Current Misconceptions of Obsessive-Compulsive Disorder Among Chinese Adolescents: Causes and Implications

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Abstract. This study aims to examine the current misunderstanding of obsessive-compulsive disorder (OCD) among adolescents using both quantitative data (questionnaire) and qualitative data (interview). OCD is a complex mental health condition, and understanding among adolescents is often limited, which may influence early recognition, help-seeking behaviour, and effective management of the disorder. This research observes three main aspects of misunderstandings: the general belief that OCD is an anxiety disorder, the perception that psychotherapy is more important than pharmacotherapy, rather than equally important, and the belief that the age of OCD prevalence is between 13 and 30. These misconceptions can result in delayed treatment and inadequate support for affected individuals. Alongside the finding that social media is the most common source of information from which participants collect misinformation, the study highlights the role of digital platforms in shaping adolescents' perceptions. This indicates a need for improved mental health literacy and accurate educational interventions targeted at young people.

Keywords: Obsessive-Compulsive Disorder; Adolescents; Mental Health Literacy; Anxiety; Symptom Awareness.

1. Introduction

Obsessive-Compulsive Disorder (OCD) is a chronic and often debilitating illness marked by the presence of both intrusive, unwanted thoughts (obsessions) and repetitive behaviours or mental rituals that are time-consuming (compulsions) [1]. According to Migala, OCD has a prevalence of 2-3% in a lifetime [1]. The specific symptoms of obsessive-compulsive disorder include some recurring and persistent thoughts and inner urges, such as the fear of contamination and the repetitive arrangement of items in a near order. Obsessive thoughts can also manifest as excessive handwashing. This is an action that occurs involuntarily due to an internal compulsive behaviour and requires strict adherence to one's rules [2]. The recategorisation of OCD from an anxiety disorder in the DSM-IV [3] to a subtype of Obsessive-Compulsive and Related Disorders in the DSM-5 leads to one of the main misunderstandings of this illness. Despite the comorbidity between OCD and other anxiety disorders, they have a crucial difference, as anxiety disorders do not involve compulsions that are intended to relieve anxiousness, the symptom that occurs in OCD. This change also triggers the concerns of professionals over the approximately 50.5% misdiagnosis rate of OCD [4], and OCD sufferers are usually undiagnosed for ten or more years [5,6]. Therefore, this research aims to evaluate the extent of the misconception that Chinese adolescents have about OCD, and the aspects in which the participants show the most common misunderstandings. In order to do so, this research conducted a series of in-depth analyses and discussions to compare with other contemporary research to support this study.

The reasons for these common misunderstandings may be due to a general lack of knowledge, gender influences, family background, and the misleading sources of information that adolescents refer to, such as social media. Importantly, this research recognises the low mental health literacy (MHL) in China compared to Western countries [7]. In a national mental health assessment conducted by the Psychological Institute of the Chinese Academy of Science, the baseline MHL in China is 12% [8,9], meaning that only 12% of the population meets basic competency, including recognition,

understanding, attitudes, and help-seeking skills. This demonstrates a general lack of knowledge-spreading, which leads to the information reception mainly coming from the internet and social media. Based on the factors above, this investigation hypothesises that individuals may have an inaccurate perception of the symptoms and behaviours shown by OCD, and this research aims to explore the specific misconceptions and evaluate the possible reasons.

2. Method

2.1 Participants

This research uses opportunity sampling and voluntary sampling. Self-reports are used as the research method of the study. Researchers published a questionnaire on WeChat Moments to invite Chinese adolescents who fall in the age group between 10 and 19 to participate in our research. Also, participants who are mainly from middle school and high school have been asked to fill out the questionnaire. Since most of the participants who filled out the questionnaire were contacts of the researchers of this report and students in the community, most of the participants were adolescents under the age of 20 and generally studied in international schools. The participants have a wide range of majors and studies to ensure diversity in this sample.

2.2 Measures

A self-designed questionnaire was used to assess the understanding and perceptions of adolescents on OCD, which was developed by analysing and integrating relevant information on the internet regarding the common misconception of OCD among the public. The questionnaire contains 11 questions in total and mainly covers the following aspects: causes, symptoms, high-risk groups, classification, and treatment methods of OCD. This questionnaire also asked participants to fill out their gender, which allows this research to compare the differences in misconceptions about OCD caused by gender differences. Two versions of the questionnaire were made for this experiment. The first version was discarded due to the broadness of the questions included, which led to an overly general response from the participants. 30 data points in the first version of the questionnaire were collected and used in this version as a pilot study. Based on these data, the second version of the questionnaire has been improved and produced, which received 201 responses.

2.3 Interviews

This study also used a self-designed interview, which followed a structured interview method and was conducted offline, one-on-one and face-to-face with the participants. The interview questions were determined after the collection of the first version of the questionnaire, in order to complement the aspects that were not included or not detailed enough in the questionnaire. The interview consisted of 7 questions, including age and questions to test the knowledge of the participants on OCD. After the interview, a task on paper was also given to the participants to fill out, which included many two-choice questions describing either the real symptoms of OCD or some widely believed incorrect symptoms that are spread on the internet. An example is stated as follows: 1. Repetitive cleaning, even if it is done thoroughly, would still make the individual physically and mentally exhausted. 2. The sustaining of a clean and organised space, but would not have a psychological burden from cleaning. The first response in this example is the correct symptom of OCD, as ICD-11 states that OCD diagnostic requirements include the result in significant mental distress even after the act of obsessions and compulsions, whereas the common misconception of OCD is that it results in sustaining a clean and organised space, which would not result in a psychological burden.

2.4 Data Collection Procedure

The questionnaire was distributed over two and a half days. The questionnaire system generated preliminary data statistics, and the remaining complex data was analysed by researchers. To avoid

gender bias, the interview was conducted with 5 male participants and 5 female participants. The interviews were conducted with students from different classes who volunteered to participate. Participants were taken to a room where there was no one else except themselves and the interviewers. Before the interview began, each participant was informed that questions would be asked, and it was necessary to ensure that participants maintained a certain degree of authenticity. The entire interview process was recorded and used for the subsequent organisation and reference to information, but no personal information or private data will be disclosed during the entire process. Therefore, the interviews were audio-recorded with consent.

3. Results

According to the data from the statistical interviews, 40% of the sample group have a misconception of OCD to a high extent of up to 80%. From the detailed analysis of the results, it can be seen that 80% of the sample have no understanding of the symptoms of OCD. The remaining people who have some understanding of OCD have not established a relatively correct cognition. They merely acquire some partial information from their friends around them and popular science videos on the Internet. Their misunderstandings regarding common OCD symptoms include: an extreme obsession with cleanliness, items need to be placed in extreme order over time, and a very strict control over time. Furthermore, the research results also reveal that these individuals lack a correct understanding of OCD. They believe that the possible causes of this disease might be: the pursuit of perfectionism, strict self-demand, neurological problems, family genetic issues, and the influence of the surrounding environment. According to the result of the interview, we concluded that participants' limited understanding of the causes of OCD and the corresponding symptoms led to misconceptions about OCD. This result also prompts our reflection: when there is insufficient information, participants tend to consider OCD as an anxiety disorder.

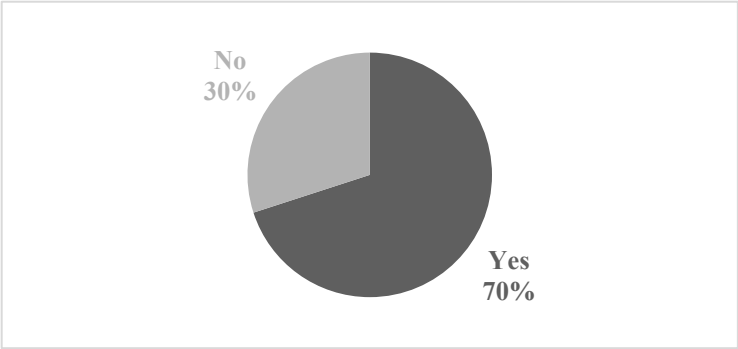


Figure 1. Adolescents' perception of whether OCD is classified as an anxiety disorder.

No means participants do not consider OCD to be a type of anxiety disorder. Yes means that participants consider OCD to be a type of anxiety. During the interview, two-choice questions were also distributed to gather a wide range of opinions and understandings from teenagers about OCD. The results of the questionnaire survey confirmed that teenagers have a very serious misconception about OCD. The Figure shows that about 70% of the teenagers believe that OCD belongs to anxiety disorders, and the survey also shows that 60% to 80% of them believe that OCD mainly manifests as repetitive actions, paying special attention to cleanliness, as well as obsessive behaviours of perfect symmetry and perfectionist pursuits.

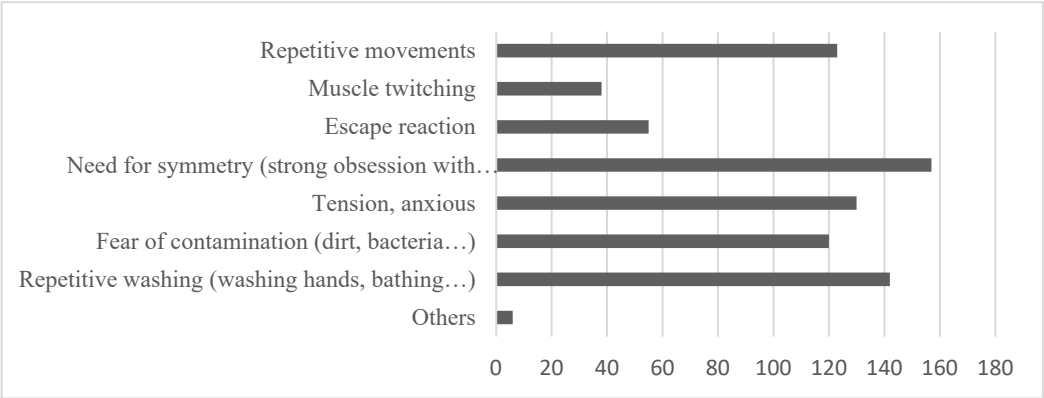


Figure 2. Main characteristics of OCD as perceived by adolescents.

The statistical chart presents the statistics of the main manifestations of OCD as reported in the questionnaire survey. It was found that the behaviours that are most likely to cause misunderstandings among people are repetitive movements, need for symmetry with perfectionism, tension, anxiety, and repetitive washing.

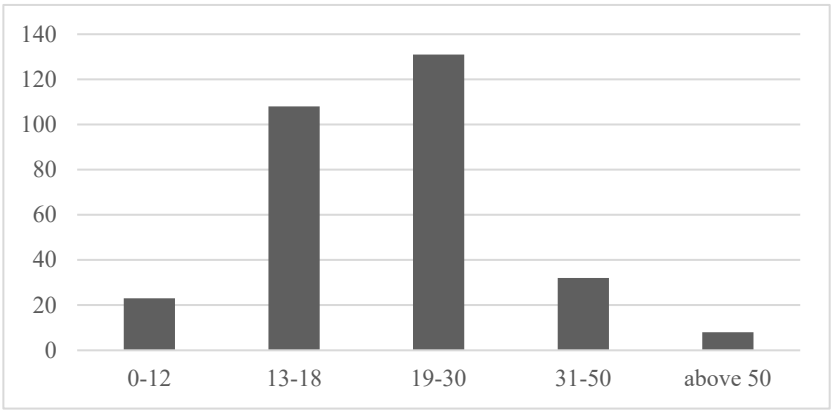


Figure 3. Adolescents' perception of the age group in which OCD mainly occurs.

In Figures 2 and 3, we observe that the symptoms and behaviors that teenagers are most prone to exhibit when having misunderstandings about OCD are as follows: repetitive movement, need for symmetry with perfectionism, tension, anxiety, and repetitive washing. Meanwhile, they believe that OCD is more prevalent among individuals aged 19 to 30, followed by those aged 13 to 18.

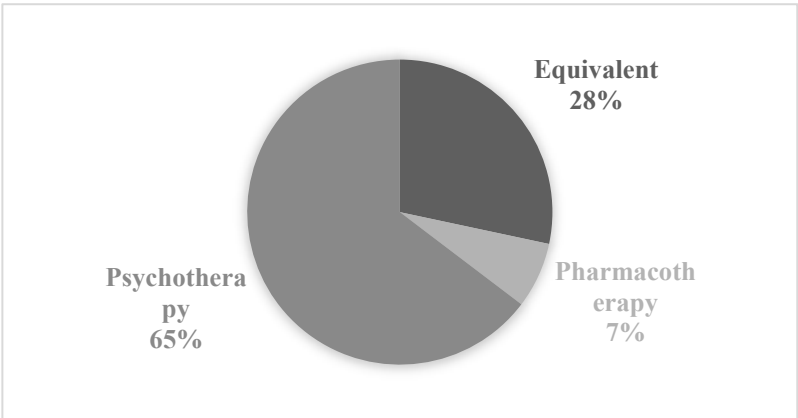


Figure 4. Perceived importance of treatment approaches for OCD.

We conducted face-to-face interviews to explore which treatment method was considered the most effective by the participants. The results of Figure 4 statistics show that 65% of the participants

believed that psychotherapy was the most effective treatment for OCD, while 28% and 7% of the participants thought that equivalent and pharmacotherapy were equally effective.

4. Limitations

After the experiment, when the data was analysed, it was discovered that the problems that occurred throughout the entire research process. This study has many concepts that need to be improved, first, in the questionnaire survey. Experimenters discovered that the proportion of female participants was much higher than that of male participants. This may lead to a gender bias in the analysis results of the questionnaire. These data may not be able to represent men. Therefore, the generalisability of the questionnaire results is relatively poor. At the same time, because the scope of the questionnaire distribution is very wide, it is possible to collect responses from age groups that are not within the scope of the study. Researchers need to spend time removing these questionnaires. Second, this experiment did not hide its purpose. It was the investigation of the misunderstandings of OCD in adolescents. Therefore, the results obtained from the adolescents may be biased to show their understanding of OCD or to cater to the purpose of the experiment. This is called 'demand characteristic', which originated from Orne [10]. Thirdly, there may be situations where one changes their answers in mind to meet social expectations. This is due to some social consensus, where participants would believe that the answer they give is more socially acceptable than the answer they have in mind. For instance, the question in the interview: Do you think obsessive-compulsive disorder needs to be treated? Although the interviewee may have their perspective or opinions on this disorder, they do not necessarily express their true opinion because society is more inclined to respect every kind of disease. Moreover, since the opposite sampling method is used, all participants will have the same characteristics. For example, all these participants are on campus and are all from Vision Academy. This indicates that all the students here have studied international courses. And most of them study A-level courses. Then there might be more knowledge about OCD in other courses. This will lead to poor generalisability of this experiment.

5. Discussion

This essay determined three main aspects of the misconceptions of OCD among contemporary adolescents: the relationship between OCD and anxiety, the gender and age prevalence of OCD, and the different treatment methods of OCD. In contemporary society, as high as 50.5% of people around the world have certain misconceptions of OCD, where Chinese people account for a large proportion [4]. In these misconceptions, 69.65% of people believe that OCD is a type of anxiety disorder [11, 12], compared to 70% of the participants believing so in this research. This statistically proves that the majority of the Chinese population is misguided by information. In their research on Bartz and Hollander, they explored the impacts of OCD and the appropriate treatment measures, from the following five aspects: comorbidity studies, family studies, neurocircuitry, neurotransmitter function, and pharmacological treatment response. In addition to the common symptoms of obsessive-compulsive disorder, paedophilia, and aggressive tendencies also belong to OCD. These are all potential and easily overlooked symptoms [5]. For example, the most common misconception is that many people believe OCD belongs to anxiety. According to relevant research studies, the connection between obsessive-compulsive disorder (OCD) and anxiety disorders is as follows: OCD may trigger anxiety disorders, but it does not constitute anxiety disorders. OCD should be classified as an obsessive-compulsive disorder and related disorders.

According to Radua's research [13], the article clearly stated that OCD patients and other anxiety disorder patients have different neural substrates, even with opposite research results. Both similarities and differences between OCD and other anxiety disorders in neurobiology and symptoms are discussed. Our research also investigates the prevalence of OCD among different sexes. The result demonstrates that more than 77% of adolescents consider that females have a greater prevalence. The

result obtained from our questionnaire is positive, as it matches the overall result in the research that females manifest a greater ratio of OCD compared to males overall [14]. However, the prevalence of OCD in the two different biological sexes varies in different age groups. The average age of women with OCD is much older than that of men. The peak periods for women to suffer from obsessive-compulsive disorder are around the age of 20 and during the postpartum period. For men, the high incidence rate occurs during childhood and adolescence. In addition, the cultural difference also influences the prevalence between the two sexes [14]. In summary, a larger proportion of women are diagnosed than men; therefore, as mentioned above, the overall outcome is positive.

When we delved into the treatment methods for obsessive-compulsive disorder, we discovered a significant misconception. Our research results are shown in Figure 4, which indicates that 65% of the participants believe that psychotherapy is the most effective method for treating obsession. In the research of Swierkosz-Lenart et. al [15], both psychotherapy and pharmacotherapy are discussed. Cognitive behavioural therapy is a psychological treatment method. This method can teach people how to correctly identify the thinking patterns that cause negative emotions and behaviours in themselves and learn how to get rid of such disturbing ways of thinking [16]. According to the research [17], CBT includes exposure therapy and measures to prevent the recurrence of behaviours. This treatment method is currently the most effective way to treat OCD. CBT avoids using common drug treatments to suppress the symptoms, thereby reducing the possibility of disease recurrence. There is a study reported that 42 children have OCD. They were treated with a CBT protocol based on exposure plus response prevention (ERP). The treatment response rate was 79%, and the mean decrease from baseline in NIMH global score was 45% [1]. This study clearly shows that CBT could be used to treat OCD. Based on the advancements in social technology and psychological research, it is possible that there will be even more effective treatment methods in the future. This treatment method is considered more effective than serotonergic treatments, including Selective Serotonin Reuptake Inhibitors (SSRIs), which are pharmacological interventions, according to several studies that compared the outcomes of both approaches in treating obsessive-compulsive disorder. However, the limited accessibility of CBT, being time-consuming, requiring constant commitment, and high cost are crucial factors that act as barriers to initiating and completing CBT. Nevertheless, the importance of psychotherapy should still be recognised, especially since acceptance and commitment therapy (ACT) of mindfulness showed promising perspectives in the treatment of OCD.

Along with CBT, SSRIs are also considered a first-line treatment in OCD by the American Psychiatric Association (APA) Practice Guidelines, as multiple evidence has been found to prove the connections between serotonergic disruption and OCD in previous research and is an effective treatment option which could be suggested to patients lacking compliance for psychotherapy, in order to obtain a certain level of moderation and reduction in severity. However, the complexity of the effect obtained by serotonergic is still undefined. It is shown that there is a significant reduction of OCD behaviour when a higher dose of serotonergic is used compared to a lower dose, therefore the factor that off-label prescriptions that may cause a lack of access for patients to adequate dose therapy needs to be taken into account, as this phenomenon prolongs the duration of untreated illness, which is a parameter that appears to have significant impact in terms of outcome for patients treated with SSRIs.

Overall, this research paper argues that both psychotherapy and pharmacotherapy are crucial to the treatment of OCD, contributing their effect towards different groups of people. Therefore, the misconception results in this questionnaire that only 7% of participants believe that pharmacotherapy holds a greater importance, 28% of the participants believe that both methods of treatment are equivalent in their importance, while 65% believe that psychotherapy holds a greater importance in the treatment.

6. Conclusion

Overall, through the research, there is multiple evidence demonstrating that adolescents with OCD. The research used both quantitative and qualitative data to investigate more specific, accurate results. Specifically, there are questionnaires and interviews involved. OCD had been removed from anxiety disorders in DSM-5. The reason for the misconception learnt in this investigation is the lack of accurate knowledge dissemination, which also implies the absence of rapid information transmission in society. In the future, this topic can have a more targeted investigation to find a more reliable result. More detailed, from the face-to-face interview, some outcomes testify that most teenagers understand OCD from the internet, especially social media frequently used in China, such as BiliBili, TikTok, or Red Book, as shown in the results of the research carried out by our interviewers. In addition, there are 3 main aspects that youngsters misunderstand about OCD. The most apparent result shown in this research is that there is a large proportion (over 69%) of adolescents who believe OCD is one of the subtypes of anxiety disorders. The reason for this phenomenon may be the comorbidity between OCD and anxiety disorders. Moreover, the results show that over 60% of teenagers believe that psychotherapy is more effective than medication when it comes to treatment. The result from the survey questionnaire shows that only 28% of the participants have a correct understanding of the importance of these two treatment methods, which is that both methods are equally important for the treatment. Furthermore, approximately 50% to 60% of the participants do not have a clear understanding of the high-incidence age group of OCD. Some interviewees believe that OCD treatments are unnecessary unless the symptoms are severe. However, regardless of mild or moderate, treatment according to the individual is necessary for every diagnosed patient.

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