

What is the Best Approach to Discussing Mental Health in Adolescent Populations?

I. Introduction

Anxiety and depression are public health issues affecting the entire United States, across all ages. One group of the population that needs special attention in the discussion revolving anxiety and depression are adolescents (age 12-17 years old). According to the Center for Disease Control and Prevention (CDC), in 2011 4.9% of adolescents reported having depression and 6.4% reported having anxiety.¹ Furthermore, according to a study done by the National Institute of Health, cases of reported anxiety in adolescents increased 20% from 2007-2012 and, as of 2017, the prevalence of depression has increased to 13.3%, a doubling of numbers reported by the CDC in 2011.² If that wasn't daunting enough, the Anxiety and Depression Association of America reported that up to 80% of adolescents do not receive treatment for their anxiety and depression symptoms.³ Oregon is not immune to these trends, either. In fact, the adolescent population in Oregon is among the hardest hit demographics when it comes to episodes of depression in the entire United States. In a population study conducted by Healthy People 2020, it was reported that from 2012-2015, 15.5% of adolescents in Oregon age 12-17 reported having a major depression episode, which is the highest in the country.⁴

It's clear that adolescent mental health in the United States, especially in Oregon, has not been adequately addressed or assessed. This is reflected in the data that shows increases in both prevalence and incidence over the last decade. This prevalence and incidence of depression can be due to a lot of reasons: lack of proper mental health education, stigma revolving around mental health, lack of access to mental health resources in schools and increased usage of social media can all partially explain this problem. It is vitally important from a public health standpoint to properly educate our children about anxiety and depression.

II. A Focus on Mental Health Literacy

Although children are suffering from higher rates of anxiety and depression, knowledge and literature surrounding mental health is quite low in the adolescent population. In a systematic review performed by Singh et al., it was shown that in 44% of the studies, a majority of participants in the studies were unable to recognize depression.⁵ Furthermore, in another 17% of the studies examined, researchers reported a “mixed picture”, roughly 30-70%, of the ability for adolescents to recognize depression. Furthermore, in a study reporting on the mental health literacy of 1,104 U.S. high school students performed by Coles et al. they found that, not only did less than 50% of participants recognize depression, less than 2% of the participants correctly recognized social anxiety disorder.⁶ This lack of depression and anxiety recognition is problematic helping adolescents with their mental health needs. If they cannot identify or recognize either their own needs or the needs of their peers, then getting the adequate care and resources for those needs is incredibly challenging. In fact, Coles et al. found that one-third of adolescents failed to recommend that a peer with depression or anxiety disorder symptoms seek help. Furthermore, Coles et al. were able to show, through logistical regressions, that there was a

statistically positive correlation in help-seeking recommendations in adolescents that could accurately recognize, show concern, and estimate duration of depression symptoms. Similar findings were found with the anxiety disorder symptoms except recognition alone in anxiety disorder did not significantly predict help-seeking recommendations. What these significant correlations point to is that equipping the adolescents in our community with the knowledge to identify depression and anxiety disorder symptoms is the foundation in the approach to better mental health outcomes in this population.

III. A Focus on Habits that Help and Habits That Don't

If mental health literacy can be considered as the foundation of a house then understanding what habits and behaviors help with depression and anxiety and what habits and behaviors don't would be the beams and walls that create the optimal protection and resilience for the house against harsh winds, heavy rains and cold weather. Keeping in mind variations between individuals, there is a strong body of evidence that certain broad habits can either be helpful or detrimental to one's mental health: those habits would be physical activity and social media use. Understanding the role of each habit can help people fully optimize their habits for a quality mental health.

Physical activity is a habit that is highly encouraged throughout all of medicine. Although most of the research regarding adolescent physical activity has revolved much around physical health and weight management, there is more coming out that quantifies how important physical activity is for adolescent mental health as well. In a cross-sectional study conducted by Guddal et al., a sample of roughly 10,000 adolescents were enrolled into a study that examined the relationship between physical activity and mental health. In that study, the researchers found that a high level of physical activity was significantly associated with reduced odds of low self-

esteem, low life satisfaction and, most importantly, psychological distress.⁷ These positive impacts included adolescent populations that were living below the average economy and had an increased exposure to intimate partner violence, a group of children that has some of the highest rates of mental health conditions. Additionally, this study also found that adolescents tend to find a dramatic drop off in activity around the age 15-16, when there is a move from middle school to high school, further supporting the correlation between mental health and physical activity.

Furthermore, a different study performed by Jewett et al. followed the mental health of adolescent participants after they graduated from high school and tracked their reported mental health status three years after they had participated in school sport participation. The researchers found that students “who consistently participated in school sport during high school reported lower depressive symptoms, lower perceived stress and higher self-rated mental health”, even three years after their sport participation was completed.⁸ This data not only supports the need for an emphasis on physical activity to aid adolescent mental health during adolescence, but also shows evidence for the neuroprotective effects of physical activity on adolescent mental health as that adolescent develops into an adult. Lastly, it is important to note which type of physical activity is best. Pluhar et al, found that team sports provided a statistically significant higher positive impact on anxiety or depression than individual sport athletes.⁹ That is not to say that individual sport activities aren’t helpful. However, the evidence supports the idea that team sports are the most optimal in guarding against anxiety and depression. These findings support the idea that physical activity should not only be encouraged for the positive impact it has on physical health but, equally as important, on mental health, as well.

Having a focus on developing good habits that lead to mental health is vitally important for adolescents. One way this goal can be looked at, is making sure that poor habits aren't started either. This is where social media use comes in. Social media is a hot topic right now as more and more documentaries emerge around the effects it can have on mental health, most notably the documentary "The Social Dilemma" on Netflix. There is some research data that quantifies exactly what type of effects social media causes, especially in adolescents. In a population study conducted by Kelly et al. and published in 2019, the researchers found a statistically significant correlation between amount of social media use and depressive symptoms. The Kelly study was particularly insightful because it linked the amount of time with the degree of depressive symptoms and found that not only did more social media use correlate to more depressive symptoms, it also correlated with more online harassment and less hours of sleep. These are two more factors that play an active role in developing depressive symptoms. Interestingly, the study further found that girls and boys in lower income and one parent households were more likely to use social media for greater than 5 hours daily.¹⁰ A systematic review of 16 studies performed by Karim et al. published in 2020 supported the idea that increased time on social media led to increased levels of anxiety and depression among adolescents. Contrarily, the review also reported that some of the studies within the review failed to determine a causal relationship between social media and its effect on mental health and the literature does state that more research is needed in order to understand that relationship more fully.¹¹ Although the causal relationship between social media use and adverse mental health outcomes has not been fully discovered, there is an undeniable correlation between the number of adolescents who use social media (70% of teenagers – up a third of teens in the last eight years, according to Abi-Joude et

al.)¹² and the amount of adverse mental health outcomes (up 15% in that same timeline). Pair that with the increased amount of social media usage reported in teens (Kelly study) and there is a strong case for encouraging a reduction or some sort of guideline for social media use by adolescents from healthcare professionals.

IV. How to Best Approach Adolescent Mental Health Education and Interventions

So far, the topics of what to talk about (health literacy) and what to promote (more physical activity, less social media) have been discussed. These edifying topics are important in equipping adolescents in how to properly manage their own mental health. This, however, is only half the battle. Making sure that the vehicle that delivers the information is equally as important as the information itself. One can have the best knowledge for the patient but if the information doesn't resonate or connect, then all the work is for nothing. Focusing on the best routes of mental health education for adolescents is the next most important step alongside the actual information that is delivered.

When it comes to best interventions for adolescent mental health promotion, there are a few broad categories of interventions: school-based, community-based, individual-based and digital platforms. In a systematic review done by Das et al., researchers looked at each category and analyzed the effectiveness for each to improve mental health outcomes. The study found that when a school-based intervention is used, targeted group-based interventions and CBT were the most effective at reducing depression and anxiety symptoms. However, when the demographic focus was on the low- income urban youth, researchers found that community-based mental health interventions focused on the group of adolescents as a whole, ones that were not tied to a

school-based curriculum or focused directly on a single individual, garnered better mental health outcome results than person-only interventions.^{13,14} Having knowledge of these tailored approaches is important to understand as a patient educator because it is important to know that the information that is being shared is being done in the most optimal format possible. This article shed some light on the use of digital platforms in order to transmit mental health information in a quality manner but, ultimately, could not draw any conclusions.

Given that more and more adolescents are using screens, there has been more research done in order to evaluate if this approach may an appropriate method in educating and assisting adolescents with mental health needs. In a study conducted by Liverpool et al., the effectiveness of various types of digital health interventions were assessed and analyzed. The data reported in this study showed digital interventions utilizing modules and simulation scenarios achieved retention rates among adolescents of 79.2%, compared to face-to-face interventions that saw dropout rates of 20%-60% with the use of digital mental health interventions. Upon further interpretation, the researchers propose that digital health interventions can be a vital supplement in the “toolbelt” of interventions that a medical provider could use to assist an adolescent with mental health needs – including other literacy aspects along with psychoeducation and psychotherapy.¹³

Another approach to understanding the best routes in order to deliver mental health education to adolescents is to also understand what routes **do not** work. In a 2020 systematic review done by Aguirre Velasco et al., researchers analyzed 90 studies that assessed the barriers to mental health interventions and help-seeking in adolescents. Mental health stigma, family beliefs and mental health literacy were the three most cited barriers that caused adolescents to

not seek help for their mental health. Furthermore, the researchers found interventions that focused on reducing mental health stigma, psychoeducation and outreach initiatives to help adolescents with mental health needs all had a statistically significant increase in help-seeking intentions.¹⁴

V. It's 'Not One Size Fits All'

In addition to mental health education, much like in the rest of healthcare, you not only need to have the right information, but you also need to have the right vehicle to deliver that information. An example of this is the five “rights” of drug administration, which outlines needing the right patient, the right drug, the right dose, the right time, and the right route. There is no exception in the realm of patient education in adolescent mental health. After a review of the literature, the most optimal ways to deliver mental health information to adolescents include the inclusion of community-based interventions, the personalization of using universal teaching methods versus targeted group-based interventions (selective approaches) in the school-setting and the utilization of digital platforms for cognitive behavioral therapy (CBT) delivery including the use of videos with specific characteristics that are designed to attenuate to the preferences of adolescents. Initiating these educational conversations early on will allow adolescents to be their own best advocates and set them up for a healthy life. Emerging literature around this topic, as referenced earlier, strongly emphasizes the need for a careful specialization depending on topic (internalizing problems over externalizing problems) and style (universal approaches for depression education and targeted approaches for anxiety education).^{13, 14}

A major limitation for a majority of the research in adolescent mental health interventions is that it is not an accurate depiction of what works for all adolescents. A common thread in the

published research is that low income, urban populations have higher rates of adverse mental health conditions among adolescents, yet a majority of the research is not focused on this population. The scant literature that does exist focused on this populations suggest that adolescents from low-income, urban backgrounds can benefit more from a community-based mental health program. This systematic review reported that, for this population, person plus community interventions and environment-only intervention had a statistically significant positive impact whereas a person-only intervention actually had a nonsignificant impact. Similarly, although this paper has reported on the potential positive impact of digital mental health interventions, if someone doesn't have full access to a digital device, then speaking and educating them on that route is completely useless.

VI. Conclusion

In conclusion, with increasing rates of depression and anxiety among adolescents, having the right type of information, delivered in the right manner while utilizing the right approach is proving to be more and more important. Evidence shows that effective education about depression for children is done with (a) increasing mental health literacy, (b) increasing emphasis on activities that promote mental health resilience (peer support, exercise, team sports), (c) educating on the effects of social media habits on mental health, (d) getting help and treatment if feelings of depression or anxiety are present and, lastly, (e) the route of education for adolescent populations of different socio-economic status should be taken into account, as the data supports the idea that certain avenues of education, whether that be community or individual based, digitally or in the classroom, allows for improved patient outcomes.

Providing medical care for patients isn't all about coming up with the best differential diagnosis or understanding what pharmaceutical interventions work the best given a certain

disease presentation. In part, it's about truly understanding your patients, where they come from, what they want to get out of their healthcare experience and how you can best assist them towards that goal. Having a strong understanding and knowledge of this type of approach and applying this approach to mental health education, as it specifically pertains to adolescents, can allow for medical providers to optimize their care for the mental health issues that adolescents are facing. As backed by the evidence, by adopting this approach, we can ensure that our kids are getting the best care possible.

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