Auctus: The Journal of Undergraduate Research and Creative Scholarship

2017

Depression in Low-Income Adolescents: Guidelines for School-Based Depression Intervention Programs

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Abstract

Adolescent depression is growing in interest to clinicians. In addition to the estimated 2 million cases of adolescent major depressive episodes each year, depressive symptoms in youth have become indicators of mental health complications later in life. Studies indicate that being low-income is a risk factor for depression and that socioeconomically disadvantaged teenagers are more than twice as likely to develop mental illnesses. Only an estimated 1 in 4 children with mental illnesses receive adequate help and 80% of these resources come through schools. Thus, this study focuses on establishing the importance of depression intervention programs in low-income high schools and designing novel guidelines for effective protocols. A compilation of expert opinion on depression screening, education, and treatment, as well as analysis of previously implemented school screening and awareness programs, are examined in order to understand key strategies. The results of this study finds that a multi-layered approach with screening, universal education, and interventions for those identified as being high-risk is most effective in addressing the mental health needs of low-income adolescents. To ensure feasibility and efficacy, screening should be conducted with a modified PHQ-a test and followed-up by timely clinical interviews by school psychologists. All students should receive universal depression education curriculum consisting of principles such as: depression literacy, asset theory, and promotion of help-seeking behaviors. Extending universal education to teachers would also be beneficial in promoting mental health communication and positive classroom environments. It is vital that those screening positive for depression or suicidality receive protocols geared towards high-risk youths, such as group Cognitive-Behavioral Therapy and facilitated mental health center referrals based on individual severity. Effectively addressing depression in school systems requires integration of mental health promotion, depression prevention, and psychotherapy—by taking this multidimensional approach, public health officials and school administrations can ensure that adequate resources are directed to those most in need.

Introduction

As the emphasis on mental health grows in the United States, more research is being conducted on the prevalence and impact of depression in the general population. According to Martin Seligman, depression is set to be the second-most disabling condition by 2020 and is currently the most prevalent psychological disorder in the United States. Depressive disorders come in many forms; Major Depression is the most well-known and is characterized by episodes of severe depressive symptoms, such as fatigue or feelings of hopelessness, which interfere with daily life. While Major Depression may be limited to just one episode, it usually resurfaces throughout a patient's life. Persistent Depressive Disorder consists of a depressed mood for over two years and may occur alongside Major Depression. Other forms of depression include psychotic depression, postpartum depression, Seasonal Affective Disorder (SAD), and bipolar depression. According to Richardson et al., the clinical severity of depression can be measured using patient-rating scales such as the PHQ-2, which uses a 1-5 ranking. Thus, depressive symptoms are evaluated on a spectrum—while a patient may not necessarily have

symptoms severe enough for Major Depression, he or she may still benefit from psychotherapy and increased awareness of mental health resources.

The National Alliance on Mental Illness estimates that 16 million American adults have had at least one major depressive episode in the last year. The Depression Center at the University of Michigan Health System notes that the economic burden of depression is $83 billion in the United States and that depression significantly impacts aspects of society such as workplace productivity and interpersonal relationships with family and acquaintances. Due to its significant impact on Western society, clinicians are pushing to develop long-term solutions that combine both psychological therapy and biological treatments. Likewise, activist groups and healthcare systems are fighting the still-prevalent stigma against depression and helping to establish mental health as a leading public health matter.

Adolescents and low-income populations are at an increased risk of suffering from depression. Since depression is a condition that interferes with educational attainment and socio-behavioral functioning, depression intervention programs should be implemented in low-income high schools in the US as a means to provide mental health services to those most in need. As a public health matter, depression needs to be addressed at all levels of severity. Specific protocols consisting of depression screening, universal depression and mental health education, and follow-up interventions for those identified as being high-risk are recommended in order to provide adequate resources to those most in need.

Increased Risk of Depression in Adolescents and Low-Income Population

The number of adolescents affected by depression is concerning to clinicians considering that the incidence rate for Major Depression is increasing. According to Anne Ruble et al.:

> In 2007, there were an estimated two million adolescents aged 12–17 who suffered from a major depressive episode in the last year. Of those, approximately half had a major depressive episode which caused severe impairment in one or more role domains, including chores at home, school or work responsibilities, close relationships, and social life (SAMHSA Office of Applied Studies, 2008). (1025)

Given depression's impact on socio-behavioral functioning and its close ties with disorders including substance abuse and suicide, schools and communities face effects such as students' decreased scholastic performance and an increase in partaking in high-risk behaviors. Furthermore, mental health disorders that have roots in adolescence often continue throughout adulthood despite initial recovery. According to the United States Preventative Task Forces, those at increased risk of depression stay at-risk for the remainder of their lives (785). In regard to the need to educate adolescents about depression, Ruble et al. claim that only 42% of students in a given study can accurately identify depression as a mental illness and students are overconfident in their ability to address depression using methods that have not proven to be effective (1026). Adolescent depression remains difficult to address due to the unwillingness of youth to seek help and reach out to trustworthy adults regarding resources. A dearth of knowledge on depression itself is a barrier to establishing proper communication regarding the disorder and contributes to the high morbidity rate in this population.

Research confirms that socioeconomic status also affects depression rates in a community. According to Stacey Alicea et al., urban Latino and African-American youth populations, who often grow up in disadvantaged neighborhoods, are at a heightened risk for mental illnesses and socio-behavioral complications due to a stressful upbringing (176). This idea is supported by Marc Lerner, who demonstrates that teens from low-income backgrounds are more than twice as likely to develop complications with mental health. Youth with strong ties to family and community have been shown to be less likely to develop mental health complications

and more likely to achieve academically. However, in low-income populations, adolescents are often faced with stressors such as a disrupted home environment, significant financial need (and thus, less access to specialized resources), and community stigma toward mental health intervention. Low-income youth are also more prone to feelings of chronic stress and isolation, which makes addressing psychological concerns with family or other trusted caregivers more difficult. A study by Elizabeth Goodman, Gail Slap, and Bin Huang solidifies the connection between socioeconomic status and depression levels in adolescents—Goodman, Slap, and Huang demonstrate that Population Attributable Risk for socioeconomic status on depression is 26% for income and 40% for parental income (p. 1844). The high ARe (attributable risk among the exposed) values indicate that if all populations studied were of equal socioeconomic status, the health disparities would be greatly reduced. The concept that low-income or low-education levels alone increase the risk of depression in vulnerable populations highlights the importance of addressing factors that are associated with being low-income and understanding the inherent population-attributed risks that certain groups of students face.

Empirical and Theoretical Evidence for School-Based Depression Intervention

Adolescents with depression and associated mental health conditions often do not receive the assistance that they need. Alicea et al. claim that while community mental health organizations exist in inner-cities, they are often not integrated effectively with the community and youth miss out on key clinical opportunities for recovery. The concept that those with mental illnesses are not able to access adequate resources is supported by Mathilde Husky et al., who finds that less than a third of those with suicidal ideation have received mental health services in the past year (881). Lerner further supports this claim, stating that less than 25% of those children who need mental health help receive proper care for their conditions. In order to successfully reduce psychologically driven disparities in the classroom and health disparities in the community, adolescents' mental health concerns must be addressed within their familial and socioeconomic circumstances. Despite the presence of resources in some communities, low-income families face problems with accessibility—many do not have the time or the financial liberty for intensive clinical care outside of school and work, which perpetuates the cycle of susceptibility for depression.

Screening protocols, which allow for identification of depression, may be the first step in providing resources to those who need them the most. The United States Preventative Services Task Force, which provides national guidelines on public health matters, released a statement recommending the screening of adolescents and children in the context of primary care facilities and is currently updating its recommendations (784). However, Lerner finds that while 90% of pediatricians feel responsible for depression identification, only 0.2% of clinical visits involve depression screenings. Husky et al. note that students are reluctant to voluntarily disclose information regarding "emotional distress" and that parents are unaware of their children's' mental health complications to a "considerable extent" (881). Essentially, the adolescents in low-income environments who are most vulnerable to depression are also the ones who are not able to access resources provided by conventional sources. Most low-income adolescents do not have a home environment that is conducive to open discussion regarding mental health and thus do not take the initiative to reach out to community wellness centers. While research has noted the importance of clinical screening for depression in adolescents, financial burdens regarding healthcare insurance and costs of follow-up care remain barriers to accessing primary care resources. Even for those with access to primary care physicians, the aforementioned lack of screenings from pediatricians and the use of a general protocol that is not specific to the needs of socioeconomically disadvantaged patients hinder access to proper

care.

In his keynote speech to the PARTNERSHIPS FOR THE NEXT CENTURY: Spring 2014 Semiannual Meeting hosted by the California Department of Public Health regarding school mental health interventions, Lerner asserts that of the children who receive help, 80% receive it through school-based mental health services. Peter Silverstone et al., note that a review of past literature on the topic highlights that schools may be the most apt place for depression prevention and intervention (2). Marc Atkins also lends credence to Lerner and Silverstone et al.'s claims regarding schools as opportunities to address adolescent mental health (depression in particular) but also notes that schools were not created to handle such responsibilities. However, given the need for mental health services in low-income communities and the fact that schools play a critical role in an adolescent's socio-behavioral development, school-based depression services are an effective way to provide care to a very vulnerable population. As it is the environment in which they develop many of their behaviors and attitudes that persist into adulthood, it is imperative that schools encourage a positive environment regarding depression treatment and mental health awareness. Furthermore, classroom attendance and academic success is often very dependent on the mental health and positive psychological functioning of students, so schools have incentives to provide adequate resources to those in need. Perhaps most critically, schools are much more accessible and integrated with an adolescent's daily life than either primary care or community mental health centers in low-income communities.

Mental health is very much a public health matter. Poor mental health, which can set in much earlier in life than most conditions, increases the risk of comorbid conditions such as obesity and heart disease, which are already elevated in low-income populations. Given that depression is just as much psychosocial as it is biological, community-based strategies encapsulating everything from prevention to treatment should be considered. In his lecture as part of the Evidence-Based Practice in Mental Health Services series at the Leonard Davis Institute, Atkins references the 2009 H1N1 virus campaign, one of the most successful public health campaigns recently launched. The campaign consists of two key principles—give initial resources including vaccines to those in immediate need and get the rest of the general public involved by launching a campaign centered on hygienic practices such as hand-washing and sneezing into the elbow. A similar approach can be taken in schools for depression intervention campaigns. Quickly providing resources to those most affected and still involving everyone via an educational campaign allows for a widespread long-term response in terms of eradicating disease and eliminating stigma. Public health lies on a continuum; reducing depression rates and stigma in low-income adolescents requires more than just antidepressants – it requires health awareness, preventative efforts, changes in public opinion, and follow-up treatment. Multiple studies establish the value of multi-layered interventions. In a clinical setting, both the United States Preventative Services Task Force (USPSTF) and Rachel Zuckerbrot et al. emphasize the importance of providing multidisciplinary, staff-assisted follow-up services and psychotherapy treatment for those who screen positive. Elizabeth O'Connor, Evelyn Whitlock, Bradley Gaynes, and Tracy Beil support this by stating that primary-care programs that simply screen for depression are unlikely to affect depression outcomes, but those that integrate follow-up education with screening can decrease depression rates. Low-income schools that have school psychologists reflect similar environments as primary-care programs and can apply many of the same strategies.

In regards to schools, both Silverstone et al.'s EMPATHY study and Lerner's PBIS study involve identifying students as low-, medium-, and high-risk and providing appropriate resources (i.e., mental health center referrals, school psychologist counseling, etc.) as in primary care. Alicea et al. also emphasize the importance of intervening at different levels—the STEP-

UP mental health campaign aims to address urban adolescent mental health in youth, family, and school/community settings. Alicea et al. also assert that understanding the needs of the population are essential in creating an effective program (176).

The concept of a multi-layered depression intervention program targeted toward low-income adolescents has yet to be implemented. Many of the aforementioned studies have had successful outcomes in reducing depression rates, increasing depression literacy, and referring students to outside resources, but few have combined all three elements. For example, Husky et al. and Silverstone et al. both address screening and follow-up protocols while Ruble et al. discusses depression education. While each of these studies address parts of depression, an effective intervention program integrates many of the individual strategies mentioned in previous studies and spans screening, education, and high-risk intervention all at once. More so, a program has yet to be geared specifically to the unique needs and school environment of low-income students—the following guidelines are a step towards creating effective program protocols that provide the most service to those most in need of depression and mental health resources.

Initial Screening Protocols

Screening protocol should be geared, as Atkins and Alicea et al. highlight, toward the needs of the target population receiving screening. According to the United States Preventative Services Task Force (USPSTF), different screening tools including the Zung Self-Depression Scale, Beck Depression Inventory and General Health Questionnaire, which can all be administered in under 5 minutes, have been shown to have good sensitivity and fair specificity. The USPSTF also establishes that shorter tests that address mood and anhedonia are effective in detecting depressed patients (787). The USPSTF formally states that there is limited evidence to empirically suggest one screening test over another and that factors such as patient demographics and suitability for the screening setting should be considered (785). Lerner asserts that screening tools such as the MH E-Screening and PHQ-9 for Adolescents are suitable options for those ranging from 12-21 years old. In establishing what screening test to use, the accessibility, efficacy, rapidity of administration, and cost-effectiveness are key principles to consider when conducting screening tests on large groups of students in low-income environments with limited extra resources. Additionally, since the screening programs would be implemented in a school environment and not in a formal primary care setting, efforts to reflect clinical diagnostic standards should be made to ensure accuracy in screening results. Given these vital components, it is important to note the potential of the PHQ-a test, which is the Patient Health Questionnaire-9 modified for Adolescents. The PHQ-9, which is widely used for adults, draws its questions directly from the clinical guidelines outlined by the Diagnostic and Statistical Manual of Mental Disorders-5—the PHQ-a simply has modifications in wording and scaling to suit adolescents.

In regards to the efficacy of the PHQ-a, Richardson et al. note that at a cut-off score of 11 (a slightly higher score for adolescents than for adults), the test had sensitivity in 89.5% and specificity in 77.5% of youth diagnosed with major depression. Richardson et al. emphasize that screening tools should be brief, accurate, easy to understand and without cost, all of which the PHQ-a provides (1118). Silverstone et al. note that the EMPATHY mental health screening program used the PHQ-a as well, but with a modification to include two questions regarding suicidal ideation. Silverstone et al. rationalize that if intervention is based simply on the PHQ-a depression score, those who are actively suicidal may be missed despite needing mental health resources (9). Given the strong correlation between major depression rates and suicidal ideation, a similar approach for screening low-income high school students should be

taken. By using the PHQ-a with a modification to address suicidality, students will be screened with a test based on clinical diagnosis criteria, eliminating the concern of missing those who are suicidal but asymptomatic of depression.

Beyond the screening tool used, Lerner highlights the importance of planning out how screening will be implemented, information will be disseminated, and follow-up protocols will be established. While Lerner focuses on the immediate transition to primary care for just those who screen positive for depression instead of also incorporating universal education, he makes valid points regarding understanding cultural issues, literacy, privacy and the right to opt out before screening is conducted. Lerner's points are supported by Atkins and Alicea et al., who assert that understanding the cultural needs of the community before implementing a program is vital. Husky et al. note that the screenings took place in health classrooms (882). Providing students and caretakers with clear information regarding the reasoning behind and logistics of the screening and follow-up services, as well as the full promise of confidentiality and the ability to opt-out at any time, allows for program coordinators to start breaking down the stigma regarding mental help in low-income communities. Both Husky et al. and Silverstone et al. allude to conducting clinical interviews following screening – while Husky et al.'s study provided it for anyone who screened positive for depression, Silverstone et al.'s study provided it for students deemed to be in high- and medium-suicide risk groups following screening. Both Silverstone et al. and Lerner emphasize the importance of rapid feedback. Silverstone et al.'s EMPATHY program ensured that those who were highest risk for suicide received interviews within 48 hours, and feedback from students, caretakers, and staff were rapidly integrated into the program (10). Likewise, Lerner notes that the PBIS program allowed for implementation of behavioral systems that incorporated rapid intervention for students considered Tier 2 and Tier 3 (medium and high risk, respectively). Rapid feedback and interviews are critical because it indicates to students and caretakers that the program administrators take student mental health screenings seriously and can provide immediate assistance. Integrating rapid screening results also allows for program administrators to effectively modify a program around the psychological and social needs of the target population based off student feedback in post-screen interviews.

Silverstone et al. also highlight that those who administered the tests and ran the bulk of the program were not necessarily highly-trained specialists, but rather school personnel such as psychologists and teachers (4). Allowing school staff to run the majority of the screening and interviews (with additional trained overseers) allows for students to start building valuable trust with adults that they can go to for resources. Doing so builds stronger connections within the school community regarding mental health and assists with promoting positive communication between teachers and students.

Establishing Universal Mental Health Education

Research suggests that depression screening is not necessarily effective by itself and needs to be coupled with education for at least moderate results. Universal education, regardless of screening outcome, for all students involved in a depression intervention program is key. Silverstone et al. and Lerner both highlight use of universal education for all groups (low to high risk) as part of their mental health intervention programs. According to Ruble et al., adolescents lack proper depression literacy and the knowledge of how to address mental health in peers and seek help (1026). Providing universal education—that is, depression and mental health education for all program participants, regardless of screening diagnosis—is critical as it affects the school environment and introduces students to help-seeking behaviors. By educating all participants on depression literacy, understanding of mental health, and how to access resources,

students are informed about depression and are more likely to display sensitivity to peers' mental health concerns and wellbeing. By facilitating discussion about mental health in a safe space such as a classroom, school staff are able to foster a positive school climate, which is essential for academic and psychosocial success in low-income schools. Furthermore, simply screening students and providing no follow-up services to those who did not screen positively for depression limits mental health education to a very small portion of the overall population and leads to minimal positive change. According to Ruble et al., Adolescent Depression Awareness Program (ADAP) is a 3-hour curriculum with pre- and post-tests (separated by 6-8 weeks) that addresses this concern by teaching students about depression, diagnosis, suicidal ideation, and help-seeking. Ruble et al. note the program is taught by medical students and psychiatry residents using different teaching modalities, including group activities and videos, and has been shown to be effective in increasing depression awareness and decreasing stigma behind receiving support (1026). A curriculum similar to ADAP would be ideal for implementation as part of high-school depression intervention programs as it addresses the aforementioned depression literacy and can be tracked for effectiveness using the pre- and post-tests. In particular, the use of medical students and residents allows for school systems to start building strong connections with community mental health resources and for students to be able to interact with medical professionals regarding concerns without worrying about clinical costs.

Alicea et al. note several key programs used by STEP-UP, an urban mental health campaign, which can be paralleled in depression intervention campaigns. In particular, Alicea highlights Social-Action Theory (SAT), which focuses on aspects like mental health empowerment and social capital, as well as asset theory, which focuses on improving mental health functioning, educational and financial goal-setting, and behavioral change. Both were implemented by STEP-UP to focus on empowering inner-city youth from under-resourced communities in regards to psychosocial functioning (Alicea et al. 178). The strategies utilized with the inner-city populations can be paralleled in low-income adolescent depression intervention programs. Students who are not otherwise exposed to many self-help resources are able to utilize principles from SAT and asset theory to develop positive psychosocial behaviors, planning skills, and disengage with harmful behaviors that arise from their environment. Introducing SAT and asset theory into depression intervention programs allows for students with limited financial resources to learn long-term principles of empowerment and education alongside positive mental health strategies and depression education.

As demonstrated by Lerner, teachers are also a vital component in determining the school environment and mental health of students. Lerner suggests that teachers should be educated about teaching methods that acknowledge positive behavior and create an effective and healthy learning environment in the classroom. Lerner expands on this to suggest that teachers and school administrators should be educated on early warning signs of mental illness and how to properly communicate with students and caretakers regarding such concerns. Depression screening typically focuses exclusively on the students, but introducing universal education for teachers as well is key since school staff has a large influence on school culture. In poor high schools, scholastic success is dependent on mental health success—teachers who are well-versed in addressing depression and associated mental illnesses are able to better empathize with the needs of vulnerable students and work individually with them to address psychological and academic concerns. This idea is supported by Atkins, who details the concept of Teacher Education Days as part of his mental health campaign to train urban teachers in specific teaching strategies and provides them with information about mental health resources that they can access in the classroom. Atkins notes that, given adequate resources, teachers were willing to follow through with suggested practices following the 3-Year Follow-Up Strategy.

Atkins' study emphasizes that educating teachers is a way to feasibly influence the classroom atmosphere in the long term and to strengthen student-teacher relationships.

High-Risk Intervention and Follow-up

In order to give resources to those who need them the most, depression intervention programs should have follow-up protocols for students at high risk of depression or suicide. Both the EMPATHY program (Silverstone et al.) and the PBIS Study (Lerner) establish multi-tier categories for students following screening, in which the high-risk and moderate-risk students are given additional resources and appropriate follow-up referral. This parallels the USPSTF (2009) recommendation for multidisciplinary interventions that involve staff-assisted care systems (785). Silverstone et al. determine that those who score in the top 10% for EMPATHY or show suicidal ideation are the highest risk category—they are given immediate clinical interviews and internet-based guided Cognitive-Behavioral Therapy; there is no mention of outside referrals, but students do work with Resiliency Coaches (22). While the treatment is not as intensive as for the high-risk group, the moderate-risk group is given CBT as well and the low-risk students are given the optional CBT curriculum as a supplement to the universal program. Silverstone et al. find that implementation of this program results in statistically significant reductions in depression, anxiety, and suicidality scores (16-18). A study by Anthony Spirito, Christianne Esposito-Smythers, Jennifer Wolff, and Kristen Uhl questions CBT's ability to reduce suicidality, but does assert that CBT strategies like Rational Emotive Therapy (teaches cognitive restructuring) and the ABCDE method (teaches about dealing with negative beliefs or thoughts) have been empirically proven to be effective depression treatments (194). Lerner notes that the PBIS study uses a Multi-Tiered System of Support Model, in which Tier 2 students are given group support and intervention and Tier 3 students are given further individualized screenings and Person Centered Planning. According to Learner, implementation of the PBIS program leads to improvements in socio-behavioral functioning and reduces discipline referrals. High-risk interventions provide the critical connection between vulnerable low-income students and resources available at community mental health centers and hospitals. Taking a multi-tier approach parallels the concept of "triaging" in trauma situations—with limited resources available, classifying students based on severity of condition and assigning resources appropriately ensures that each group gets adequate care relative to their need. Husky et al. provided those who asked for help or had high depression screening/suicidal ideation scores with a second-stage clinical interview and referral to either school or community mental health services. Reflecting on the research by Silverstone et al. and Lerner, Alicea et al. note that the STEP-UP urban mental health campaign also introduced one-on-one mentoring and group facilitation of crisis plans for those who express the most need. Husky et al. note that those who had milder cases are more likely to be referred to school-based services while those with suicidal ideation and very high risk are referred to community mental health services. A similar strategy is recommended for depression intervention programs. Students who need highly specialized attention or are in a critical condition (i.e., experiencing suicidality) are able to get care from those with specific mental health training and tools. At the same time, keeping cost-effectiveness in mind, students with less severe depression are able to receive adequate care from school psychologists, further strengthening the student-adult relationships within the school system. Alicea et al. also introduce the idea of in-home visits with caretakers (since accessibility is a hindrance in urban communities) to involve parents in creating a healthy home environment and facilitating parent-child relationships, which is critical in low-income families.

In regards to specific treatments, the USPSTF issue a warning about the use of Selective

Serotonin Reuptake Inhibitors (SSRIs) and antidepressants in the treatment of depression in the adolescent and older adolescent age groups. The USPSTF formally recommends that clinicians look at psychotherapy and other non-medication-based treatments as the use of SSRIs are correlated with increased risk of suicidal behavior in adolescents (786). In addition to being a financial burden that neither school programs or low-income families can be held responsible for, parents demonstrate concerns regarding unnecessary access to prescription drug abuse following screening. The proposed depression intervention program does in fact focus on psychotherapy as a treatment method but also ensures that students with severe needs are being linked to specialized mental health centers that can handle pharmaceutical treatment appropriately.

Conclusions and Further Considerations

This paper establishes overarching guidelines and recommendations for comprehensive depression interventions in high schools serving low-income students. However, it is imperative that research be conducted before a program is fully enacted. Aspects to be researched further include the mental health funding of schools serving low-income students and the level of training that school psychologists receive. Additionally, factors like differences in rural and urban low-income communities and the receptiveness of their respective external mental health centers should be considered. Strategies for increased engagement with parents or caretakers, as well as financially feasible community-wide elimination of stigma, are important aspects to consider as well.

Understanding the unique psychosocial needs of a community is critical in public health and psychology. Adolescents from low-income communities need advocates who understand the unique financial and environmental constraints that they are put under. Eliminating depression in impoverished families is not simply of matter of providing another wellness center or pharmaceutical dispensary to the community. Effective mental health change requires combination of identification of disease, education and public awareness, and rapid treatment for those who need critical resources. Developing such a system in a school environment allows for students to easily integrate change into their daily lives and create positive conversation about mental health before entering adulthood.

Works Cited

Alicea, Stacey, Gisselle Pardo, Kelly Conover, Geetha Gopalan, and Mary McKay. "Step-Up: Promoting Youth Mental Health and Development in Inner-City High Schools." Clinical Social Work Journal 40.2 (2011): 175-186. Web.

Atkins, Marc. "New Models for Mental Health Promotion in High Poverty Communities: Drilling Deeper in Urban Schools". Lecture presented at Evidence-Based Practice in Mental Health Services Research Seminars in University of Pennsylvania, Philadelphia. (2012). Web.

Bradshaw, Catherine, Tracy Waasdorp, and Philip Leaf. Effects of School-Wide Positive Behavioral Interventions and Supports on Child Behavior Problems. Pediatrics 130.5(2012): 1136-1145. Web.

Depression. (n.d.). Retrieved December 10, 2015, from https://www.nami.org/Learn-More/Mental-Health-Conditions/Depression

Depression and Lost Productivity. (n.d.). Retrieved December 10, 2015, from http://www.depressioncenter.org/work/information-for-employers/lost-productivity

Goodman, Elizabeth, Gail Slap, and Bin Huang.. "The Public Health Impact of Socioeconomic Status on Adolescent Depression and Obesity." American Journal of Public Health 93.11 (2003): 1844-1850. Web.

Husky, Mathilde, Marian Sheridan, Leslie Mcguire, and Mark Olfson. "Mental Health Screening and Follow-Up Care in Public High Schools." Journal of the American Academy of Child & Adolescent Psychiatry 50.9 (2011):, 881-891. Web.

Lerner, Marc. "Mental Health Screening and Early Intervention in Schools." Lecture presented at PARTNERSHIPS FOR THE NEXT CENTURY: Spring 2014 Semiannual Meeting in Mission Inn Riverside, Riverside, CA. (2014). Web.

O'Connor, Elizabeth, Evelyn Whitlock, Bradley Gaynes, and Tracy Beil. "Screening for Depression in Adults and Older Adults in Primary Care: An Updated Systematic Review.".U.S. Preventive Services Task Force Evidence Syntheses, 75 (2009).Web.

Richardson, Laura P., Elizabeth McCauley, David Grossman, Carolyn McCarty, Julie Richards, Joan Russo, . . . and Wayne Katon. "Evaluation of the Patient Health Questionnaire-9 Item for Detecting Major Depression Among Adolescents." Pediatrics 126.6 (2010). 1117-1123. Web.

Ruble, Anne E., Phillip Leon, Laura Gilley-Hensley, Sally Hess, and Karen Swartz. . "Depression Knowledge in High School Students: Effectiveness of the Adolescent Depression Awareness Program." Journal of Affective Disorders 150.3 (2013): 1025-1030. Web.

"Screening for Depression in Adults: U.S. Preventive Services Task Force Recommendation

Statement." Annals of Internal Medicine 151.11 (2009): 784-792. Web.

Seligman, Martin. Learned Optimism: How to Change Your Mind and Your Life. New York: Vintage Books. (2006). Print.

Silverstone, Peter H., Marni Bercov, Victoria Suen, Andrea Allen, Ivor Cribben, Jodi Goodrick, . . . and Christopher Mccabe. "Initial Findings from a Novel School-Based Program, EMPATHY, Which May Help Reduce Depression and Suicidality in Youth. PLoS ONE PLOS ONE 10.5 (2015): 1-29. Web.

Spirito, Anthony, Christianne Esposito-Smythers, Jennifer Wolff, and Kristen Uhl. "Cognitive-Behavioral Therapy for Adolescent Depression and Suicidality." Child and Adolescent Psychiatric Clinics of North America 191-204.Web.

Williams, Selvi, Elizabeth O'Connor, Michelle Eder, and Evelyn Whitlock. Screening for Child and Adolescent Depression in Primary Care Settings: A Systematic Evidence Review for the US Preventive Services Task Force." Pediatrics, 69 (2009). Web.

Zuckerbrot, Rachel, Amy Cheung, Peter Jensen, Ruth Stein, and Danielle Laraque. "Guidelines for Adolescent Depression in Primary Care (GLAD-PC): I. Identification, Assessment, and Initial Management." Pediatrics, 120.5 (2007): 1299-1312. Web.