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How Magazines for Young Women Present Profiles of Anorexics

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Abstract

The media's portrayal of health issues can have significant effects on the population it is targeting. This paper will evaluate how magazines that target young women portray profiles of people with Anorexia Nervosa. While there has been research on how media negatively influences people with or at risk for an eating disorder, there has been less research on how the magazines are actually presenting the disorders. This is significant because if magazines are inaccurately portraying specific aspects of the disorder, correcting these misrepresentations could lead to fewer barriers to help for anorexics. In this study, articles that profile a patient with anorexia were chosen from magazines with a large audience and an audience of primarily young women. These articles were then coded using a checklist that searches for specific aspects of describing the disorder. These results were compared to evidence already known about the reality of the disorder to see if any aspects of the disorder are misrepresented. As suspected, magazine portrayal of anorexia is inconsistent with the reality of the disorder. In the future, hopefully health care professions will learn the specific inconsistences between the magazine representation and the reality of anorexia and counteract this misinformation for at-risk or anorexic patients.

Introduction

Defining Anorexia Nervosa

The American Psychological Association (2017) defines anorexia as a disorder when “individuals believe they’re fat even when they’re dangerously thin and restrict their eating to the point of starvation” (para. 2). Slightly differently, the National Institute of Mental Health (2016) characterizes anorexia as “emaciation, a relentless pursuit of thinness, a distortion of body image and intense fear of gaining weight, and extremely disturbed eating behavior” (para. 1). While the APA focuses on the individual’s self-image and their behavior that is the result of that self-image, the NIMH focuses on the physical characteristics that correlate to anorexia. The specificity of the criteria for the disorder by the NIMH leaves room for misdiagnosis if the APA definition is more accurate, as anorexic patients may be psychologically struggling but not yet reached the point of emaciation. Also, there is a notable difference of opinion in the medical community as to how much of the disease is believed to be psychological, as is stressed in the APA definition, verses physical, as stressed in the NIMH definition.

While the definitions vary, there is a growing consensus on the severity of anorexia. Of all mental health disorders, anorexia is believed to have the highest mortality rate (National Institute of Mental Health, 2016). The rate of mortality for patients with anorexia was observed to be six fold higher than that of the general public (Danielson, Rekkedal, Frostad & Kessler, 2016). The various physical consequences of the disorder that lead to these high rates of mortality will be discussed later.

Demographics

Women have three times higher rates of anorexia than men (Hudson, Hiripi, Pope & Kessler, 2012). Diagnosis of the disorder can be difficult but The National Comorbidity Study Replication shows that rates of anorexia in the female population are 0.9%. However, a more recent study using the DMV-IV definition of anorexia suggests that cumulative lifetime incidence of anorexia for women is 1.7% (Nagl, 2016), or approximately three million Americans. This statistic does not even include people who have subthreshold anorexia, meeting a few but not all of the characteristics of anorexia, or people who have symptoms of anorexia. An additional 0.6% of the population is believed to have subthreshold anorexia and 1.5% of people additionally are suspected symptomatic threshold anorexia. It is even more common for women to have specific symptoms of anorexia, such as being underweight or refusing to gain weight, as can be seen in 27% of the women studied (Nagl, 2016). Between the high morbidity rate and the significant percentage of women who are affected by the disorder, it is necessary for American society to understand more about anorexia and learn what steps can be taken to prevent and treat the disorder.

Biological Components

In addition to the high mortality rate of anorexia, there are serious physical consequences. There are two main categories of physical consequences due to starvation. The first is a lack of mineral nutrients that results in anemia (low iron levels), hyponatremia (low sodium levels), hypokalemia (low potassium levels), and osteopenia (low bone density) (Miller, Grinspoon, Ciampa, Hier & Herzog, 2015). The health consequences of mineral deficiency usually affect more than one body system and are often

serious. The second branch of consequences is consequences that come of muscle loss, ranging from bradycardia (a slow heart beat) to hypothermia (reduced body temperature)(Miller et al., 2015). Muscular dystrophy results when the body does not have glucose available to break down, so it supplements energy by forming ketobodies from proteins. These proteins could come from a food source, but in the case of anorexics, the proteins come from body muscle, including cardiovascular tissue. The cardiovascular issues due to this muscle loss can include changes in left ventricular mass, bradycardia, hypotension, and conduction abnormalities (Sachs, Harnke, Mehler & Krantz, 2016). Each of these cardiovascular changes can be life threatening. These physical consequences are significant not only because they contribute to the high mortality rate of anorexic patients, but also because they illustrate the significance of preventing or correctly diagnosing the disorder. Many of these physical consequences are greatly dependent on the amount of time that the disorder has progressed so early detection of the disorder can be lifesaving.

While anorexia is classified as a mental disorder, recent research has shown that there is a strong biological aspect that contributes to the mental illness. In particular, a dopaminergic reward pathway, which is a common reward system seen in people with addictions, seems to play a role in anorexia. The difference in responses to illness-compatible cues between recovered anorexic patients and healthy controls were eliminated when the neurotransmitter dopamine was depleted, suggesting that dopamine plays a role in positively reinforcing cues of emaciation and physical activity (O'Hara, Keyes, Renwick, Giel & Campbell, 2016). In addition, a study of anorexic patients brain rewards system using a blood oxygen level dependent MRI found that anorexic patients had a greater brain reward system response to food compared to the control group (Frank,

Reynolds, Shott, Jappe & Yang, 2011). Both of these studies strongly suggest a biological reward component to anorexia, illustrating that anorexia is a serious mental disorder likely due to an imbalance of neurotransmitters in addition to psychological and behavioral components.

Predisposing Factors

Early detection of anorexia may become easier as the medical field gains a deeper understanding of predisposing factors. These are factors that make it more likely for a person to develop anorexia. One common predisposing factor is the personality disorder obsessive-compulsive disorder (OCD). Childhood obsessive-compulsive disorder has been shown to be a strong predictor of eating disorders, with the odds ratio of developing the eating disorder increasing by a factor of 6.9 for every additional OCD trait present in children (Anderluh, Tchanturia, Rabe-Hesketh & Treasure, 2003). Cognitive and socio-emotional factors that have also been found to be predisposing factors include close attention to detail, impairment of global interaction, and an automatic bias toward critical faces and away from compassionate faces (Treasure & Schmidt, 2013). The impairment of global interaction and bias toward critical faces are interesting predisposing factors because one of the psychosocial consequences of anorexia is isolation, so it is possible that some of the predisposing factors become exaggerated with the disorder. While more research needs to be done on how these predisposing factors can act as predictors of eating disorders, the correlation between these traits and eating disorders illustrate the mental health component of the disorder. Just as with other mental disorders, eating disorders develop from the exaggeration of predispositions and traits and are not simply a reflection of a social pressure to not eat.

Treatment

Despite the reality of the disorder, anorexia is very difficult to treat. Some studies have suggested that over half of all anorexic patients do not fully recover from the disorder (Danielson et al., 2016). Of all mental disorders, anorexia has the longest median length of hospital stay in the UK (Schmidt, Renwick, Lose, Kenyon & DeJong, 2015). This may be due to the physical consequences of anorexia, but it could also be due to the lack of knowledge about the disorder and how to treat it. One issue with mental health treatment of the disorder is that different treatments vary in effectiveness depending on the progression of the disorder (Schmidt et al., 2015). Since anorexia is a disorder that typically affects younger women, treatment for this disorder often focuses on people who have not been affected by the disorder for long. However, it is the chronic, older patients who are likely to need effective mental health treatment the most. For example, psychotherapy was very helpful to adolescence with a shorter duration of the disorder but it was not helpful to older, chronic patients (Schmidt et al., 2015). Another issue with treatment is that many times the treatment is adapted from other mental illnesses even though anorexia is unique because it often combines many of the different disorders, from depression to anxiety to social anxiety to obsessive-compulsive disorder (Schmidt et al., 2015). As the medical field develops a new system for treating anorexia, it is important to note the struggle with finding an effective treatment because it illustrates the need for prevention and for medical professionals to be adamant about continual care, rather than viewing the disorder as a temporary issue.

The Significance of Media Representation

Media representation is a powerful tool that creates community understanding of public health issues. The term "media" includes sources of mass communication, and while this study evaluates media representation through the analysis of popular magazines, the various types of media communication work together to create public understanding. This understanding is often more influential in igniting change than the facts underlying the issue. For example, it has been found that attention on various political issues changes based on media coverage rather than actual changes in the scale of the problem (Weishaar, 2016). Inaccurate representation of a health issue can be harmful, as can be seen when looking at media representation of vaccines. Although vaccinations are arguably the most significant and life-saving invention of modern medicine, published misinformation such as Wakefield's retracted paper that linked vaccines with autism has resulted in some mistaken beliefs about vaccines (Habel, 2016). Not only is this true on a broad scale, but a study that gave participants either articles of balanced claims for and against the link between vaccines and autism, prolinks claims, or antilinks claims found that those who read the balanced claims were more likely to believe that experts were conflicted about the issue than the other groups (Dixon, 2012).

These studies illustrate how detrimental media representation can be toward understanding public health issues, but media representation can also have a positive influence. Much of the credit for the dramatic decrease in smoking in the United States has been attributed to media representation. Smokers who were exposed to mass media campaigns were found to have a positive shift in their view about stopping smoking and have more attempts to stop smoking over the short amount of time studied (Vallone,

2011). On the contrary, the strongest risk factor for adolescents initiating smoking is believed to be smoking-related media messages, accounting for 35-52% of smoking initiation (Bier, 2016). Whether it is initiating or ceasing smoking, media presentation of smoking has a large influence on public perception about smoking.

Media and Anorexia

Just as media representation is crucial and influential for public understanding of vaccines and smoking, media is essential in creating public understanding of anorexia. However, the media plays an even more powerful role in understanding anorexia compared to many other public health issues. While the representation of smoking and vaccines center on public perception and health consequences of these issues, representation of anorexia also includes understanding about how the mental illness is defined, since mental illnesses are not tangible. The public interpretation of media portrayal influences whether the general public considers the disorder serious and worth treating, in addition to creating a societal stereotype about the disorder.

Although creating an understanding of anorexia often leads to creating stereotypes about people with the disorder, theses stereotypes can also alter how the public understands anorexia. For example, a study that compared perception of anorexia to obesity in magazines found that “Anorexia Nervosa was constructed as more desirable, powerful, and feminine than obesity”(Whitehead & Kurz, 2008). This harmful stereotype about anorexia may explain the common misconception that anorexia is a vain disorder centered on the desire to be beautiful, rather than it being a serious mental illness. In addition, the misconception that anorexics are powerful because they deny the physical urge to eat is particularly damaging toward public understanding of the disorder because it

reinforces the idea that anorexia is a form of control, representing self-restraint and achievement (Whitehead et al., 2008). However, a critical step toward recovery for anorexics is the recognition that they are not in control of the disorder, but that the mental illness is dictating how they live their life. Therefore, media representation of anorexia can be harmful not only for public understanding of the disorder, but it can also create a barrier to help for anorexics.

Methods

This study analyzed thirty-seven articles (n=37) that are profiles of people who are currently or have in the past struggled with anorexia. The articles were chosen from magazines that target a large audience and the audience is primarily young women. The parameters set were that the magazine had a six month total paid and verified subscription greater than 1,000,000 according to each magazine's Publisher's Statement on Alliance for Audited Media (2017). The readership demographic was then evaluated using the magazine's most recently published media kit. If the media kit was not available, then the magazine's website was used. In order to meet the qualifications, the magazine's percent of readers between 18-34 must be greater than 45%, or if that information is not available then the median age must be 40 years old or younger. In addition, women must make up at least 75% of the readership, or if that information is not available then the magazine must claim to target women readers. A list of seventeen well known "women" magazines were evaluated for the parameters, and seven magazines fit the qualifications: *Cosmopolitan*, *Glamour*, *Seventeen*, *Elle*, *Vogue*, *Shape*, and *Allure*. The articles were chosen by searching "anorexia" on the website, and selecting all articles about one person who has dealt with anorexia, or articles with a section about one person who has struggled with anorexia. Only

the three most recent articles about the same person in the same magazine were analyzed. In addition, only articles published between 2013 and 2016 were analyzed.

The articles were analyzed using a checklist covering a range of aspects pertaining to anorexia. The checklist was developed by evaluating a sample set of five articles and selecting interesting aspects, and then adding other aspects that the researcher was interested in pertaining to anorexia. Most of the articles followed a similar format when discussing the disorder. They started with the development of the disorder, then discussed the subject's life during the disorder, and finished with recovery from the disorder. This pattern allowed for a relatively consistent opportunity for each of the aspects to be discussed in the articles. The list of aspects, along with their description and an exemplary quote, are included in the table in the "Results" section of this paper. Some of the aspects pertain to the development of the disorder, such as whether the disorder developed due to societal pressures. Other aspects cover issues during the disorder, such as an expressed desire to get help during the disorder, and some aspects focus on recovery, such as whether there is mention of a mental recovery process. A total of twenty-six aspects were analyzed and all aspects were mentioned at least once in an article.

Results

Overview of Results

The results of this study illustrate a variety of misrepresentations about anorexia in the magazines for young women, most of which could act as a barrier for anorexics to receive help. The medical system involvement when dealing with disorder was underrepresented, with medical bills for treatment of anorexia only being mentioned in

11% of the articles, hospitalization being mentioned in 32% and a doctor's involvement being mentioned in 46%.

Unfortunately, the mental health aspect of the eating disorder was also underrepresented. The various psychological and emotional struggles that often lead to the development of anorexia were rarely mentioned. Coping was discussed in only 22% while both societal pressure and having another psychological disorder were discussed in 32% of articles each. Even more concerning is that mental health recovery was only mentioned in 68% of articles.

Fortunately, there were some aspects of the disorder that were represented in a beneficial manner. For example, the subject's current weight was only mention in 14% and anorexic weight mentioned in 22%. In addition, the societal obsession with calories was not perpetuated with only 8% of the articles mentioning the specific number of calories the subject ate while struggling with anorexia.

Below is a table with each of the twenty-six aspects, the percent of articles that the aspect appeared in, a description for what the article needed to mention in order to qualify as having that aspect, and an exemplary quote about the aspect from one of the articles studied. The aspects are listed from least mentioned to most mentioned.

Data Table

Aspect	**Percentage (%)**	**Description**	**Exemplary Quote**
Specific calories	8.11	A specific number of calories eaten during the disorder is	"500 calories a day" (Koman,

during disorder		listed	2015a, para. 2)
Medical bill	10.81	The expense of receiving treatment for anorexia, or discussion that there was an expense for treatment	“her treatment raised a whopping $196,000 in two months” (Friedman, 2015a, para. 1)
Desire for help during disorder	10.81	Anorexic expressed that she/he wanted help while struggling with the disorder but there was a barrier to receiving help	“ I confessed to my mom that I was suffering from an eating disorder... but she didn't know how to help. I told her I would be OK” (Paredes, 2015, para. 7)
Current weight	13.51	Weight of the anorexic at the time the article is written or “recovered” weight	“Brittany hit 221 pounds” (Beck, 2015, para. 4)

Picture from disorder: unhappy	13.51	A picture, clearly taken while the subject was struggling with the eating disorder, shows the subject unhappy	(Bruk, 2015b)
Specific foods eaten during disorder	16.22	Description of specific food eaten during disorder	“she'd order a bowl of minestrone and eat none of it” (Sagher, 2016, para. 16)
Recovery given a specific time frame	18.92	Recovery from the disorder was listed to have taken a specific amount of time or is expected to take a specific amount of time.	“I battled for almost four years” (Friedman, 2016b, para. 5)
Anorexic weight	21.62	Weight during the subject’s struggle with the disorder	“155 lbs” (Gilbert, 2016)
Disorder manifested as coping mechanism	21.62	The reason, or one of the reasons, given for the development of the disorder was it acted as a coping mechanism	“after a breakup in college, she started restricting her eating habits” (Friedman, 2016a,

			para. 2)
Appearance during disorder	27.03	Physical characteristic of subject during disorder	"Her hair began to fall out, her skin got worse" (Friedman, 2016a, para. 3)
Picture from disorder: happy	27.03	A picture, clearly taken while the subject was struggling with the eating disorder, shows the subject happy	(Mascia, 2014)
Negative body image during disorder	29.73	Description of low self-esteem or negative self-image during disorder	"obsessing over whether my stomach was visible through my hospital gown" (Bruk, 2015b, para. 2)
Disorder manifested due to societal reasons	32.43	The reason, or one of the reasons, for the development of the disorder was the societal expectation to be thin	"I thought for years in order to be accepted and do well with

			gymnastics, I had to be skinny" (Narins, 2015, para. 2)
Disorder manifested due to personal issue (control/OCD/self-esteem)	32.43	The reason for the development of the disorder was due to an addition psychological disorder or internal struggle, such as desire for control, low self-esteem, OCD, or depression	"felt his food intake - or lack of - was 'the one thing in his life he could control'" (Harvey-Jenner, 2016, para. 1)
Patient hospitalized or institutionalized	32.43	Subject was hospitalized or institutionalized	"After much searching, we found a program near my house." (Paredes, 2015, para. 9)
Implication of complete recovery	35.14	Suggestion of a complete recovery from the disorder	"and that now I am out of it" (Orenstein,

			2015b, para. 3)
Isolation/lying	35.14	Subject isolated himself or herself due to the disorder or lied because of the disorder	"she became isolated and withdrawn" (Friedman, 2016a, para. 3)
Exact time when knew anorexic	37.84	Describe the point in time when subject knew she/he were anorexic	"diagnosed with anorexia in 2012" (Koman, 2015b, para. 1)
Life or death situation of the disorder	40.54	The seriousness of the disorder being a life or death situation was mentioned	"walking was too much for her heart to take" (Friedman, 2016a, para. 3)
Life situation prior to manifestation of disorder	40.54	Any discussion of the subject's personality, activities, or events before the disorder manifested	"Practice gymnastics or cheerleading after school" (Narins, 2015, para. 2).
Continual struggle with disorder	43.24	Implication that the subject is currently dealing with the	"Has been in recovery for about

		disorder, including using present tense to describe the disorder	a year" (Koman, 2015a, para. 3)
Medical doctor involved	45.95	A physician was involved in the treatment of the subject, including cases where this is implied when the patient is hospitalized	"hospital stays" (Refinery29, 2015, para. 3)
Negative physical consequences of disorder	48.65	Negative health consequences that developed as a result of the disorder	"increasingly blue nail pads" (Refinery29, 2015, para. 2)
Unhappiness during disorder	59.46	The mental status of the subject was negative due to the disorder	"I experienced crippling guilt" (Weiss, 2015, para 6)
Age	67.57	A numerical age or implied age, such as grade level in school, when the subject was dealing with anorexia is given	"I was 14 when" (Weiss, 2015, para. 2)
Mental recovery	67.57	Discussion of recovering psychologically, including	"mental health care" (Sugarscape,

		mental health treatment	2016, para. 1)

Discussion

While each of the results discovered during this research can offer insight into how popular young women magazines present anorexia, the most significant results will be discussed in detail to illustrate discontinuities between the presentation of anorexia in these articles and reality of the disorder. Ideally, showing these discontinuities will help journalist aim to present a more accurate portrayal in the future and help healthcare practitioners understand the type of misinformation that is readily available to patients about the disorder.

Development of Anorexia

One of the most significant misconceptions presented in the media is the reason for developing anorexia. Three different reasons were analyzed in this study: that the disorder developed due to societal reasons, such as the societal pressure to be thin; that it developed due to an addition psychological issue, such as OCD or depression; or that it developed as a coping mechanism. Both development due to societal reasons or a psychological issue were presented equally, appearing in 32% of the articles, while coping was presented 22% of the time.

Looking closely, it is interesting that societal reasons were described as the reason for developing the disorder in only 32% of articles because the hypothesis when entering this research was that societal pressure would be the dominant reason given for development. Hollywood actresses are often accused of being too thin and the modeling industry is commonly blamed for encouraging anorexia, with some European countries

banning underweight models in an attempt to decrease the number of eating disorders. In fact, when BBC reported a the new requirement for models in France, the news article described the model's requirements and then stated the statistics about anorexia in France without stating the link between the two facts (2015), assuming the reader already knew that thin models cause anorexia. However, the reality about anorexia is that it is not a "western culturally-bound syndrome" (Touyz, Le Grange, Lacey & Hay, 2016). Young women do not develop anorexia because they see a thin model. While research is currently being done on the triggering aspects of anorexia, evidence shows leafing through magazines had no significant impact on women's body dissatisfaction or mood (Loeber, 2016). Actually, the link between media portrayal and anorexia is believed to be the motivation behind reading these magazines. Women who read beauty and fashion magazines with the desire to improve themselves were at a much greater risk for anorexia than women who read the magazines with the desire to be popular (Thomsen, McCoy, Gustafson &Williams, 2002). Correlated to this theory is a study that suggested it is stress-related exposure to media increases eating disorder behaviors. Once again, this study found that exposure to media was not what induced an eating disorder, but it was the reader's response to the media that predicted their behavioral consequences (White et al., 2016). Therefore, while media portrayal is influential for women struggling with anorexia, the assumed connection between reading frequency magazines featuring thin subjects and the development of anorexia is incorrect (Thomsen, 2002). It is positive to see that only 32% of articles blamed societal reasons for the development of the disorder, but that is 32% of the articles that are not focusing on what truly caused the development.

One of the primary reasons for the development of anorexia is the subject having another psychological disorder or issue that manifests itself in the form of anorexia. It is currently believed that 55% of anorexics suffer from an additional psychological disorder (Touyz, 2016). It is also suspected that up to 40% of anorexic patients suffer from a generalized anxiety disorder (Delleva, 2011). Of the anorexics with anxiety disorders, the anxiety disorder precedes the development of anorexia in 75% of patients (Touyz, 2016). Therefore, anxiety could act as a warning sign for anorexia in high-risk populations, mainly young women. Furthermore, in order to understand the development of anorexia it is important to understand the correlation between anxiety disorders and anorexia. Another study found that generalized anxiety disorders and anorexia "share a modest portion of genetic and unique environmental liability and these seem to be responsible for the comorbidity between GAD [generalized anxiety disorder] and AN [anorexia]" (Delleva, 2011). While more research needs to be done on the biological connection between anorexia and anxiety disorders, it is clear that anxiety disorders are strongly correlated to anorexia.

Despite research linking anxiety disorders and anorexia, this study showed that magazine articles connected the development of anorexia with another psychological disorder only 32% of the time. This miscommunication is a huge issue when it comes to improving detection for anorexia because other psychological issues often mask anorexia from the subject or prevent them from accepting help. For example, some of the most prevalent traits found in anorexic patients during interviews were a sense of unworthiness, clinical frugality, and obsessive time keeping (the last two traits are associated with OCD). All of these traits prevent the anorexic patient from believing they deserve help or are

capable of receiving help (Robinson, Kukucskal, Guidetti & Leavey, 2015). One possible solution to this barrier to help is to raise awareness about underlying psychological issues. Profiles that present anorexia as the manifestation of another psychological issue, such as anxiety or unworthiness, could encourage patients to get treatment since the struggle with anorexia is more complex than a controlled desire to not eat. In addition, awareness about the underlying issues that often accompany anorexia could help break the stereotype that anorexia is a vain, self-inflicted disorder, which is currently a label preventing the general public from supporting treatment for anorexia.

In addition to anorexia developing due to an underlying psychological issue, anorexia can also manifest as a coping mechanism. Recent studies have shown that eating disorder behaviors are closely related to maladaptive emotional regulation, including rumination. Rumination is defined as the repetition of thoughts or questions without an attempt to solve the issue immediately. However, emotional acceptance decreased body dissatisfaction for patients with an eating disorder (Naumann, Tuschen-Caffier, Voderholzer, Schäfer & Svaldi, 2016a). In addition, emotional suppression was found to be a maladaptive emotional regulation technique that exacerbated anorexia in anorexic patients (Naumann, Tuschen-Caffier, Voderholzer & Svaldi 2016b). Furthermore, induced rumination thinking after playing sad music lead to anorexics having an increased desire to not eat (Naumann, Tuschen-Caffier, Voderholzer, Caffier & Svaldi, 2015). These three studies all point toward anorexia acting as a coping mechanism as the result of an inability to deal with negative emotions in a healthy way. In addition, interviews with anorexics reveled that anorexia can act as a "social comfort blanket," helping women who are normally anxious in social situations become more comfortable (Westwood, Lawrence,

Fleming & Tchanturia, 2016). However, this study found that only 22% of articles discussed anorexia as a coping mechanism. Many of the issues with this misrepresentation of anorexia align with the issues of not discussing an underlying psychological disorder. Not recognizing that anorexia is a coping mechanism can prevent anorexic patients from searching out or accepting help. Also, the fact anorexia is helping suppress a negative emotion can prevent anorexics from wanting to receive help, since anorexia is acting as a crutch. It is often difficult for the loved ones of anorexics to understand the disorder or why the patient does not try to receive help, but an understanding that anorexia is an emotional survival technique can help loved ones be persistent and patient in trying to get help for the anorexic.

Barriers to Requesting Help

The desire to receive help is another aspect that was evaluated in this study. This aspect looked at whether the article stated that the subject wanted help while they were struggling with the disorder but there was a barrier to receiving help. This is significant because there are two steps in receiving help that the anorexic has to go through. The first step is the subject recognizing that he or she needs help. As discussed above, due to underlying psychological disorders and anorexia acting as a coping mechanism, the anorexic patient often does not realize that he or she needs help while struggling with the disorder. In the case of adolescents, the patient is "usually reliant on parents to recognize and facilitate help-seeking" (Thomson, Marriott, Telford, Law & McLaughlin, 2014). In addition, the feelings of self-loathing and unworthiness that are prevalent among anorexics (Robinson, 2015) can be barriers for wanting to receive help.

Once the first step is accomplished and the anorexic recognizes that he or she needs help, the second step is going through the process of receiving help. When an article states that the subject expressed a desire to receive help but there was a barrier, this is often a barrier that can be prevented or lowered. One preventable barrier is the stigma against anorexia or receiving mental health treatment. A study by Maier showed that approximately one-third of anorexic patients delay treatment due to fear of stigmatization and discrimination (Maier, Ernst, Muller, Gross & Zepf, 2014). This statistic, about 33%, only includes the social stigma barrier to help yet it is dramatically different from representation found in this study. Only 11% of articles discussed the subject wanting to get help but being unable to do so. Such a low representation of external barriers in articles undermines the severity of barriers for receiving help that many patients experience. One barrier is a fear of discrimination due to the disorder as illustrated in Maier's study, but another barrier is parental refusal to acknowledge the disorder. Parents often attributed early signs of anorexia to typical adolescent behavior (Thomson et al., 2014). Another barrier is the healthcare system in the US, where psychological treatment is expensive and rarely paid for my health insurance, leaving the patient to pay for treatment. Since the majority of people affected by this disorder are young adults, they are often not in a financial position to pay for help. However, excluding finances, media representation of anorexia can potentially decrease barriers to treatment by giving parents and patients a more accurate understanding of the disorder and decreasing stigmas that currently accompany the perception of anorexia.

Public Definition of Anorexia

One of the most common misperceptions about anorexia is that a person has to be severely underweight in order to be considered anorexic. The focus on the numerical value of the patient's weight rather than the anorexic's obsession with weight when diagnosing or describing the disorder leads to failing to diagnosis a large number of patients. Even the DSM-V released in 2013 requires patients to be at or below a significant low weight in order to be diagnosed with anorexia (Grohol, 2017). However, Australian researchers found that the significant health problems from anorexia are the result of rapidly losing weight, rather than the patient's current weight. It was found that patients who had anorexic behavior symptoms but were at a normal body weight were still medically unstable (Whitelaw, Gilbertson, Lee & Sawyer, 2013). Cynthia Bulik, director of the Center of Excellence for Eating Disorders at the University of North Carolina at Chapel Hill, argues that by focusing primarily on weight, physicians miss a large number of eating disorder patients (Haelle, 2014). The Australian Psychology Society has updated their definition of anorexia to describe anorexia as the goal to achieve and maintain a significantly low weight, rather than actually being at a significantly low weight (2017). Since a consistent lack of mineral, nutrients and glucose cause negative physical consequences regardless of the patient's starting weight, it is interesting that the medical definition of anorexia has not adjusted to focus on starvation rather than body weight. However, when articles discuss the anorexic's specific weight while he or she were struggling with the disorder, the magazine is putting focus on the number on the scale, rather than the psychological and physical harm done due to a lack of food. Therefore, it is positive that only 22% of articles discussed the anorexic patient's weight. It is important to emphasize how anorexia is a

psychological disorder that has physical repercussions, and that weight is the object of obsession due psychological struggles, not the defining feature of the disorder.

Unlike weight, negative body image is a defining feature of anorexia. The DSM-IV defines this as "disturbance in the way one's body weight or shape are experienced" (Franco, 2012). As mentioned earlier, a sense of unworthiness and self-loathing were almost universal among the anorexic patients interviewed in Robinson's study (2015). This combination of anorexia with a sense of unworthiness is dangerous because unworthiness leads patients to believe that they do not need deserve help. In addition, the patients have a distorted body image so they cannot visually see that they need help. It is important that patients recognize that their perception of themselves can often be a barrier to receiving help. Unfortunately, only 22% of articles in this study mentioned having a negative body image during the disorder. Not only does this act as a barrier for treatment, but also it undermines how critical negative body image is in perpetuating the disorder. Pro-anorexia websites often offer "thinspiration," with pictures of extremely thin women so that people with anorexia have a model to compare themselves to and a goal to strive for (Brady, 2014). These websites thrive off anorexics encouraging each other to reach a lower weight, and the websites are popular since almost all anorexics have a distorted body image. Greater awareness about the significance of distorted body image could provide maybe a different narrative to anorexics than the narrative they receive on pro-ana websites.

Misconstruing Symptoms of Anorexia

Another aspect of disorder that pro-ana websites offer a solution for is the isolation and lying that accompanies the disorder. Isolation is endemic to eating disorders (Brady, 2014) as anorexics often avoid social situations that involve food. In fact, in interviews

researchers found that social isolation was ubiquitous. Many of the interviewees also discussed how their relationships deteriorated due to this social isolation (Robinson, 2015). While avoiding social situations with food can be a contributing factor to anorexic's isolation, because anorexia is also often the exacerbation of obsessive and anxiety disorder, even in cases of foodless social interaction anorexics spend energy focusing on calories rather than the people they are interacting with, further deteriorating relationships. Westwood's study, which interviewed ten women with anorexia, found that nine of the ten women discussed the negative impact anorexia had on their friendships (2002). These negative impacts ranged from their friends not understanding the disorder to anorexics distancing attachment with friends to them losing friendships altogether, in addition to having less social interaction (Westwood, 2002). Despite the strong push into isolation that accompanies anorexia, isolation or lying about the disorder were only discussed in 35% of the articles in this study. Not only is the lack of mentioning isolation important, but also lying is an important part of hiding the disorder that also harms relationships. Raising awareness about the general secretiveness that is associated with anorexia could help with earlier detection. Thompson found that parents recognized their child's eating habits changing slowly, rather than being an immediate change (2014), so awareness about the subtly detecting eating disorders could result in earlier detection.

Recovery

Once the disorder is detected and the patient is ready to receive help, the road to recovery is long. While physical recovery is possible, there are some long-term consequences even after recovery. In mice with induced anorexia, it was found that while many of the physiological symptoms were corrected during the recovery phase,

hypoleptinemia remained constant in the mouse long-term. This is interesting because "hypoleptinemia is one of the main endocrine dysregulation in AN patients" (Zgheib et al., 2015, pp. 9), so it is possible that it remains constant long-term in humans recovering from anorexia also.

However, understanding mental recovery is also a complicated process. Given that validity of anorexia in American society is a recent change, more research needs to be done on the long-term recovery rates of anorexia and most effective treatments. The information about recovery that is available often fails to take into account the psychological struggle and simply tracts the physiological struggle, focusing on weight. Despite the complicated nature of recovery from anorexia, recovery was given a set time frame in 20% of articles in this study. With recovery being such a complicated, intricate process that research is still discovering ways to study it, it is inaccurate for articles to present recovery as a known process with a known amount of time needed to make a full recovery. This misinformation is harmful because it implies that the disorder can be recovered from safely and efficiently. Anorexics may delay treatment if they believe that the disorder can be controlled in a specific amount of time once recovery starts. In addition, giving a specific amount of time needed to recover perpetuates the idea that anorexia is a disorder that can be controlled, when currently there are not many known, effective psychological treatments. It is harmful to refer to the disorder in a way that implies that recovery is a set process.

Mental Health Component

While treating the physical consequences of anorexia is a critical part of recovery, anorexia is a mental illness that needs mental health treatment. Despite this seemingly

obvious conclusion, only 67% of articles in this study mentioned any type of mental health recovery.

One of the primary reasons that it is concerning that only 67% of articles mentioned mental recovery is the current stigma against mental illness (Brown & Bradley, 2002). It is suspected that only one-third of people with a mental illness seek help. A recent study of college students looked at how both public stigmas, the discrimination due to a mental illness, and self-stigmas, the internalization of public stigmas, relate to people with mental illness. The study found that the subject's awareness of public stigmas and self-stigmas prevented them from getting the mental health help that he or she needed (Bathje & Pryor, 2011). Magazine articles can be a useful way to accept mental illness and decrease the stigma, but by pointedly not mentioning mental health treatment in an article about a mental illness these articles are exacerbating the stigma.

In addition, by negating the fact that anorexia is a mental illness, authors are instead focusing on physical consequences of anorexia, primarily thinness. Since our society values thinness so much, by failing to focus on the mental illness it is easy for an article to appear in awe of anorexia, rather than showing the horror of the disorder. One of the counterarguments regarding raising awareness about anorexia is the idea that the public has a fascination with the ability to choose mind over body, rather than society actually having a significant population with eating disorders. One study claimed that the media presents eating disorders "as something that young women would want to achieve" (Hardin, 2003). While it is true that the majority of articles about eating disorders were found to focus primarily on "unusually thin sufferers of eating disorders" (Inch & Merali, 2006), the substantial evidence about the prevalence of eating disorders, along with the

discussed biological and psychological components of the disorder mentioned above, suggests that eating disorders are a significant concern in American society even if popular magazine presentation focuses on the most dramatic cases of eating disorders.

One study that further illustrates how misguided the magazine focus on thinness is when discussing anorexia is a study that found that treating anorexia using interpersonal theory and non-specific supportive management was more effective than behavioral treatment that focused on weight and shape concerns (McIntosh 2005). While research is still being done to understand the most effective treatments for anorexia, breaking this assumption that the disorder is only due to a fascination with thinness is a critical understanding that needs to be shared with the public in order to decrease barriers to help. Therefore, it is essential for articles about anorexia to include the mental health aspects of the disorder and therefore start taking the focus away on thinness.

Conclusion

By understanding public misconceptions about anorexia that are the result of misrepresentation in popular young women's magazines, hopefully health care professionals can actively correct these misconceptions by providing information that will directly counter the misconception, thereby lowering barriers to receiving help. While more research needs to be done to further understand how misrepresentation is playing a role in preventing anorexics from help, heath care professionals can take steps to raise awareness about anorexia being a mental health disorder that needs professional help. The misconception that anorexia is the result of societal pressure needs to be counteracted with an understanding of anorexia as a coping mechanism or a manifestation of other psychological disorders. In addition, journalists can take steps to represent anorexia in a

manner that more accurately reflects the reality of the disorder, thereby increasing awareness and hopefully decreasing barriers to receiving treatment.

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