Adolescent Depression in the Schools:

Evidence-Based Prevention and Intervention Programs

Shelley R. Hart, PhD, NCSP

Sometimes feeling sad, hopeless, or miserable is an expected part of life; however, when these feelings don't lift after a few weeks, or they cause someone to not be able to participate successfully in life's activities, it is cause for concern. Schools offer a unique context to address these issues for youth. This Project AWARE Issue Brief will provide an overview of school-based depression prevention and intervention programs for adolescent young people (typically defined as 12 through 18 years old), focusing on:

- A Tier 1 universal preventive intervention—the *Adolescent Depression and Awareness Program (ADAP)*—that has demonstrated an impact on knowledge, stigma, and help-seeking behaviors,
- A Tier 2 selective prevention program—*Coping with Stress (CWS)* — that has supported prevention of future depression, and
- A Tier 3 indicated preventive intervention—*Adolescent Coping with Depression (CWD-A)*—that has supported the reduction of depression and suicidal thoughts and behaviors in teens.

According to the American Psychiatric Association[2], a diagnosis of Major Depressive Disorder (MDD) requires:

- a period of two or more weeks with either "depressed mood" or "loss of interest or pleasure" in things a person previously enjoyed,
- and at least four other symptoms that show a change from how the person normally behaves. These problems are typically related to
  - sleeping (changes in amount of sleep or problems with falling or staying asleep),
  - eating (changes in weight or appetite),
  - energy (changes in activity level),
  - concentration difficulties, problems with self-image (feelings of worthlessness or inappropriate guilt), or
  - suicidal thoughts and feelings.

Understanding Depression: Diagnostic Considerations & Prevalence

Depression in adolescensce is a more common experience than most people think. Data from a nationally representative survey indicated that lifetime prevalence for adolescents was 11.0% for a diagnosis of *Major Depressive Disorder* (MDD).[1] This means that for a typical classroom of 30 students, 3 to 4 of those students may be dealing with depression that is clinically significant—that is, interfering with major aspects of the students' life.

In addition to those identified as having MDD, many more frequently experience these symptoms at a level that negatively affects their lives. Often these symptoms go unrecognized, misdiagnosed, or untreated.[3] Unfortunately, other issues that often occur along with depression, such as acting out or behavioral problems, might hide it, meaning that youth do not get the help they need. However, these externalizing behaviors are important potential precursors to depressive symptoms and have been shown to predict future depression in youth.[4]

Gender and Sexual Orientation-Related Disparities. Gender differences exist, with females experiencing a two to three times greater risk of MDD and four times greater risk for severe MDD in comparison to males.[1] These differences become more pronounced over time; that is, we see greater increases in depression as females move through adolescence in comparison to males.[1] Sexual minority youth (e.g., lesbian, gay, transgendered) are also consistently found to be more at risk to experiencing depression and depressive symptoms.

Race, Ethnicity, and Poverty-Related Disparities. While prevalence estimates for depressive symptoms vary for young people of color and economically disadvantaged youth—some indicate that depression is equally common across ethnicity and socioeconomic status[1], while others indicate higher prevalence of depressive symptoms among these groups[6] –what is clear is that these young people are disproportionately impacted by reduced access, utilization, and quality of mental health services.[6] Furthermore, the field does not yet properly understand these populations because research has not historically prioritized their unique needs; research examining strategies and preventive interventions for vulnerable subgroups (e.g., ethnic minorities) is not common.[6]

Impacts of Depression on Health and Wellbeing

Depression can result in long-term health and mental health consequences, the most serious of which is suicide.[7] While depression is an important symptom to attend to in regards to suicide, the role of concurrent aggression cannot be overlooked.[9] Importantly, research has shown that when depressive symptoms are adequately reduced, symptoms of aggression and oppositionality also decrease.[10]

Depression also affects critical long-term aspects of an individual's life, such as friendships, romantic relationships, school, work, and physical health.[11] Over time, youth with these symptoms are more likely to:

- engage in high-risk behaviors (e.g., multiple sexual partners, criminal activities, excessive substance use),
- demonstrate less effective coping with stress,
- report more loneliness,
- experience academic problems (e.g., high school/college dropout), and
- experience continued mental health problems in adulthood in comparison to those without the experience of depression.[12]

Suicide ranks as the second leading cause of death for youth 10 to 19 years of age. Disturbingly, after a 15% decline from 1999 to 2007, suicide rates have increased 56% from 2007 to 2016.[8]

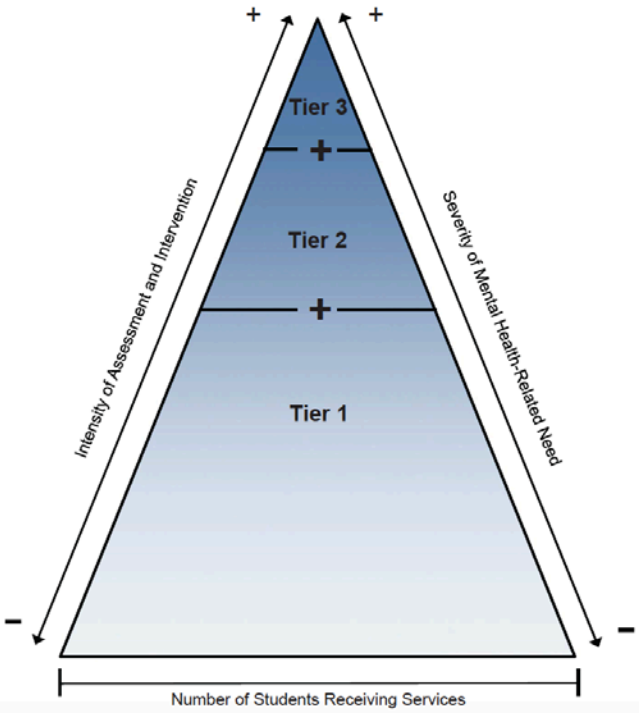
It is therefore is vital that we attempt to prevent and intervene when we see these symptoms. Because educators are among the most likely people to interact with young people on a daily basis, they are a critical link for helping young people experiencing depression receive appropriate care.

School-Based Supports Are Critical. Even when identified, barriers such as cost and inconvenience may prevent access to support and appropriate treatment for many youth. [13] Importantly, for students with mental health issues, those who receive counseling are most likely to receive it at school.[14] Therefore, school personnel have an essential role in influencing the kinds of support students with depression receive. Because of their natural role as community hubs, schools have tremendous opportunities to impact meaningful improvements in access to, and utilization of, mental health services. High-quality identification, referral, and intervention services in the schools are especially critical where community-based resources are scarce, such as in high poverty and/or rural communities. A disproportionate number of young people of color live in these underresourced communities, making school-based supports extremely important for reducing racial and ethnic disparities in mental health access and uptake.

Evidence-Based Depression Prevention and Intervention Programs

The National Research Council and Institute of Medicine (2009) defines a comprehensive continuum of care as one that includes mental health promotion strategies, as well as universal, selective, and indicated preventive interventions. This public health model has been widely adopted in schools, and is generally referred to as the multi-tiered system of supports (MTSS; Figure 1).

Figure 1. The Multitiered System of Support Model for Mental Health Supports in Schools



Source: SAMHSA (2015). *School Mental Health Referral Pathways Toolkit.*

- In the school context, *mental health promotion activities* aim to enhance students' ability to achieve developmentally appropriate tasks and establish a positive sense of self, and are focused on the entire school body. Social Emotional Learning (SEL) curricula are an example of mental health promotion strategies.
- *Universal preventive interventions (Tier 1)* are also appropriate for an entire population (e.g., classroom, school) and do not focus only those who are at risk. Universal preventive interventions might aim to directly address specific behaviors, such as bullying, and/or indirectly attempt to change the social context that influences knowledge, attitudes, and behaviors, for example through decreasing stigma.
- *Selective preventive interventions (Tier 2)* are typically specific for individuals whose risk for developing a challenge, such as depression, is significantly higher than for others.
- *Indicated preventive interventions (Tier 3)*. In the school context, students who are showing symptoms of depression may receive preventive interventions at the indicated level while also receiving treatment by one or more trained mental health clinicians in the community setting. School-based interventions provided at the indicated level typically require professional training (e.g., school psychologist) and may even require training above a professional degree (e.g., specialized training in cognitive behavioral therapy [CBT]).

Do school-based interventions for depression work?

Much emphasis has been placed on providing school-based school mental health services, but do school-based mental health services work? Several recent studies examining the effectiveness of depression prevention programs for youth indicated that school-based interventions have the potential to reduce depressive symptoms and prevent future episodes of MDD. Detailed below are common characteristics of effective school-based interventions for MDD.

Efficacy V. Effectiveness: What's the Difference?

Efficacy: The ability of an intervention to demonstrate benefit under carefully controlled and ideal conditions.

Effectiveness: The ability of an intervention to demonstrate benefit under real-world circumstances.

1. M**ore intensive interventions tend to be more effective**. Those programs focused at the selective (Tier 2) or indicated (Tier 3) levels tend to be more effective (i.e., demonstrate more significant changes between the intervention and control groups) than universal programs (Tier 1), and tend to have results that last for a longer period of time (e.g., 12 months). That said, though it is difficult to evaluate their long-term effects, some evidence supports the benefit of universal prevention over the long term. For example, Wilcox and colleagues (2008) demonstrated that the effects of a universal preventive intervention administered in first grade had an effect on suicidal thoughts and behaviors more than 15 years later.

2. **Programs facilitated by outside professionals (e.g., mental health professionals or graduate students) tend to lead to superior results than those facilitated by teachers or school staff**. Of course, implementation fidelity is more difficult to maintain when the developers of a program or researchers carefully controlling the quality of implementation are not involved in the process.[17] However, this is problematic as programs delivered by outside providers are likely to be expensive and unsustainable over time. It is imperative for these programs to demonstrate *effectiveness*—that is, to demonstrate improvements under real-world conditions.[18]

3. **Cognitive Behavioral Therapy (CBT) is a common element of effective programs.** The selective and indicated programs included in these studies utilized CBT strategies and techniques. This is important, as CBT is recommended as a first-line approach, superior to other forms of therapy such as interpersonal psychotherapy or family therapy.[19] CBT is a therapeutic model that addresses distortions in thought related to the self, others, and the future. When using CBT, a clinician attempts to help the individual identify, explore, and change patterns of negative thinking that leads to depression and other problematic behaviors. While CBT has been shown to result in improvements for youth experiencing depression, it does require advanced training by professionals, which may not be available for all mental health professionals practicing in a school setting. It is important for professionals to evaluate whether these types of programs result in practice outside their scope of expertise. Most of the programs highlighted are manualized and many require training by the developers—which might be costly for school systems already financially burdened.

For those interested in more on CBT, including an integration with Dialectical Behavior Therapy [DBT]—which focuses more on emotion regulation, please see:
Brent, Poling, & Goldstein (2011). *Treating Depressed and Suicidal Adolescents: A Clinician's Guide.* New York: Guilford.

Described below are three evidence-based interventions, one for each level of progressive supports within the MTSS model (Figure 1). These evidence-based interventions are highlighted in this Issue Brief because of their research evidence supporting effectiveness, and the accessibility of their materials for school-based professionals.

Universal (Tier 1) Preventive Intervention: Adolescent Depression Awareness Program (ADAP)

The **Adolescent Depression Awareness Program (ADAP)** developed by faculty at Johns Hopkins University addresses depression prevention through educating youth, parents, and teachers about the signs and symptoms. The central message of ADAP is that depression is a treatable mental health issue. It attempts to reduce stigma by using a medical model approach to understanding depression. At the time of its inception, a survey of suicide prevention programs indicated that 95% of the programs presented suicide as a response to extreme pressure that could happen to anyone versus a consequence of mental illness. Focusing on the knowledge that 90% of individuals who died by suicide had a psychiatric illness,[20] ADAP developers liken depression to a medical condition—pneumonia—in order to educate, de-stigmatize and encourage help-seeking.

To date, ADAP has been provided to over 75,000 students in 19 states and Washington, D. C., with almost 1,700 participating instructors. Several, large-scale, randomized-controlled or controlled studies have taken place since development in 1999.[21] It is important to note that the evidence to support ADAP comes from developers of the program, that is, independent evaluation of the program through a randomized controlled trial by individuals other than developers of the program, have not occurred.

Adolescent Depression Awareness Program (ADAP)

What is ADAP's Format? ADAP is designed to be 3 hours long, taught in 2 or 3 consecutive classes (typically health classes). It incorporates multiple modalities (i.e., interactive lectures, videos, film assignments, homework, and group activities).

Who can implement ADAP? ADAP developers recommend the program be implemented as part of health class, although other settings can also be considered.

For Whom is ADAP designed? ADAP is designed for use with adolescents in high school settings.

Where can I find ADAP Materials? All materials are included in the instructor kit (e.g., DVD's, PowerPoint presentations, handouts, group activity cards), which is provided to all trained instructors. Training is available online. For those interested in becoming trained and for a description and history of the program see: https://www.hopkinsmedicine.org/psychiatry/specialty_areas/moods/ADAP/index.html

In a randomized effectiveness trial including 6,679 students, ADAP resulted in significantly higher levels of depression literacy.[22] In fact, 46% of participating teachers reported being approached by students with concerns about themselves or others. Within 4 months of ADAP implementation, 44% of those students had received treatment. In a combined trial of 500 students, researchers also demonstrated the important relationship of depression literacy with school climate.[23] That is, students at schools with positive climate reported higher levels of depression literacy and lower levels of stigma. This supports the external validity of depression literacy as a concept and helps direct future research regarding potential mechanisms for change.

Strengths of ADAP include:

- a focus on increasing depression literacy, with attempts to destigmatize mental illness, but not normalize suicide,
- the variety of staff who are able to effectively implement, including, but not limited to, teachers, counselors, psychologists, nurses, and social workers—this addresses a large limitation of some of the universal preventive programs identified in the systematic reviews and meta-analyses,
- important changes from implementation with large randomized trials, and direction provided on how to incorporate the program into the Common Core curriculum, a potential barrier for schools adopting universal preventive interventions such as ADAP.[24]

Selective (Tier 2) Preventive Intervention: Coping with Stress (CWS) Program

The **Coping with Stress (CWS) Program** was adapted from the CWD-A program (see below) for youth at-risk for, but not currently experiencing, depression. CWS is a psycho-educational program based in CBT principles that addresses prevention of depression through helping youth build coping skills. Through this skill-building, it is hoped to immunize youth against the effects of stressors that otherwise might onset depression.[25]

Several randomized-controlled trials have occurred to evaluate CWS.[26] As noted with ADAP, the evidence to support CWS comes from developers of the program, that is, independent evaluation has not occurred. These studies have taken place in schools, health care settings, and in various cities. All the studies have included youth with elevated levels of depressive symptoms, and two of the samples included youth at-risk of future depression by virtue of having a parent with MDD. Importantly, the controls in the study were receiving "treatment as usual" versus no treatment. As the placebo effect has been found to be particularly high in depression intervention trials, it is important for the controls to experience some type of intervention in order to truly evaluate the impact of the program versus simply the experience of any type of treatment.[27]

In general, these studies have demonstrated that those in the CWS program were significantly less likely to have a diagnosis of MDD, experience depressive symptoms, and to have suicidal thoughts or behaviors in comparison to those receiving other forms of intervention by follow-up. Interestingly, in one study, parental depression was found

Coping With Stress (CWS) Program

What is CWS's Format? There are two versions of the CWS available, the original, 15 sessions course and the POD Teams version, adapted to an 8-week course in 2009. Sessions for both are 90 minutes and are designed for between 3 to 10 youth. The first sessions build group community and provide information about depression. The following sessions focus on specific skills and techniques to restructure thinking and modify irrational and negative self-statements.

Who can implement CWS? CWS is designed to be delivered by mental health professionals on school campus, either as a class during regular school hours or as a therapy group or workshop.

For Whom is CWS designed? The target population for CWS are adolescents who are not currently experiencing MDD, but who already carry some known increased risk of depression, such as having had a past episode of depression, having depressed parents, or having some other known risk factor for depression.

Where can I find CWS Materials? All CWS materials, including a leader's manual and student workbook, for both versions of the program are available free of cost at Kaiser Permanente's Center for Health Research: https://research.kpchr.org/Research/Research-Areas/Mental-Health/Youth-Depression-Programs#Downloads.

to moderate the impact of the intervention, such that those youth with depressed parents were less likely to significantly benefit from the CWS.[28] Additionally, longer-term follow-up assessment tended to see the effects of the intervention dissipate.

Strengths of CWS include:

- the ability of the program to demonstrate an impact on future depression over and above "treatment as usual",
- the availability of materials,
- the adaptability of the length of the program, and
- CWS is listed at multiple clearinghouses as a "proven" program for the treatment of depression (see: https://www.samhsa.gov/ebp-web-guide/prevention-mental-health-disorders for a list of these searchable websites).

Indicated (Tier 3) Preventive Intervention: Adolescent Coping with Depression (CWD-A) Program

The **Adolescent Coping with Depression (CWD-A)** is a program developed via research from the Oregon Adolescent Depression Project and is based on CBT and social learning theory.[29] CWD-A is based on an extensively researched intervention with adults.[30] CWD-A focuses on issues typically experienced by depressed youth, such as irrational and negative thoughts, poor social skills, limited pleasant activities, and anxiety. Like ADAP, CWD-A is meant to de-stigmatize depression and the program is presented as a class in coping skills rather than treatment or therapy. CWD-A teaces the following core CBT skills:

- Mood monitoring
- Social skills
- Pleasant or fun activities
- Relaxation techniques
- Constructive thinking
- Communication
- Negotiation and problem-solving
- Maintenance of gains

The program begins with the first session establishing rules, providing the rationale, and informing students about the social learning theory of depression. This initial session is followed by 15 skill-building sessions intended to help students develop emotion regulation and deal with situations that contribute to their depression. Session activities include didactic (i.e., teaching about depression), group activities, role-playing exercises, and homework (e.g., readings, relaxation activities, self-monitoring forms,

Adolescent Coping With Depression (CWD-A)

What is CWD-A's Format?
The program is conducted in a group of four to eight youth who are actively experiencing depressive symptoms. It is designed to be conducted over an 8-week period with 16 two-hour sessions. However, suggestions for adaption to work with individuals or to adjust the duration are available.

Who can implement CWD-A? CWD-A is designed to be implemented by trained mental health clinicians, generally in the after-school setting.

For Whom is CWD-A designed? CWD-A is designed for use with adolescents ages 14 to 18 years who are experiencing depression.

Where can I find CWD-A Materials? All CWD-A materials, including a leader's manual, student workbook, and adaptation guide are available for qualified facilitators on the developer's website for free. For those interested in materials, training opportunities, a description of the program see: https://www.saavsus.com/adolescent-coping-with-depression-course

quizzes). A concurrent parent program to help caregivers work with their depressed youth can accompany CWD-A. The Leader's Manual [31] includes a list of sessions and activities, including sessions with both parents and youth if the parent program occurs.

Since being adapted from CWD,[32] CWD-A has been researched in a number of randomized-controlled, randomized, or controlled trials in a variety of settings.[33] These trials have consistently shown an improvement on multiple depressive symptom measures from multiple raters with the CWD-A in comparison to control groups, both immediately following the intervention and at follow-up. When comparing low-severity versus high-severity groups, those with higher levels of symptoms demonstrate more significant improvement in depressive symptoms.[34] Additionally, a maintenance study incorporating a "booster" session demonstrated that those who participated in the booster demonstrated lower externalizing features.[35] The settings and participants in these trials are quite diverse: from healthcare, clinical settings, schools, and juvenile justice facilities, and have incorporated youth with MDD and sub-clinical (i.e., impairing but not diagnosed MDD) symptoms, and those with comorbid (i.e., co-occurring) diagnoses such as conduct disorder.

Strengths of CWD-A include:

- a focus on skill-building with students experiencing active clinical or sub-clinical levels of depression conducted within a CBT framework—a first line psychological intervention,
- demonstrated positive outcomes for adolescents in a variety of settings,
- being listed at multiple clearinghouses as a "proven" program for the treatment of depression, and
- free materials are available for mental health professionals.

Conclusion

The prevalence of depression rises in the adolescent years. Research indicates that those who develop these disorders early are significantly less likely to receive treatment within the year of onset than those who develop MDD in adulthood.[36] Schools offer tremendous opportunities to address these challenges for youth. Recent evidence exists to support the provision of resources toward universal, selective and targeted preventive interventions to address depression in the schools. Schools should consider providing depression prevention along a continuum of care. Several programs are particularly attractive in their evidence-base and their ability to address barriers to implementation in the schools, including the universal preventive intervention, ADAP, the selective preventive intervention Coping with Stress (CWS), and the indicated preventive intervention CWD-A.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Avenevoli, S., Swendsen, J., He, J. -P., Burstein, M., Merikangas, K. R. (2015). Major depression in the National Comorbidity Survey—Adolescent Supplement: Prevalence, correlates, and treatment. *Journal of the American Academy of Child & Adolescent Psychiatry, 54*, 37-44. doi: 10.1016/j.jaac.2014.10.010

Beaudry, M. B., Townsend, L., Heley, K., Cogan, E., Schweizier, N., & Swartz, K. (2017). Fulfilling the Common Core standards and meeting students' need for depression education: ADAP. *Journal of School Health, 87*, 296-299. doi: 10.1111.josh.12496

Brent, D. A., Poling, K. D., & Goldstein, T. R. (2011). *Treating depressed and suicidal adolescents: A clinician's guide*. New York, NY: Guilford Press.

Bridge, J. A., Goldstein, T. R., & Brent, D. A. (2006). Adolescent suicide and suicidal behavior. *Journal of Child Psychology and Psychiatry, 47*, 372-394. doi: 10.1111/j.1469-7610.2006.01615.x

Calear, A. L., & Christensen, H. (2010). Systematic review of school-based prevention and early intervention programs for depression. *Journal of Adolescence, 33*, 429-438. doi: 10.1016/j.adolescence.2009.07.004

Christiana, J. M., Gilman, S. E., Guardino, M., Mickelson, K., Morselli, P. L., Olfson, M., & Kessler, R. C. (2000). Duration between onset and time of obtaining initial treatment among people with anxiety and mood disorders: An international survey of members of mental health patient advocate groups. *Psychological Medicine, 30*, 693-703. doi: 10.1017/S0033291799002093

Clarke, G., Lewinsohn, P., & Hops, H. (1990). *Leader's manual for adolescent groups: Adolescent coping with depression course*. Retrieved from https://www.saavsus.com/adolescent-coping-with-depression-course

Clarke, G., Hornbrook, M., Lynch, F., Polen, M., Gale, J., Beardslee, W., O'Connor, E., Seeley, J. (2001). A randomized trial of a group cognitive intervention for preventing depression in adolescent offspring of depressed parents. *Archives of General Psychiatry, 58*. 1127-1134. doi: 10.1001/archpsyc.58.12.1127

Clarke, G. N., Hornbrook, M., Lynch, F., Polen, M., Gale, J., O'Connor, E., Seeley, J. R., & Debar, L. (2002). Group cognitive-behavioral treatment for depressed adolescents in a health maintenance organization. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*, 305-313. doi: 10.1097/00004583-200203000-00010

Clarke, G. (1995). *The adolescent coping with stress class: Leader manual—A fifteen-session class curriculum developed for the prevention of unipolar depression in adolescents with an increased future risk*. Retrieved from: https://research.kpchr.org/Research/Research-Areas/Mental-Health/Youth-Depression-Programs#Downloads

Clarke, G. N., Rohde, P., Lewinsohn, P. M., Hops, H., & Seeley, J. R. (1999). Cognitive-behavioral treatment of adolescent depression: Efficacy of acute group treatment and booster sessions. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 272-279. doi: 10.1097/00004583-1999-030000-00014

Cuijpers, P., Muñoz, R. F., Clarke, G. N., & Lewinsohn, P. M. (2009). Psychoeducational treatment and prevention of depression: The "coping with depression" course thirty years later. *Clinical Psychology Review, 29*, 449-458. doi: 10.1016/j.cpr.2009.04.005

Curtin, S. C., Heron, M., Miniño, A. M., & Warner, M. (2018). Recent increases in injury mortality among children and adolescents aged 10-19 years in the United States: 1999-2016. *National Vital Statistics Reports, 67*(4). Hyattsville, MD: National Center for Health Statistics.

Domitrovich, C., & Greenberg, M. T. (2000). The study of implementation: Current findings from effective programs that prevent mental disorders in school-aged children. *Journal of Educational and Psychological Consultation, 11*, 193-221. doi: 10.1207/s1532768xjepc1102_04

Dopheide, J. A. (2006). Recognizing and treating depression in children and adolescents. *American Journal of Health-System Pharmacy, 63*, 233-243. doi: 10.2146/ajhp050264

Gallerani, C. M., Garber, J., & Martin, N. C. (2010). The temporal relation between depression and comorbid psychopathology in adolescents at varied risk for depression. *Journal of Child Psychology and Psychiatry, 51*, 242-249. doi: 10.1111/j.1469-7610.2009.02155.x

Garber, J., Clarke, G. N., Weersing, R., Beardslee, W. R., Brent, D. A., … Iyengar, S. (2009). Prevention of depression in at-risk adolescents: A randomized controlled trial. *Journal of the American Medical Association, 301*, 2215-2224. doi: 10.1001/jama.2009.788

Garvik, M., Idsoe, T., & Bru, E. (2014). Effectiveness study of a CBT-based adolescent coping with depression course. *Emotional and Behavioral Difficulties, 19*, 195-209. doi: 10.1080/13632752.2013.840959

Glasgow, R., Lichtenstein, E., & Marcus, A. (2003). Why don't we see more translationa of health promotion reseach to practice? Rethinking the efficacy-to-effectiveness transition. *American Journal of Public Health, 93*, 1261-1267.

Hart, S. R., Kastelic, E. A., Wilcox, H. C., Beaudry, M. B., Musci, R. J., Heley, K. M., Ruble, A. E., & Swartz, K. L. (2014). Achieving depression literacy: The Adolescent Depression Knowledge Questionnaire (ADKQ). *School Mental Health, 6*, 213-223. doi: 10.1007/s12310-014-9120-1

Hart, S. R., Van Eck, K., Ballard, E. D., Musci, R. J., Newcomer, A., & Wilcox, H. C. (2017). Subtypes of suicide attempters based on longitudinal childhood co-occurring depressive, anxious and aggressive behavior. *Psychiatry Research, 257*, 150-155. doi: 10.1016/j.psychres.2017.07.032

Jacobs, R. H., Becker-Weidman, E. G., Reinecke, M. A., Jordan, N., Silva, S. G., Rohde, P., & March, J. S. (2010). Treating depression and oppositional behavior in adolescents. *Journal of Clinical Child & Adolescent Psychology, 39*, 559-567. doi: 10.1080/15374416.2010.486318

Jones, L. I., Pastor, P. N., Simon, A. E., & Reuben, C. A. (2014, August). Use of selected nonmedication mental health services by adolescent boys and girls with serious emotional or behavioral difficulties: United States, 2010–2012. *NCHS Data Brief, no. 163*. Hyattsville, MD: National Center for Health Statistics.

Jonsson, U., Bohman, H., von Knorring, L., Olsson, G., Paaren, A., & von Knorring, A.-L. (2011). Mental health outcome of long-term and episodic adolescent depression: 15-year follow-up of a community sample. *Journal of Affective Disorders, 130*, 395-404. doi: 10.1016/j.jad.2010.10.046

Kessler, R., Angermeyer, M., Anthony, J., Graaf, R., Demyttenaere, K., Gasquet, I.…Üstün, T. (2007). Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Health Survey Initiative. *Wold Psychiatry,* 6, 168-176.

Lee, S., Tsang, A., Breslau, J., Aguilar-Gaxiola, S., Angermeyer, M., Borges, G., … Kessler, R. C. (2009). Mental disorders and termination of education in high-income and low- and middle-income countries: Epidemiological study. *The British Journal of Psychiatry, 194*, 411-417. doi: 10.1192/bjp.bp.108.054841

Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H., McGinley, J., Thoma, B. C., Murray, P. J., D'Augelli, A., & Brent, D. A. (2011). Suicidality and depression disparities between sexual minority and heterosexual youth: A meta-analytic review. *Journal of Adolescent Health, 49*, 115-123. doi: 10.1016/j.adohealth.2011.02.005

Martin, J. M. (2010). Stigma and student mental health in higher education. *Higher Education Research & Development, 29*, 259-274. doi: 10.2080/07294360903470969

Merikangas, K. R., He, J. P., Brody, D., Fisher, P. W., Bourdon, K., & Koretz, D. S. (2010). Prevalence and treatment of mental disorders among U.S. children in the 2001–2004 NHANES. *Pediatrics, 125,* 75–81. doi:10.1542/peds.2008-2598

Merry, S. N., Hetrick, S. E., Cox, G. R., Brudevold-Iversen, T., Bir, J. J., & McDowell, H. (2011). Psychological and educational interventions for preventing depression in children and adolescents. *Cochrane Database of Systematic Reviews, 12*, 1409-1685. doi: 10.1002/14651858.CD003380.pub3

National Research Council and Institute of Medicine. (2009). Defining the scope of prevention. In M. E. O'Connell, T. Boat, and K. E. Warner (Eds.), *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. Washington, D. C.: National Academies Press.

Nock, M. K., Hwang, I., Sampson, N. A., & Kessler, R. C. (2010). Mental disorders, comorbidity and suicidal behavior: Results from the National Comorbidity Survey Replication. *Molecular Psychiatry, 15*, 868-876. doi: 10.1038/mp.2009.29

Owens, P. L., Hoagwood, K., Horwitz, S. M., Leaf, P. J., Poduska, J. M., Kellam, S. G., & Ialongo, N. S. (2002). Barriers to children's mental health services. *Journal of the American Academy of Child and Adolescent Psychiatry, 41,* 731–738. doi:10.1097/00004583-2002060000-00013

Perrino, T., Beardslee, W., Bernal, G., Brincks, A., Cruden, G., Howe, G., Murry, V., Pantin, H., Prado, G., Sandler, I., & Brown, C. H. (2015). Toward scientific equity for the prevention of depression and depressive symptoms in vulnerable youth. *Prevention Science, 16*, 642-651. doi: 10.1007/s11121-014-0518-7

Rohde, P., Clarke, G. N., Mace, D. E., Jorgensen, J. S., & Seeley, J. R. (2004). An efficacy/effectiveness study of cognitive-behavioral treatment for adolescents with comorbid major depression and conduct disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 43*, 660-668. doi: 10.1097/01.chi.0000121067.29744.41

Ruble, A. E., Leon, P. J., Gilley-Hensley, L., Hess, S. G., & Swartz, K. L. (2014). Depression knowledge in high school students: Effectiveness of the adolescent depression awareness program. *Journal of Affective Disorders, 150*, 1025-1030. doi: 10.1016/j.jad.2013.05.033

Sanchez, A. L., Cornacchio, D., Poznanski, B., Golik, A. M., Chou, T., & Comer, J. S. (2018). The effectiveness of school-based mental health services for elementary-aged children: A meta-analysis. *Journal of the American Academy of Child and Adolescent Psychiatry, 57*, 153-165. doi: 10.1016/j.jaac.2017.11.022

Swartz, K. L., Kastelic, E. A., Hess, S. G., Cox, T. S., Gonzales, L. C., Mink, S. P., DePaulo, J. R. (2010). The effectivenss of a school-based adolescent depression education program. *Health Education & Behavior, 37*, 11-22. doi: 10.1177/1090198107303313

Swartz, K., Musci, R. J., Beaudry, M. B., Heley, K., Miller, L., Alfes, C., Townsend, L., Thornicroft, G., & Wilcox, H. C. (2017). School-based curriculum to improve depression literacy among U. S. secondary students: A randomized effectiveness trial. *American Journal of Public Health, 107*, 1970-1976. doi: 10.2105/AJPH.2017.304088

TEAMS/PODS Intervention Team. (2003). *The adolescent coping with stress course: Leader manual—An eight-session curriculum developed for the prevention of unipolar depression in adolescents with an increased future risk*. Retrieved from: https://research.kpchr.org/Research/Research-Areas/Mental-Health/Youth-Depression-Programs#Downloads

Thapar, A., Collishaw, S., Pine, D. S., & Thapar, A. K. (2012). Depression in adolescence. *The Lancet, 379,* 1056–1067. doi:10.1016/s0140-6736(11)6087-4

Townsend, L., Musci, R., Stuart, E., Ruble, A., Beaudry, M. B., Schweizer, B., …& Swartz, K. (2017). The association of school climate, depression literacy, and mental health stigma among high school students. *Journal of School Health, 87*, 567-574. doi: 10.1111/josh.12527

Werner-Seidler, A., Perry, Y., Calear, A. L., Newby, J. M., Christensen, H. (2017). School-based depression and anxiety prevention programs for young people: A systematic review and meta-analysis. *Clinical Psychology Review, 51*, 30-47. doi: 10.1016/j.cpr.2016.10.005

Wickrama, T., & Wickrama, K. A. S. (2010). Heterogeneity in adolescent depressive symptom trajectories: Implications for young adults' risky lifestyle. *Journal of Adolescent Health, 47*, 407-413. doi: 10.1016/j.jadohealth.2010.02.013

Wilcox, H. C., Kellam, S. G., Brown, C. H., Poduska, J., Ialongo, N. S., Wang, W., & Anthony, J. C. (2008). The impact of two universal randomized first- and second-grade classroom interventions on young adult suicide ideation and attempt. *Drug and Alcohol Dependence, 95*, S60-S73. doi: 10.1016/j.drugalcdep.2008.01.005

Yaroslavsky, I., Pettit, J. W., Lewinsohn, P. M., Seeley, J. R., & Roberts, R. E. (2013). Heterogeneous trajectories of depressive symptoms: Adolescent predictors and adult outcomes. *Journal of Affective Disorders, 148*, 391-399. doi: 10.1016/j.jad.2012.06.028

Endnotes

[1]Avenevoli, Swendsen, He, Burstein, & Merikangas, 2015
[2] APA, 2013
[3] Christiana et al., 2000; Merikangas et al., 2010
[4] Gallerani, Garber, & Martin, 2010
[5] Marshal et al., 2011
[6] Perrino et al., 2015
[7] Nock, Hwang, Sampson, & Kessler, 2010
[8] Curtin, Heron, Miniño, & Warner, 2018
[9] Hart et al., 2017
[10] Jacobs et al., 2010
[11]A. Thapar, Collishaw, Pine, & A. K. Thapar, 2012
[12] Jonsson et al., 2011; Lee et al., 2009; Wickrama & Wickrama, 2010; Yaroslavsky, Petit, Lewinsohn, Seeley, & Roberts, 2013
[13] Owens et al., 2002
[14] Jones, Pastor, Simon, & Reuben, 2014
[15] Calear & Christensen, 2010; Merry et al., 2011; Sanchez et al., 2018; Werner-Seidler, Perry, Calear, Newby, & Christensen, 2017
[16] Martin, 2010
[17] Domitrovich & Greenberg, 2000
[18] Glasgow, Lichtensetin, & Marcus, 2003
[19] Dopheide, 2006
[20] Bridge, Goldstein, & Brent, 2006
[21] Hart et al., 2014; Ruble, Leon, Gilley-Hensley, Hess, & Swartz, 2013; Swartz et al., 2010; Swartz et al., 2017; Townsend et al., 2017
[22] Swartz et al., 2017
[23] Townsend et al., 2017
[24] Beaudry et al., 2017
[25] TEAMS/POD Intervention Team, 2003

[26] Clarke et al., 2001, Garber et al., 2009
[27] Merry et al., 2011
[28] Garber et al., 2009
[29] Clarke, Lewinsohn, & Hops, 1990
[30] CWD; Cuijpers, Muñoz, Clarke, & Lewinsohn, 2009
[31] Clarke, Lewinsohn, & Hops, 1990
[32] Cuijpers et al., 2009
[33] Clarke et al., 2002; Garber et al., 2009; Garvik, Idsoe, & Bru, 2014; Rohde et al., 2004
[34] Rohde et al., 2004
[35] Clarke et al., 1999
[36] Kessler, et al., 2007

Project AWARE Technical Assistance Center
Toll-Free Phone: (844) 856-1749
Email: NITT-TA@cars-rp.org
Website: www.samhsa.gov/NITT-TA