# Understanding and Treating Major Depressive Disorders among Adolescents

Yiting Wang<sup>1,a,\*</sup>

<sup>1</sup>Dalian American International School, Dalian, China a. angel2music@163.com \*corresponding author

Abstract: The purpose of the paper is to review and introduce the issue of Major Depressive Disorders among teenagers, including its possible cause and treating methods. The paper also reviews and depicted several research and reviews done to date regard to the topic. Based on the findings and results of studies done to date, Cognitive Behavioral Therapy (CBT) is discovered as one of the most effective treatments in treating major depressive disorders nowadays. Other treatments nowadays are also depicted in the paper, each with different level of effectiveness, including Interpersonal Therapy (IPT) and Family Therapy (FT). Regardless of the actual treating methods after being diagnose, initial steps to took and possible prevention interventional programs are also depicted below. As more experiments and research expect to be done in the future, drawbacks of other treatments regarding to the topic will be revised, whereas various types of efficient methods could be free to choose from by patients.

*Keywords:* Major Depressive Disorders, Adolescents, Treatment, Cognitive Behavioral Therapy, Therapy.

#### 1. Introduction

The adolescent and teenage developmental stage is of paramount psychological significance, as it represents a critical period that considerably impacts an individual's life trajectory [1][2]. Specifically, adolescents are very likely to experience various types of mental disorders while confronting stresses and pressures at a young age. In particular, Major Depressive Disorder is one type of mental or psychiatric disorders that most commonly emerge in adolescence. The symptoms of Major Depressive Disorder include persistently depressed mood, lack of interest in everyday activities, feelings of worthlessness or guilt, fatigue, suicidal thoughts, sleep disturbance and etc. Based on the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), the diagnosis of Major Depressive Disorders requires an individual to exhibit five of the listed symptoms, which must include a depressed mood or lack of interest or pleasure leading to social or occupational impairment [3]. According to statistics, "As many as 8% of adolescents diagnosed with MDD have completed suicide by young adulthood, making suicide the second leading cause of death among adolescents 12-17 years of age" [4]. As shown from the factual data, a respectable percentage of teenagers are suffering from Major Depressive Disorders, and it truthfully leads to life threatening impacts and consequences if it is not well diagnosed and managed within adolescence. Regard to MDD in adolescence, factors that contribute to the psychological disorders in teenagers vary, including but

<sup>©</sup> 2024 The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

not limited to poor school performance, parental pressures, physical or emotional trauma, interpersonal challenges in later life and etc [4]. Not a single factor or cause will lead to Major Depressive Disorders among teenagers, various types of factors play a role in the causal relationship.

## 2. The Fields of Psychology that Associates with the Topic

Developmental and Clinical Psychology are the 2 fields or domains of psychology that could relate to the topic of treatments and management methods of Major Depressive Disorders among teenagers in western countries. Clinical Psychology refers to a field of psychology concerned with evaluating and treating mental illness, abnormal behaviors, and psychiatric problems. And Major Depressive Disorder is defined as one serious type of psychiatric disorders or mental illness that need to be treated with therapies and treatments. Therefore, the topic of treating teenage MDD is evidently relevant to the domain of clinical psychology based on the definition of both MDD and clinical psychology. Furthermore, the topic of treating Major Depressive Disorders among teenagers seems to have less direct association with the field of developmental psychology comparing to its relevance with clinical psychology. However, the topic particularly concentrates on MDD among teenagers, as an important age stage as human develop throughout lifetime, most changes and difficulties can occur and experienced in young adulthood or adolescence. According to Erik Erikson's stage of development, the Adolescence stage from age 12-18 is where teens develop a sense of self and personal identity, the failure in this stage will lead to a weak sense of self and role confusion. Meanwhile, young adults from age 12-18 also confront new pressures and stress that they need to learn to deal with, which fail to cope with these challenges might lead to mental disorders such as Major Depressive Disorders [1]. Understanding the psychological changes and difficulties that adolescence experience will assist the finding of MDD treatments that specifically target young adulthood. As a result, learning developmental psychology also plays a crucial role in studying the topic of treatments and prevention of MDD targeting teenagers.

#### 3. The Analysis and Clarification of the Keyword "Adolescent"

The age range for the word "Adolescents" is varied among different papers and reviews. Based on the definition of World Health Organization (WHO), adolescents refer to anyone who is between the age of 10 to 19 [5]. Meanwhile, other resources may also suggest that 10-24 years is more in line with the growth of adolescents instead of the age 10-19 [6]. Specifying the age range of adolescents seems to be less significant and resourceful in discovering the most effective treatment of Major Depressive Disorders among them. However, the changes that could happen in nearly a decade can significantly impact adolescence's future life in certain degrees as they go through the process. The changes or maturation will occur not only physically, but also mentally, socially, morally, and etc., especially after puberty. It is the official transition from children to young adults, achieve sexual maturity and other physical changes. More importantly, emotions and mindsets are easily influenced during this period while it stabilized and established. Emotions will be affected by hormones, pressures from outside environment can easily cause mental or emotional break down of adolescents [7]. Due to the fact that this is the stage where significant changes occur in short term of time, specifying the treatments down to even shorter period of time could improve efficiency in a great level. A 10 year old girl has a complete different level of maturity and beliefs as a 19 years old girl. It would evidently to claim that the same treatment methods or process might not be applicable for both of them. Consequently, clarifying and specifying the certain age interval for adolescence would be a great initial process to ensure more accurate results of the efficacy of treatments.

# 4. Treatments and Management Strategies targeting Major Depressive Disorders among Adolescents

#### 4.1. Initial Actions and Management

Based on the advises of the GLAD-PC guidelines, primary care physicians to educate families and patients about depressions and establish a treatment or management plan with certain goals associating school, home, and social functioning. For instance, the proposal could include objectives like being respectful to others, engaging in activities with supportive and encouraging peers, participating in family or friend's mealtime, and maintain academic accomplishments. Furthermore, a plan that ensure safety should also be considered, for the purpose of restricting the use of lethal means or dangerous items that could lead to suicidal actions. Presenting ways for patients in communicational purpose during crisis is in need, including but not limited to: offer emergency contact number if suicidal thoughts emerge, teaching parents to recognize signs and signals of selfharm or dangers to other, and listing coping strategies and management [8]. The listed management methods are more of preventing life threaten danger caused by the Major Depressive Disorder and trying to resolve the negative thoughts by integrate into normal and encouraging social activities. As the fact the severity of the symptoms of Major Depressive Disorders is especially high, these activities and preventions would not be enough to eradicate the injurious impact of the psychiatric disorder. In particular, losing interests in everyday activities, as one of the symptoms of Major Depressive Disorders, the severity of the disorder highly supports the difficulty in patients participating in the above activities from GLAD-PC Guidelines. As a result, more and various types of therapy and treatment method is necessary in managing Major Depressive Disorders.

# 4.2. Cognitive – Behavioral Therapy (CBT)

To date, numbers of research and reviews have been done on understanding and treating Major Depressive Disorders in Adolescents. In the study done by The Treatment for Adolescents with Depression Study (TADS) Team in 2011, they have found that "88 of 189 adolescents (46.6%) who have recovered from depression, had recurrence within 63 months" [9]. Based on the findings of the study, the possibility of relapse and reoccurrence of Major Depressive Disorders in adolescents are respectively high, demonstrating the need of effective treatments to reduce the probability of relapse. Concentrating on the possible treatments and managements, as Méndez et al. suggested in their review, effective management involves a multimodal approach including psychoeducation, lifestyle interventions, psychotherapy, and medication. To be specific, main psychological treatments nowadays include Cognitive Behavioral Therapy (CBT), Interpersonal Therapy (IPT), Family Therapy (FT), and Psychoanalytic (PT). Among these approaches, Cognitive Behavioral Therapy (CBT) has been evidently proved as a well-established and effective method in treating Major Depressive Disorders in adolescents compared to various active and control conditions, for both group and individual format. Cognitive Behavioral Therapy is a type of psychological therapy based on treating and altering unhelpful mindsets (cognitive) and behaviors, and based on the principles that the individual with psychological issues can adopt more healthier coping strategies, thus alleviate the impact of the symptoms, and strengthen their overall effectiveness in life [10]. Strategies involving altering unhelpful cognitive patterns include but not limited to: Utilize problem solving ability to overcome challenging circumstances and establish stronger sense of confidence. And methods in altering unhelpful behavioral patterns include but not limited to: Learn to confront own fears and practicing role playing for possible challenging interactions with others. Not all strategies will be used by each therapist, creating a trustful and collaborative atmosphere with patients and to establish a useful strategies and understandings of the issue would be more effective [10]. Back in 1997, studies have done to show that Cognitive Behavioral Therapy demonstrate more efficacy in treating MDD among teenagers than Family Therapy and non-directive supportive therapy (NDST). Brent and colleagues have conducted an experiment to evaluate and comparing the effectiveness of CBT with FT and NDST. By the end of the treatment period, statistics have shown that only 17.1% of the adolescents in the CBT group continued to exhibit depressive symptoms, in contrast to 32.3% and 42.4% in the FT and NDST group [11]. Nowadays, CBT still demonstrate strong credibility in treating Major Depressive Disorders in adolescents, suggested in the review done by Korczak et al. [12]. Cognitive Behavioral Therapy has made significant advancement and changes in treating the disorder in both research and clinical practices area. The effectiveness of Cognitive Behavioral Therapy is still being proven and revised into better versions in treating Major Depressive Disorder among teenagers through more research and studies.

## 4.3. Interpersonal Therapy (IPT)

Interpersonal Therapy (IPT) has also been demonstrated as a well-established efficient method compared to clinical monitoring and routine care, however, not for both group and individual format. Group Interpersonal Therapy may be as effective as CBT yet requires more sufficient evidence to prove its effect. Interpersonal Therapy is a type of psychological treatment that focuses on improving patients' interpersonal relationship and social functioning [13] [14]. This type of therapy was originally established to treat Major Depressive Disorders, yet it could be adopted in many other disorders nowadays [13]. Back in the late 1990s, Mufson and colleagues adapted the Interpersonal Therapy to treat Major Depressive Disorders among adolescents, concentrating in common teenager problems like conflicts with parents and peer pressures. And according to the results of their study, "75% of the IPT adolescents had recovered from depression, scoring 6 or less on the Hamilton Rating Scale for Depression, whereas only 46% improved in the control condition" [9]. The effectiveness of Interpersonal Therapy targeting Major Depressive Disorders among teenagers have already been shown back in early years, further research also was done in proving its credibility comparing with Cognitive Behavioral Therapy. Based on the studies that Rosselló and Bernal have done, there were no significant differences in the effectiveness of Interpersonal Therapy (IPT) and Cognitive Behavioral Therapy (CBT). Both showing great changes and advancements in treating teenagers who suffer from Major Depressive Disorders [8].

#### 4.4. Family Therapy (FT)

Adolescents experiencing major depressive disorders frequently report serious problem in several areas of family functioning. In particular, as teenagers go through the sensitive and developmental stage of their life, the supports and communication among become very significant in influencing their mental health. Therefore, family therapy seems to be an important approach in improving the issue of teenagers suffer from major depressive disorders. Family Therapy can be defined as a psychological approach that concentrates in ameliorating the relationship and interactions between individuals and family members [15]. However, recent systematic reviews of family therapy alone or against other control methods for teen major depressive disorders still lack even until 2023 [15]. Considering the significant associations of family functioning with teen major depressive disorder, the review of Waraan et al. done in 2023 proves the effectiveness of family therapy with other treatment methods now been actively used. Based on the results of their review, the outcomes of family therapy and other treatments shows no significance variance or difference through their meta-analysis. The only differences occur in the effect of family therapy in adolescents who suffer from suicidal thoughts, it demonstrates how family therapy appears to have greater effect in treating these teens comparing with other methods. Parental factors take up a great amount of percentage in causing

major depressive disorders among teenagers, especially in countries in East Asia. The education within the family can substantially effect the develop of adolescents' mental health, influencing and shaping their internal values. Thus, contributing to the fact of how major depressive disorder might be caused by not only genetic factors, but also environmental factors. Family therapy is a psychotherapeutic approach being widely used in treating major depressive disorders among teens, yet still lack of evidence in proving its efficacy.

#### 5. Prevention for Major Depressive Disorders among Teens

Not all articles have stated the possible prevention of major depressive disorders for teens to utilize, where the statement of no current prevention targeting this issue also appears. However, based on report of Institute of Medicine in 1994, there are 3 types of prevention interventions. And the review of Gladstone et al. done in 2012 explains the preventive interventions targeting major depressive disorder among adolescent [16]. Universal preventive intervention, as one type of preventive approach, concentrates in activities that faces normal community or public regardless of possible risks. Example of this type of prevention include establish a course that educate the negative risks of substance abuse to high schoolers. Another type refers to selective preventive intervention, target different community, as to people who are in great risk of the disorder. Indicated preventive program, as the last type of intervention, focus on people who demonstrates symptoms of the disorders [16]. The different between these 3 types of preventive intervention is their target audiences. Gladstone et al.'s review also depicted several successful examples of each type of preventive intervention programs. Starting with Universal prevention program, the evaluation of Spence and colleagues determined the success of the program targeting 1500 students in Queensland, Australia [17]. Problem Solving for Life (PSFL) refers to a 40-50 minutes activities eight times a week, concentrating in lecturing the reconstruction of cognitive and problem-solving ability. The schools that were randomly assigned to implement the Problem Solving for Life (PSFL) intervention display decreasing symptoms of major depressive disorder comparing with schools who goes through regular condition, and some high risks students are also not categorized as high risks as well. However, the difference only appears in short amount of time, it starts to reduce after longer period of time, suggesting the significance to long term intervention. Moreover, for selective preventive intervention, Penn-Resiliency Program (PRP) refers to 90 - 120 minutes of teaching students about the association between their life events and their belief towards it. This program has been evaluated and proved to decrease symptoms of major depressive disorders of teens, yet no preventive effect was discovered for this program. The depicted studies and program were about decade ago, whereas even these preventive programs show how they can reduce symptoms of major depressive disorders for adolescents, not all display the function of preventing such disorder to appear or emerge. And based on the data of teens who suffer from major depressive disorders, the number of teens experiencing such pain are still increasing around the world. Thus, demonstrating the lack of effective preventive programs and interventions, in order to stop the pain from the root. Although there are many active treatment methods targeting the issue, yet it would still be an unhealthy memory for children to go through and trying to overcome. Therefore, not only more treatment methods will emerge in the future, the need of valid preventive interventions is also urgent and helpful regard the issue itself.

#### 6. Conclusion

To conclude, as the topic became a common issue that the world concentrates on, more research and studies will be implemented, the number of effective treatments and diagnosis will be discovered. The number of teens who still suffer from major depressive disorders are still increasing and rising globally, they might encounter incomprehension and discrimination from people around them.

Adolescence is a very crucial stage of human throughout a course of lifetime, severe mood disorders like Major Depressive Disorders must be properly treated, to avoid future risks factors that could negatively impact their life. Occasionally, adults assume the discomforts psychologically are normal and common for young adults who just started facing new pressures and stress in their life. Nevertheless, psychological illness during this specific stage of life will not just impact this specific stage of life and assume to be overcame as the next stage of life approaches. Most often, the reason why Major Depressive Disorder still being the most prevalence mental disorders among teenagers in the current time, is how the issue has not been taken seriously as it should be. From successful prevention to active treatment methods, all steps need to be taken in solving the current issue. Proper and appropriate guidelines in diagnosing and treating MDD among teenagers should be put into more real-world practices and collectively learn from each case.

#### References

- [1] Bodicherla, K. P., Shah, K., Singh, R., Arinze, N. C., & Chaudhari, G. (2021). School-Based approaches to prevent Depression in Adolescents. Cureus. https://doi.org/10.7759/cureus.13443
- [2] Preventing mental, emotional, and behavioral disorders among young people. (2009). In National Academies Press eBooks. https://doi.org/10.17226/12480
- [3] Bains, N., & Abdijadid, S. (2023, April 10). Major depressive disorder. StatPearls NCBI Bookshelf. https://www.ncbi.nlm.nih.gov/books/NBK559078/
- [4] Mullen, S. (2018). Major depressive disorder in children and adolescents. Mental Health Clinician, 8(6), 275–283. https://doi.org/10.9740/mhc.2018.11.275
- [5] Csikszentmihalyi, M. (2024, September 11). Adolescence | Definition, Characteristics, & Stages. Encyclopedia Britannica. https://www.britannica.com/science/adolescence
- [6] Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. The Lancet Child & Adolescent Health, 2(3), 223–228. https://doi.org/10.1016/s2352-4642(18)30022-1
- [7] Professional, C. C. M. (2024, September 5). Puberty. Cleveland Clinic. https://my.clevelandclinic.org/health/body/puberty
- [8] Selph, S. S., & McDonagh, M. S. (2019, November 15). Depression in Children and Adolescents: Evaluation and treatment.

  AAFP. https://www.aafp.org/pubs/afp/issues/2019/1115/p609.html#:~:text=The%202005%20to%202014%20National%20Surveys%20on%20Drug,are%20not%20receiving%20needed%20care%20for%20depression.%201
- [9] Méndez, J., Sánchez-Hernández, Ó., Garber, J., Espada, J. P., & Orgilés, M. (2021). Psychological Treatments for Depression in Adolescents: more than three decades later. International Journal of Environmental Research and Public Health, 18(9), 4600. https://doi.org/10.3390/ijerph18094600
- [10] What is Cognitive Behavioral Therapy? (2017, July 31). https://www.apa.org. https://www.apa.org/ptsd-guideline/patients-and-families/cognitive-behavioral
- [11] Brent, D. A. (1997). A Clinical psychotherapy trial for adolescent depression comparing cognitive, family, and supportive therapy. Archives of General Psychiatry, 54(9), 877. https://doi.org/10.1001/archpsyc.1997. 01830210125017
- [12] J. Korczak, D., Westwel Roper, C., & Sassi, R. (2023, May 29). Diagnosis and management of depression in adolescents. CMAJ. Retrieved September 16, 2024, from https://www.cmaj.ca/content/195/21/E739
- [13] Interpersonal Psychotherapy. (2022, December 28). Psychology Today. Retrieved September 16, 2024, from https://www.psychologytoday.com/us/therapy-types/interpersonal-psychotherapy
- [14] Silva, S. (2021, June 10). All about Interpersonal Therapy (IPT) for Depression and Relationships. Psych Central. https://psychcentral.com/lib/interpersonal-therapy-ipt#ipt-therapy
- [15] Waraan, L., Siqveland, J., Hanssen-Bauer, K., Czjakowski, N. O., Axelsdóttir, B., Mehlum, L., & Aalberg, M. (2022). Family therapy for adolescents with depression and suicidal ideation: A systematic review and meta–analysis. Clinical Child Psychology and Psychiatry, 28(2), 831–849. https://doi.org/10.1177/13591045221125005
- [16] Gladstone, T. R. G., Beardslee, W. R., & O'Connor, E. E. (2011). The prevention of adolescent Depression. Psychiatric Clinics of North America, 34(1), 35–52. https://doi.org/10.1016/j.psc.2010.11.015
- [17] Spence, S. H., Sheffield, J. K., & Donovan, C. L. (2005). Long-Term outcome of a School-Based, Universal Approach to Prevention of Depression in Adolescents. Journal of Consulting and Clinical Psychology, 73(1), 160–167. https://doi.org/10.1037/0022-006x.73.1.160