Contributing Factors to the Development and Diagnosis of Anorexia Nervosa

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Introduction

Anorexia nervosa (AN) is a psychiatric disorder characterized by weight that is less than adequate for age, sex, and development as well as an intense fear of gaining weight and poor body image.[1] The disorder's mortality rate is almost 6 times higher than that of the general population and is the deadliest of any other psychiatric disorder.[2] Peak onset age is between 15-19 years of age and is most prevalent in women – nearly 4% of women will be diagnosed with the disorder in their lifetime.[2] AN puts those diagnosed with the condition at risk for a myriad of physical and mental health complications.

DSM-5 diagnostic criteria for AN include: restriction of energy intake relative to requirements, intense fear of gaining weight, persistent behavior that interferes with weight gain, disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, and persistent lack of recognition of the seriousness of current low body weight.[2]

Methods

- Search criteria for this literature review were peer reviewed articles from online databases published within the last 5 years.
- Research was gathered using PubMed and other databases in which access was provided through Tennessee Technological University.
- Key words used in the search were as follows: "anorexia nervosa", "contributing factors of anorexia nervosa", "comorbidities of anorexia nervosa", "contributing factors of eating disorders", "OCD and anorexia", and "the media and anorexia nervosa".

Discussion

- Review of literature surrounding the development of anorexia nervosa was done. After reviewing development of anorexia nervosa, four contributing factors were particularly prevalent. These four major factors were genetic, co-morbidities, social, and media exposure. These factors showed correlation to developing AN and have the potential to explain why and how the condition is developed.

Contributing Factors of Development

- Genetic: two genomic wide association studies have found correlations between AN and the SOX2OT gene and another study showed a shared genetic risk between AN and multiple other psychiatric disorders such as other eating disorders, obsessive compulsive disorder, depression, and suicide (however, they could not pinpoint which gene was responsible).[1]
- Comorbid: body image distortion is a major factor that contributes to the development of AN and is most heavily influenced by peers and parental relationships.[3] By six years old body shape awareness is prominent and 40%-50% of children ages 6-12 report body dissatisfaction.[3] Obsessive compulsive disorder is another comorbidity associated with AN with one study I particular showing nearly 30% of participants with long term eating disorders meeting the requirements of OCD diagnosis.[8]
- Social: studies have found social factors can highly influence the development of AN. One study found 66% of its participants with AN reported early life social difficulties[4]. Specific social factors associated with AN have found to be things such as poor familial communication, poor familial caring, maternal dieting, peer dieting, and weight related teasing.[5]
- Media Exposure: studies have shown associations between frequent social media use, as well as frequent physical appearance comparison to those in the media, and body dissatisfaction and drive for thinness – two behaviors known as characteristics of AN.[6,7] (Figure shown below)

	Estimates	*p*-Value
Intercept	9.087	1.1×10^{-10} ***
Body comparison: Never		
Body comparison: Seldom	1.225	0.365
Body comparison: Sometimes	1.768	0.158
Body comparison: Often	5.564	6.5×10^{-6} ***
Body comparison: Always	9.226	2.4×10^{-13} ***

Treatment/Prevention

Treatment should include multidisciplinary approaches that include appropriate meal plans, vitamin/mineral/fluid supplementation, and psychiatric inpatient or outpatient services.[2] Refeeding syndrome is a serious and life-threatening complication that can occur while treating malnourished patients and is defined as rapid electrolyte and fluid shifts that can lead to delirium, cardiac arrest, and death.[9] New research shows that patients might benefit from a higher calorie refeed (2000kcal) than the current practices of a low calorie refeed (1400kcal) by restoring medical stability sooner with no increased risk.[9] Prevention should include educating health care providers on risk factors so they can competently develop strategies and programs that educate parents/teachers on combatting negative weight-focused language or bullying as well as media policy making.

Conclusion

Anorexia Nervosa is a psychiatric disorder with many factors, that are still not well understood, that contribute to the development of the condition. Onset typically occurs between 15-19 years of age and is most prevalent in women.[2] AN puts those who suffer at risk for physical difficulties (growth impairment, delayed puberty, affected fertility (and amenorrhea in women), and low bone mineral density) and mental difficulties (depression, anxiety, and suicidal thoughts and attempts).[1] Contributing factors can be genetic, a result of other conditions, social exposure, media exposure, or a combination of these. Treatment practiced today includes a multidisciplinary approach involving a typical combined use of therapy, medication, and dietary planning and support.[2,3] Studies are beginning to explore and understand the correlation of these factors to shed light on development of the disorder to potentially prevent and better treat it. The development of AN is complex, with no exact cause and effect. Anorexia nervosa is currently viewed as a deeply complex and multifaceted issue in which more research, to find root causes of the disorder, should be done.

References

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