

Current Situation of Therapy on Anorexia Nervosa in Chinese Adolescent Population

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ABSTRACT

Anorexia nervosa (AN) is a type of detrimental eating disorder. Various researches have been carried out by scientists and psychologists, which intend to investigate the potential factors that could contribute to the diagnosis of Anorexia Nervosa, as well as the possible treatments that could be offered to patients. This article aims to systematically investigate the risk factors of anorexia, and the outcomes from the therapeutic-related studies. Systematic review and meta-analysis was mainly used to construct this paper. Information and controlled experiments from Databases PubMed, PsycINFO, Medline, and published articles were systematically searched. From 41 original records, 6 studies align with the inclusion criterion. Acculturation, physical appearances, sociocultural factors could all play a part in the formation of anorexia nervosa. Under the Chinese social context, the current research on effective treatments for patients with anorexia are still inadequate. Several studies have laid a firm foundation for further investigation, but researcher triangulation should be established in order to ensure the validity of the findings.

Keywords: *Anorexia nervosa, Chinese adolescent, Risk factors, Therapy*

1. INTRODUCTION

Anorexia is a type of prevalent eating disorder. Under normal conditions, in order to be diagnosed, an individual should have demonstrated an extreme restriction to food which can cause a significant low body mass index; experienced a strong fear of gaining weight even if their body weight is rapidly decreasing; or gone through the process of low developmental trajectory and physical health. Most of the time, people who are diagnosed as AN have distorted body images and extreme unhealthy mental stages. Among all anorexia nervosa patients, adolescents are considered to be the most prominent and vulnerable group. In particular, young female adults or adolescents usually present a relatively higher rate of occurrence. Data shows that the lifetime prevalence rates of anorexia nervosa among females demonstrate a significantly higher index compared to males.

It has been discovered that anorexia is becoming more prevalent not only in western countries, but also in asian countries such as China [1]. Although anorexia is a type of mental disorder that is commonly seen, there are several reasons that hinder people from identifying it effectively: the first reason is a widely spread

misconception of anorexia, “all individuals that struggle are severely underweight” [2]. In fact, some patients will show a healthy condition while they are actually dystrophic [2]. The second reason is that, while anorexia requires a complex diagnostic process, it is also difficult to distinguish from another type of psychiatric disorder, known as body dysphoric disorder (BDD). This may result in patients who have AN to receive the treatment for BDD instead of their disorder[3]. In addition, adolescence is a period when individuals start to display changes both mentally and physically. Therefore, abnormal behaviors due to anorexia could be neglected and attributed to puberty. Another important reason is highly associated with Chinese cultural background. Growing up under a relatively conservative culture, any topics that are related to mental health and illnesses are still not openly discussed as western countries do. Some of the parents are still avoiding the fact that their children behave abnormally due to psychological factors. Anorexia that occurs among adolescents, therefore, should be gaining more attention for their psychological well-being.

2. METHODS

2.1 Information sources

Databases used: Pubmed, Google scholar, and other resources. Reference lists of relevant reviews and included articles in the current review were examined. The articles cited in this article were also examined in case of missing studies beyond the period in which the initial search was carried out.

Search date: up to October 31st, 2021

2.2 Search strategy

The search terms combined Mesh terms and text words: Anorexia Nervosa (1) risk factors (2) treatment (3) Chinese (4) adolescents (5)

2.3 Selection process & data collection process

Zotero was used for importing the initially important records for databases and for removing duplicates. Title/abstract screening, full text screening, and data extraction of records were conducted by two researchers (EW and CW) independently. Disagreements were solved with the help of the senior reviewer (ZF).

3. RESULTS

3.1 Risk factors

Being aware that Anorexia Nervosa (AN) is a type of eating disorder that is heterogeneous and multifactorial, [4] this article is going to discuss several significant risk factors of Anorexia Nervosa in respect to research and case studies which were specifically taken within Chinese adolescents. Overall, anorexia nervosa can be a harmful health issue through physical side effects, in addition to various aspects from mental torments. These torments include school bullying, high conditions of pressure and stress, stereotypes of concepts from social media.

3.2 Internal factors: physical appearance

An individual's body will go through significant changes during puberty, dermatological problems such as acnes are considered to be one of the contributing factors to AN. An opinion embedded in Chinese traditional medicine is that what has been eaten would be reflected on the physical body. Food is categorized as either "cold" or "hot" types. To maintain health, a balanced amount of energy has to be acquired. Normally acne is attributed to the excessive amount of energy in "hot" foods, such as fried, oily, spicy food as well as chocolate [4]. In a case study of an 18 year old girl from Hongkong who had been diagnosed with anorexia, great anxiety and shame arose from the appearance of a moderate amount of facial acne

which was incurable with medical treatments. Being coaxed and persuaded by the mother, the patient started to eat only vegetables and fruits, which are known as "cold" foods. After successfully healing their acne, the patient was allowed to eat "hot" foods such as meat and rice, but she kept her eating habit and took candies and biscuits as substitutions of daily meals. Irritation, depressive moods and abnormal frequency of periods occurred.

3.3 External factors: social media

In recent years, as online information spreads globally, social media works as the most influential platform in building interactions among people all around the world. Among all, China, as one of the most representative cases, has demonstrated a rapid development of the network media. Despite the high pace development of the internet in recent years, there is a simultaneous creation of severe problems. Being aware of the fact that adolescents are the age group that are the easiest to be influenced, there are some features that social media possess which potentially contribute to anorexia nervosa. First, social media tends to set up unrealistic body images, which could let adolescents compare these unrealistic pictures with their own. The distinct comparisons would result in the body dissatisfaction and promote unhealthy eating habits, which eventually bring up the risk of anorexia nervosa. In addition, due to the fact that social media allows a variety of different information to be posted, the unprofessional diet could mislead those who have anorexia nervosa, and worsen their health status [5].

3.4 Interaction between internal and external factors: Acculturation

Under a trend of globalization, acculturation takes place when an individual moves and adapts to a new culture. Cultural dimension is presumed to be a relevant factor with AN. A case study of an 18-year old girl Pauline, who had been diagnosed with anorexia showcases the contribution of acculturation to this disorder[6]. With a relatively special cultural background, Pauline was born in France, whose parents are both Chinese and migrated to France as teenagers and currently operate a restaurant in Paris. Without any medical history and abnormalities in eating, Pauline started to show significant signs in emaciations and depressive moods at the age of 17. By carrying out qualitative research (interviews), it was discovered that Pauline only partially met the DSM-5 criterion, in which she displayed an atypical selectiveness of food (refusion towards Chinese food). This could be attributed to the difficulties in adapting to two distinctively different cultures, further contributing to the acculturation gap and inability to communicate with her family members. The case of Pauline reflects a general problem that the

majority of migrant children face during the construction of their self-identities and sense of belonging. The separation between their internal environment, their family and native language; and external environment, where the recipient country could potentially create vulnerability which is expressed as the abnormal development in mentality such as anorexia nervosa [6].

4. TREATMENT OUTCOMES

Sun et al [7] conducted qualitative research with the purpose of further investigating the treatment outcomes of Chinese adolescents who are diagnosed with anorexia nervosa. In this study, the six parents from six families, consisting of four females and two males, four of them had received secondary education level and two were tertiary educated, aging from 49–57 years old, with four all having female adolescents with anorexia nervosa were selected to be the participants. Research carried out as semi-structured interviews with these parents with a series of open-ended questions, including the “what”, “why” and “how”, which helped researchers collect more detailed information from the parents about the current anorexia nervosa treatment outcomes of the adolescents from a parent’s perspective. Cantonese was used throughout the entire interview, which the whole conversation process was also recorded then transcribed into verbatim. The transcripts were explicitly analyzed by two researchers. In general, an unanimous negative perception and dissatisfaction toward the results of treatments were shown by the parents, who described strong barriers in the help-seeking and treatment process [7]. These barriers were particularly presented in several aspects. For instance, it was reported that doctors lacked sympathy and support. According to the quotation from Parent 1, she was scolded by the psychiatrist for not spending enough time with her daughter, causing resentment to the parent. Another barrier perceived by parents was that they were concerned about the lack of experience and specialized knowledge in the area of anorexia nervosa, therefore not being able to offer effective treatment to their children. Another crucial barrier is that parents have a relatively limited understanding of their roles in the treatment for their children. They recognized themselves as harsh roles in controlling the eating behaviors of their children, but this ultimately resulted in the deterioration of their family relationships. The barrier of receiving effective treatment is not only created by the unprofessional therapists and parents’ incomprehension, but also the entire context, which provides very few therapeutic choices. Since treatment to anorexia nervosa is unavailable in public medical services in Hong Kong, Parent 2 reported that he found a therapist from the U.S., who kept online communication with the patient. However, the outcome was still disappointing due to the communication barriers. On the other hand, the interviewees also showed several aspects that could be regarded as enablers, which could

potentially promote the effectiveness of therapies. One of the most significant enablers is the full support from school. Parents reported that they were advised by the school to pay more attention to the mental development of their children. Overall, Sun et al [7] showed a negative progress and outcome of treatment offered to Chinese adolescents with anorexia nervosa.

Ma & Lai [1] conducted a ground breaking preliminary study that specifically focused on assessing the applicability of family therapy for Chinese adolescents who suffer from anorexia nervosa in Hongkong. 27 Chinese children and adolescents with anorexia nervosa were selected as participants of this study through a convenient sampling technique. This study was originally intended to use control and experimental groups to better contrast the results between two groups. However, due to the disagreement from the participants’ parents, the different treatments that were planned to be offered to the experimental and control group were therefore cancelled. After receiving the consent from patients and patients’ families, the adolescents were sent to university-based family treatment centers for family therapy. Several stages were incorporated into the treatment: negotiation with patients’ families was established to shift the focus from the symptom to the symptomatic cycle. Then, therapists encouraged parents to play a positive role in helping their children to gain weight, instead of monitoring and controlling their eating behaviors. Therapists also intended to reconcile and enhance family relationships through this process and support individual’s development and changes. 90 minute sessions of family therapy was scheduled for every two weeks. To measure the results of the study, patients were asked to self-evaluate on their mental status based on four aspects throughout the process of treatment: symptoms associated with anorexia nervosa, the level of psychological distress, the marital quality of parents and their perception toward family functionality, and long-term changes on body mass index (BMI). The results of this study showed that after the 6-month therapy, while the psychological distress demonstrated a significant decrease, the marital quality of the parents increased. This indicates that family therapy could potentially bring positive effects in offering treatments to adolescents with anorexia. However, the rest of the assessments did not show a significantly positive change. In addition, most of the patients resulted in body weight restoration and BMI as well as a normal menstrual cycle. The two symptoms, drive for thinness and perfectionism, of anorexia nervosa have even been eliminated after the 6-month treatment cycle [1]. However, the long term effect should warrant more research [8], as well as the risk factors led to the anorexia nervosa [9,10].

5. CONCLUSION

All in all, this paper aims to investigate the potential risk factors that potentially lead to the anorexia nervosa disorder specifically in the Chinese adolescent population. Based on the reviews of literature, it has been discovered that both internal and external factors, as well as the interaction between these two types of factors could play significant and impactful roles. Patients' dissatisfaction towards their own physical appearances, such as acnes, could result in abnormal diet behavior; which ultimately resulted in anorexia nervosa. The external environment, such as social media, could potentially indoctrinate a series of strict and stereotypical beauty standards towards the adolescents, who are experiencing the changes both mentally and physically, therefore misdirecting adolescents. The interaction between external and internal factors, such as acculturation, could lead to the conflict in self-identification and the loss of belonging to any culture. This acculturative stress could undermine the mental health status and contribute to eating disorders such as anorexia nervosa. This paper also reviews the studies which investigated the current treatment outcomes for the anorexia patients in China. The overall results are negative, also revealing the issue of insufficient professionals and inadequate understanding in this specific area. Although there has been studies that provided new directions for treating adolescents with anorexia nervosa, such as family treatment, more in-depth research is still necessary to be conducted in the future to develop treatment methods that could truly solve the eating disorder problem in China. At the same time, general knowledge of anorexia nervosa should be more widely spread to raise the awareness among all national citizens.

The majority of studies that have been conducted that specifically focus on anorexia nervosa are mainly the case studies. A general limitation that case studies possess is the difficulty of replication. In addition, since case studies are investigating a specific individual, the findings are often acquired from unique and personalized experiences, which lead to a relatively low generalizability to a wider population. For the semi-structured interviews, a potential limitation is that the open-ended questions require large efforts to analyze the qualitative results. Considering that Sun et al [7] only involved two researchers carrying out the content analysis, researcher biases could be involved. Although Ma & Lai [1] carried out an study that have clear examination standards in order to assess the effectiveness of the family therapies, the sample size is relatively small, outliers could significantly distort the overall data.

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