the creation of its own symbols and a specific language. They play an important role in creating a sense of belonging to the community (34).

Girls identifying themselves with Pro ana, called themselves "small butterflies" or "porcelain butterflies". A red bracelet resembling a thin string, worn on the right wrist has become their badge.

Personification of ana plays an important role. It is most often expressed in characteristic phrases that are intended to emphasize a strong emotional relationship with ana, e.g. "Ana- my only friend" (35).

The opinions of researchers and clinicians regarding the assessment of the phenomenon of pro-anorexia are divided. Some see in the Pro ana community a safe shelter for people suffering from anorexia nervosa, others a serious threat, as well for those who are already ill as those who are healthy (36). Regardless of existing views, Pro ana certainly constitutes a threat to the mental and physical health of its participants. It also, not in a smaller degree, contributes to the disruption of social relations. As the women researchers of the phenomenon warn: "Pro ana is an introduction to a real, inevitable disease, and is mistakenly perceived as a 'cool' way to lose weight, a lifestyle. Pro ana ALWAYS (37) ends sooner or later with more or less mental problems. There is no option to hold this under control. It is simply impossible. You have to be really naive to believe that when professing the principles of pro ana leads to a satisfying lower weight, you suddenly forget about everything

and return to a normal life. NO, it does not work that way. Changes in the psyche (which are very difficult to reverse or repair) develop very quickly even in people who consider themselves strong. You also can not forget about the physical consequences – pro ana completely, like anorexia and bulimia, destroy the body" (38).

At this point, it is worth to quote a different, though somewhat controversial opinion represented by, among others, Karen Dias. Rejecting the medical approach to eating disorders, the researcher presents cyberspace as a place where people struggling with anorexia (including Pro ana), can find acceptance. The same, cyberspace becomes a place of a safe shelter (39). Similarly, Emma Rich, on the basis of interviews with patients diagnosed with anorexia nervosa, draws attention to the sense of profound loneliness of Pro ana people, resulting in seeking contacts and interpersonal relationships among their loved ones. It is the Internet that allows Pro ana participants to share information that could not be revealed in the real world (40).

On-line environment is thus an alternative to the environment in the real world, where, apart from the approval of the unnaturally lean body, there is no acceptance for anorexia nervosa.

Risks factors

Similarly, as in the case of the already mentioned compulsive eating disorders, risk factors may also be indicated in the case of Pro ana behaviors. They include both personality and socio-cultural determinants.

The personality factors include: negative self-esteem, a tendency towards other compulsive behaviors, a tendency to suppress emotions, low level of autonomy, perfectionism or low resistance to stress. Another important factor is the so-called external placement of a sense of control (41). The Locus Of Control Theory was created by Julian Rotter and concerns the way people interpret events. People with an external location of control are convinced that life is controlled by factors independent of their conscious and deliberate influence: e.g. destiny, God, fate, illness, although they do not always have to be external factors. According to some opinions, there is a connection between the fact of sexual abuse in a childhood and the existence of eating disorders (42).

Among the social determinants of eating disorders, the attention is paid to the two groups of factors. One is related to family

factors, to the other one can include social factors, inherent in a wider environment of an individual as well as in the culture, in which a life of an individual proceeds.

According to some researchers, people with eating disorders (especially anorexia and bulimia) come from dysfunctional families, in which faulty behaviors prevail. There may be addictions, disturbances of interpersonal relations, emotional disturbances of family members, as well as, as Bohdan Woronowicz points out, the occurrence of appetite disorders (43). The mechanism of denial, preserved in such families, does not allow them to identify the problem (44)

The socio-environmental factors associated with the culture of a "lean body" seem equally important (45). In the times of strong competition, in both professional and personal fields, there is a constant compulsion to create the most desirable social image. This applies to both competence and, above all, appearance. The constant search for "me - more attractive", "me-better", "me-admired" becomes a norm. Thus, the features associated with beauty and vitality grow into obsessively desirable ones. "Culture of thinness" exerts enormous pressure, leading to pathological concentration on diets. From this perspective, women are doubly exposed to the development of eating disorders. Their bodies are the object of both aesthetic and economic domination (46). Such thinking prevails in younger and younger people. Being "ana" makes it possible to achieve these characteristics both in the dimension of nutrition, as well as physical exercises. Pro ana is becoming a "cure" for all problems, a guarantee of a happy life, a life goal.

The scale of the phenomenon

Pro ana is the international phenomenon and its scale is difficult to estimate. However, everything indicates an upward tendency of the phenomenon. Because it is just the Internet which is the main, and in fact the only space for running of the movement, it is not surprising that a number of websites devoted to this phenomenon is growing very fast.

One should take into account the fact that belonging to the community is also manifested in private blogs, Internet forums and various "unofficial" social networks, which causes camouflaging and distorting the real and already difficult to estimate data on a scale of the phenomenon.

Regulations

The world's largest organizations and medical associations struggling with eating disorders have adopted an unequivocal position on the phenomenon of pro-anorexia, which shows that websites promoting eating disorders, also as a "lifestyle", support health-threatening behaviors and neglect the serious consequences of starvation (47).

It is not surprising then that in some countries some attempts are made to regulate the problem of promoting anorexia or other forms of starvation in media (48). In 2008 the National Assembly of France adopted a law imposing a penalty of 35,000 Euro and two years in prison for encouraging women to an extreme diet and 45,000 Euro and three years in prison if death is the result of anorexia (49). Similar legal solutions are also proposed in other countries.

CONCLUSION

The ideal of a slim figure is not a figment of modern times, however in recent years it is a body that has become such a strong means of expressing identity, a cultural requirement through which people perceive themselves and other persons (50). Losing weight as well as maintaining low body weight is one of the most important elements of life for many people.

According to the promoted canons, attractive, which is above all slim body, is a prerequisite for success in every area of life. Such conviction is particularly strongly established among girls and very young women. "For youth, mass culture is a kind of "a well" from which they can draw all kinds of patterns, and since the cult of a body is so widely promoted by media, they adopt it to their system of values and on a basis of it, form their own identity. They submit to cultural and media messages, ascribing excessive value to the ideal of a beautiful, slim body, which is identified with attractiveness, happiness, a key to success and a good fortune, and more and more often with the ability to control one's own life" (51). In order to conforming to the ideal of a feminine beauty, disseminated in the mass media, they are ready to do almost anything (52), including dedication of one's own health.

The most worrying is the fact that in some cases eating disorders become a conscious choice (53). This is the case of the Pro ana movement, where the participants of the movement try to give a new meaning to the concept of normal weight, in which thinness

should be accepted as a normal range, while they determine their health status as a lifestyle, demanding acceptance for their own choices (54). As Maciej W. Pilecki, Barbara Józefik and Kinga Sałapa draw attention, due to such "phenomena" eating disorders cease to be perceived as a disease, and they become an expression of personal transgression, self-creation supported by other participants of such movements (55).

The existing state shows how important role is played by preventive measures not only among young people, but also parents and in general - a wider social environment of a young person. Actions are required at many different levels to reduce the prevalence of disorders, such as information campaigns among children and adolescents, as well as among medical personnel (56). Certainly, it is necessary to educate and sensitize physicians, including primary care physicians, to the existing problem, changing eating habits and their often dramatic effects. No less important are the observations of families, relatives and all those in whose company an anorexic person lives, as well as their involvement in the subsequent treatment process. Promoting sensible nutritional education seems to be an equally important factor in preventing eating problems.

As the Polish researchers emphasize, "it is necessary to limit the promotion of excessively slim figure in media, especially in professions where external appearance matters, i.e. model, actress. Only the joint effort of many people (doctors, psychotherapists, dietitians, parents, teachers, journalists) will allow the correct and quick diagnosis and effective therapy" (57) without which, a life of a young person can tragically end. It is difficult to deny it, even if for many people it is only a "harmless" lifestyle.

REFERENCES

1. There is also an equivalent of Pro ana, Pro-Mia (pro-bulimia - "for bulimia"), an ideology referring to Pro-Ana, that promotes bulimia as a conscious way of effective slimming. Contrary to Pro ana, in Pro-Mia you do not criticize the eating itself provided that it is always terminated by the induction of vomiting, which have to allow to preserve and gain low weight without the need to overcome "hunger attacks".
2. Woronowicz B. T., Uzależnienia. Geneza, terapia, powrót do zdrowia [Addictions. Genesis, therapy, recovery]. Media Rodzina i Parpamedia, Warszawa, 2009.
3. Cierpiałkowska L., w: Cierpiałkowska L. (ed.), *Oblicza współczesnych uzależnień* [Faces of contemporary addictions]. Wydawnictwo Naukowe UAM, Poznań, 2006.
4. From the materials of the Interdisciplinary Conference "Eating Disorders" under the patronage of the Rector of the Warsaw Medical University, prof. dr. hab. Marek Krawczyk and the Regional Medical Chamber in Warsaw, 20 May 2012 Medical University of Warsaw, (ed.) Dorota Jaguś, *Medicine Didactics Upbringing*, Vol. XLIV, No. 5/2012.
5. ICD-10 (Międzynarodowa Klasyfikacja Chorób i Problemów Zdrowotnych - International Classification of Diseases and Related Health Problems. Tenth revision)
6. American Psychiatric Association, „Diagnostic and Statistical Manual of Mental Disorders”, 4th ed. Washington, 1994.
7. Woronowicz B., op. cit.
8. Żechowski C., Zaburzenia odżywiania się – problem współczesnej młodzieży [Eating Disorders - a problem of contemporary youth]. EDC (ORE) (Ośrodek Rozwoju Edukacji) [Education Development Center], www.ore.edu.pl
9. More: Józefik B., (ed.), *Anoreksja i bulimia psychiczna. Rozumienie i leczenie zaburzeń odżywiania się* [Anorexia and bulimia nervosa. Understanding and treatment of eating disorders]. Wydawnictwo Uniwersytetu Jagiellońskiego), Kraków, 1999.
10. More: de Souza Ramos J.; de Faria Pereira Neto A., Bagrichevsky M., Pro-anorexia Cultural Identity: The characteristics of a lifestyle in a virtual community, http://www.scielo.br/pdf/icse/v15n37/en_a10v15n37, accessed on: 21.12.2015.
11. In France the movement is called Anamia
12. <http://santemedecine.journaldesfemmes.com/faq/22327-pro-ana-definition>, accessed on: 15.03.2017.
13. Startek I., Motyle w sieci. Krótka charakterystyka ruchu pro – Ana [Butterflies on the web. Short characteristics of the pro-Ana movement]. *Curr Probl Psychiatry*, 12 (3): 322-329, 2011.
14. de Souza Ramos J.; de Faria Pereira Neto A, Bagrichevsky M., op. cit.
15. http://www.sirc.org/articles/totally_in_contr0l2.shtml, accessed on 12.06.2017.
16. Limanówka, A., Cyberprzestrzeń a rzeczywistość wirtualna [Cyberspace and virtual reality], in: M. Sokołowski (ed.), *Oblicza Internetu: architektura*

- komunikacyjna sieci [Faces of the Internet: architecture of network communication]. Wydawnictwo Państwowej Wyższej Szkoły Zawodowej w Elblągu, Elbląg, p. 229- 240, 2007.
17. Whitlock JL, Powers JL, Eckenrode J., The virtual cutting edge: The Internet and adolescent self-injury. *Develop. Psychol.*, 42 (3), p. 407–417, 2006, after: Stochel M., Janas-Kozik M., Przyjaciółki wirtualnej Any – zjawisko proanoreksji w sieci internetowej [Friends of virtual Ana – phenomenon of pro-anorexia on the Internet web]. *Psychiatria Polska*, Vol. XLIV, No. 5, p. 693–702, 2010.
 18. Peebles R., Harrison Sh., McCown K., Wilson J., Borzekowski D., Lock J., Voices of Pro-Ana and Pro-Mia: A Qualitative Analysis of Reasons for Entering and Continuing Pro-Eating Disorder Website Usage, in: *Journal of Adolescent Health*, 50, 2; S62, Elsevier Science B.V., Amsterdam, 2012; DOI: <http://dx.doi.org/10.1016/j.jadohealth.2011.10.167>
 19. Most examples come from the website dedicated to Pro Ana <http://weheartit.com/thinisperfection/collections/92987064-ana-is-my-only-friend>, accessed on: 10/12/2015
 20. Csipke E, Horne O., Pro-eating disorder websites: User` opinions. *Europ. Eat. Disord. Rev.*, 15, p. 196–206, 2007, after: Stochel M., Janas-Kozik M., op. cit.
 21. Harshbarger JL, Ashlers-Schmidt CR, Mayans L, Mayans D, Hawkins J., Pro-anorexia websites: What a clinician should know. *Int. J. Eat. Disord.*, 29, p. 367–370, 2008; after: Stochel M., Janas-Kozik M., op. cit.
 22. Richardson A, Cherry E. Anorexia as lifestyle: agency through pro-anorexia websites, www.uga.edu/gcph/Richardson%20and%20Cherry.pdf. after: Talarczyk M., Nitsch K., op. cit.
 23. Stochel M. “Quod me nutrit, me destruit” – w stronę zrozumienia przyczyn zjawiska proanoreksji. Badanie polskiej populacji społeczności wirtualnej pro-ana [Quod me nutrit, me destruit - towards understanding the causes of pro-anorexia phenomenon. Study of the Polish population of the virtual pro-ana community], the master's thesis developed under the guidance of prof. dr. hab. Władysław Łosiak, 2009; Electronic database of doctoral dissertations and master's theses of the Jagiellonian University, Kraków (unpublished), after: Martyna Stochel, Małgorzata Janas-Kozik, op. cit.
 24. Richardson A, Cherry E., op. cit.
 25. Csipke E, Horne O., op. cit.
 26. Fox N, Ward K, O'Rourke A., Pro-anorexia, weight-loss drugs and the Internet: an ‘anti-recovery’ explanatory model of anorexia, *Sociol. Health & Illness*; 27 (7): 944–971, 2005 after: Martyna Stochel, Małgorzata Janas-Kozik, op. cit.
 27. Stochel M. ”Quod me nutrit, me destruit” – w stronę zrozumienia przyczyn zjawiska proanoreksji, [„Quod me nutrit, me destruit” – towards understanding the causes of pro-anorexia phenomenon], op. cit. after: Stochel M., Janas-Kozik M., op. cit.
 28. *ibid.*
 29. *ibid.*
 30. Perreira C.S., Os wannabees e suas tribos: adolescência e distinção na Internet, *Revista Estudos Feminista*, Vol. 15, No 2, p. 357-382.
 31. More: de Souza Ramos J.; de Faria Pereira Neto A., Bagrichevsky, op. cit.
 32. Hanson L., Pro-ana, a Culture Remediated in Cyberspace. Proceedings of the Media Ecology Association, Volume 4, 2003, p. 36 – 46, p. 37
 33. Talarczyk M., Nitsch K., op. cit.
 34. Sample pages: Starving For Perfection, Anorexic Nation, 2b-Thin and Totally in Control.
 35. <http://weheartit.com/thinisperfection/collections/92987064-ana-is-my-only-friend> (accessed on: 05.01.2016)
 36. Stochel M., Janas-Kozik M. Przyjaciółki wirtualnej Any – zjawisko proanoreksji w sieci internetowej [Friends of virtual Ana – the phenomenon of pro-anorexia in the internet]. *Psychiatria Polska*, Vol. XLIV, No 5, p. 693–702, 2010.
 37. original spelling
 38. <http://fitmiracle.blogspot.com/2013/02/roznica-miedzy-ruchem-pro-ana.html> (accessed on 14.01.2016)
 39. Dias K., The Ana sanctuary: Women’s pro-anorexia narratives in cyberspace, *Journal of International Women’s Studies*, Vol.4, p. 31- 45, Bridgewater State University, 2003
 40. Rich E. Anorexic dis(connection): managing anorexia as illness and an identity, *Sociol. Health Illness*, 28 (3): 284–305, 2006, after: Stochel M., Janas-Kozik M., op. cit., p. 698
 41. Based on: Wandokanty-Bocheńska M., Analiza czynników psychologicznych wpływających na powstanie jadłowstrętu psychicznego punktem wyjścia do stworzenia modelu terapii [Analysis of

- psychological factors affecting the formation of anorexia nervosa the starting point to create a therapy model], *Pediatrics Polska*, 69 (6), p. 463-466, 1994. Jakubik, A., Łada, M., Poziom samooceny i poczucie umiejscowienia kontroli w jadłowstręcie psychicznym [The level of self-esteem and the sense of localization of control in anorexia nervosa] in: S. Siek, A. Jakubik, A. Grochowska (red.): *Studia z psychologii*, Vol. IX, p. 57-72, Wyd. ATK, Warszawa, 1999.
42. More: Józefik B., op. cit.,
43. Woronowicz B., op. cit., p. 489-490
44. Evilly C. Mac, The Price of Perfection, *British Nutrition Foundation Nutrition Bulletin*, 26, 275-276, 2001.
45. More in: (ed.) Marek S. Szczepański, Beata Pawlica, Anna Śliz and Agnieszka Zarębska - Mazan, Ciało spieniężone. Szkice antropologiczne i socjologiczne [The Monetary Body. Anthropological and sociological sketches]. Śląskie Wydawnictwa Naukowe, Tychy, 2008.
46. Rathner G. Post-communism and the marketing of the thin ideal. In: Nasser M, Katzman M, Gordon R. Eating disorders and cultures in transition, p. 93–111, New York, 2001, after: Pilecki M. W., Józefik B., Sałapa K., Kontekst kulturowy zaburzeń odżywiania się – badania własne [Cultural context of eating disorders - own research], *Psychiatria Polska*, Vol. XLVI, No 2, p. 189–200, 2012.
47. Based on Martyna Stochel, Małgorzata Janas-Kozik, op. cit.
48. Les jeunes et le web des troubles alimentaires : dépasser la notion de ‘pro-ana’
Rapport du projet de recherche ANAMIA – novembre 2013, Antonio A. CASILLI, Télécom ParisTech et EHESS, Paris casilli@telecom-paristech.fr
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49. Lutte contre l’anorexie : Signature d’une charte d’engagement volontaire & Interdiction de l’apologie de l’anorexie sur Internet, Mercredi 9 avril 2008, Dossier de presse, Contact Presse – Ministère de la Santé, de la Jeunesse et des Sports 0140 http://www.sante.gouv.fr/IMG/pdf/Dossier_de_presse_anorexie.pdf
50. Owsiejczyk A., Determinanty kulturowe zaburzeń odżywiania. Wizerunki ról rodzinnych [Cultural Determinants of Eating Disorders. Images of family roles]. *Roczniki Socjologii Rodziny XVIII*, UAM, 2007.
51. Kaźmierczak N., Kiełbasa S., Patryn R., Niedzielski A., Zachowania anorektyczne wśród społeczności pro-ana [Anorectic behavior in the pro-ana community]. *Medycyna Ogólna i Nauki o Zdrowiu*, Vol. 21, No 2, p. 168–173, 2015.
52. Owsiejczyk A., op. cit., p. 214
53. Hadley A. Johnson, I Will Not Eat! A Review of the Online Pro-Ana Movements. p. 73-74, www.tc.columbia.edu/publications/gsjp/.../36307_6Johnson.pdf
54. Kaźmierczak N., Kiełbasa S., Patryn R., Niedzielski A., op. cit.
55. Pilecki M. W., Józefik B., Sałapa K., op. cit.
56. Bator E., Bronkowska M., Ślepecki D., Biernat J., op. cit.
57. Ibid.