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SCHOOL-BASED MINDFULNESS: AN UPSTREAM INVESTMENT

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**ABSTRACT**

For the past three consecutive years, mental health has ranked as the number one health concern in the annual Community Health Assessment for Jackson county. According to SAMHSA’s 2016 Center for Behavioral Health Statistics and Quality Report1, nearly 15% of Oregon adolescents aged 12 to 17 had a Major Depressive Episode (MDE) in the last year. This is higher than any other state by a large margin2. Adolescent depression is often the first indication of developing mental health and behavioral problems. In 2010, the state of Oregon spent over $602 million dollars on mental health services2. Clearly, the cost of mental illness is high, both in financial terms and social impact. Modern prevention science is based on the concept of enhancing known protective factors that occur early in the chain of developmental events leading to disorder3. Strategies and Tools to Embrace Prevention with Upstream Programs (STEP UP) is a prevention science based social and emotional school-based learning curriculum created for adolescents4. The program utilizes evidence-based strategies to reinforce protective factors and develop emotional regulation skills. The Academic, Social and Emotional Learning Act of 2015 was introduced to Congress in 2015. The Act is currently under review with the subcommittee on Early Childhood, Elementary and Secondary Education5. If the Act passes, it will mandate funding for initiatives like STEP UP to address the social and emotional developmental needs of students through the Teacher and Principal Training and Recruiting Fund program. This paper outlines a plan to implement the STEP UP program initially through one ‘flag-ship’ school-based clinic in Jackson county, with a goal of demonstrating STEP UP’s efficacy and ultimately rolling out the program to all school districts within the county.

**INTRODUCTION AND BACKGROUND**

Depression (major depressive disorder or clinical depression) is a common but serious mood disorder. To be diagnosed with depression, the symptoms must be present for at least two weeks6. In 2014, 2.8 million youth (aged 12 to 17) had a major depressive episode during the past year7. Current research suggests that depression is caused by a combination of genetic, biological, environmental, and psychological factors6.

Depression is now recognized as occurring in children and adolescents7. Many chronic mood and anxiety disorders in adults begin as high levels of anxiety in children8. Depression, even in the most severe cases, can be treated4. The earlier that treatment can begin, the more effective it is8.

Instead of expending all resources and energy on treating people later in their diagnosis, upstream prevention attempts to stop the problem from even happening. Effective upstream prevention programs modify risk and protective factors, and key knowledge breakthroughs can jump-start progress in realizing the prevention potential of specific strategies.

Childhood and adolescence are key “prevention window” periods. Looking at suicide rates as an extreme indicator of the severity of behavioral disturbance, approximately one half of emotional and behavioral disorders that are well-defined risk factors for suicide have onset of symptoms by age 14 years9. Adolescence is, in fact, the age period of the highest rates of attempted suicide8. In Jackson County, the problem of suicide is higher than that in the state overall10. The 2010 epidemiological report on the mental health of Jackson County residents found a rate of suicide deaths of 21.3 per 100,000 of the population, nearly double the 2010 national rate of 11.3, and higher than Oregon’s statewide rate of 17.1 per 100,00010.﻿

Anticipated obstacles to implementing an upstream mental health prevention program targeting adolescents are: *accessibility* and *convenience*. A school based health center (SBHC) offers solutions to both of those obstacles. SBHCs bring critical, developmentally appropriate services to children and adolescents where they spend most of their waking hours: at school. SBHCs have been providing a range of comprehensive services to youth for >40 years11. There are ten SBHCs in Jackson county, two of which are located in the outlying, isolated rural communities of Butte Falls and Prospect11. Four other SHBCs11 are located in the urban area of Medford (southern Oregon’s largest metropolitan area). In Jackson County, 12.4% of the population are Hispanic, 88.7% are White, 20.9% are under the age of 18, and the large majority of households are low-income12.

**EVIDENCE BASED PROGRAM**

There are three lesson plans that provide the foundation of the STEP-UP program: metacognition, mindfulness, and a generalized learning experience4.

Metacognition is defined as ‘knowing about knowing’ (or thinking about thinking) and the processes involved therein13. Developing good metacognitive skills, especially at a young age, is an important determinant for the development of social and emotional competencies including self-awareness, emotion identification and expression, self-motivation, and self-regulation14.

Mindfulness is achieved through meditation, guided imagery, expressive art, and breath-control. Mindfulness is an integral component of many proven, successful behavioral therapy programs, including Cognitive Behavioral Therapy (CBT) and Dialectical Behavioral Therapy (DBT)15. Specifically, mindfulness promotes self-esteem, self-awareness, and self-control.

“I would rather have a limb amputated without anesthesia than to be suffering the kind of pain I am feeling at the moment.” This is the kind of torment I was feeling as I struggled with depression. I projected my present condition into the future using catastrophic self-talk that led to suicidal thinking – e.g., “If I have to put up with this suffering for the next thirty years, I might as well end my life now.”

Fortunately, a nurse practitioner named Teresa taught me the practice of mindfulness meditation, a practice [whereby] when the mind wanders, one gently brings it back to a central focus (the breath, a candle, etc). There is something transformative that happens when we simply allow ourselves to experience our pain without trying to judge, change or resist it. When we surrender to it, while remaining in the present, the pain tends to diminish16.

The final component, the generalized learning experience, is a combination of all the aforementioned skills applied in a variety of settings and is aimed at reinforcing the new behaviors in real world environments.

The overall goal of STEP-UP is to strengthen relationships between students, teachers and parents, and to develop a deeper sense of inclusiveness and community4. The purpose is to develop strong social support networks and the coping skills to deal with overwhelming situations that often contribute to the development of anxiety, depression and other mood disturbances4.

**IMPLEMENTATION STRATEGY**

The SBHC nurse will assume responsibility for overseeing the training of a core group of teachers to become STEP-UP instructors using the pre-existing STEP-UP ‘train the trainer’ curriculum. This includes PowerPoint presentations and webinars. Training requires four separate sessions of 50-minutes over a four-week period17.

Session 1 provides instruction on how to administer assessments4. Session 2 explains the importance of social and emotional learning (SEL) for students and its role in suicide prevention4. Session 3 describes the history and theoretical background of STEP UP as well as the content of the twelve lessons4. In the final session, session 4, recommendations for how STEP UP should be taught are reviewed, including rules for students, how to encourage students’ participation, and use of constructive guided feedback and reinforcement4. During this session, teachers are also provided an overview of the structure for each lesson plan and strategies for how to appropriately complete the lesson plan within its ascribed 25-minute period4.

Pending the approval of the Academic, Social and Emotional Learning Act of 2015, the cost of implementing a county-wide STEP UP program would be provided by federal funds, paid directly to local school districts. A strong and dynamic relationship between the nine school districts in Jackson County, La Clinica and Rogue Community Health Center, is the key to effective collaboration between these organizations. To ensure this inter-disciplinary relationship runs smoothly, a STEP UP Board of Directors could be elected with members from each organization represented. The goal of the Board of Directors would be to ensure the implementation and adoption of the STEP UP program, initially over a 5-year period. The Board would hold quarterly meetings to identify obstacles to implementation and direct a Task Force of Board members to address these obstacles.

**EVALUATION PLAN**

The STEP UP Training Post-Test is designed to measure students’ retention of the material and is intended for use immediately after students complete STEP UP training.

The STEP UP Training Evaluation Survey is designed to evaluate the overall efficacy of the training in terms of behavior change and is best used 60 – 90 days after training is complete17.

Susan Bruce (sbruce@virginia.edu), the Director of the University of Virginia’s Gordie Center for Substance Abuse Prevention, serves on the National Advisory Panel for STEP UP. She collects confidential data from STEP UP programs across the nation.

The RE-AIM framework helps planners improve the sustainable adoption and implementation of effective evidence-based interventions. It has been used here to demonstrate the potential of implementing the STEP UP program in SBHCs in Jackson County.

**R**each: All 11-14 year-olds in Jackson County. This age-group represent a key “window of prevention” for the development of future mental and behavioral health disorders.

**E**ffectiveness: Efficacy can be measured specifically in terms of the 90-day evaluation tool and broadly in terms of the Major Depressive Episode (MDE) data gathered by the Oregon Health Authority (OHA). Since 2005, the OHA has conducted the Oregon Healthy Teens Survey (OHT) which collects information from eighth- and eleventh-grade students every year on whether, in the past 12 months, they had felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities18. The OHT data reflects data relating to each county in Oregon and is a useful tool for evaluating the prevalence of depression in adolescents.

**A**doption: SBHCs in Jackson county are run exclusively by two primary care organizations – La Clinica and Rogue Community Health Center. The support of these two organizations in the adoption of a county-wide STEP UP program is essential. A study of the STEP UP program conducted by the Nevada Institute for Children’s Research and Policy, noted that students who participated in the program over two school years were shown to have increased their social and emotional competency skills, and were using more positive strategies when facing adverse situations. This suggests that for students to receive the full benefit of the program, it should be implemented for a minimum of two years17.

**I**mplementation: The program would be conducted in small groups as part of the ‘advisory period’ of the school curriculum. Teachers would be assigned students once or twice a week for 25 minutes. The entire STEP UP program can be implemented over eight to twelve weeks. Flexibility will be given to the teachers regarding the number of times a week the material is taught and total length of time of the program.

**M**aintenance: Fortunately, the STEP UP program has already been successfully implemented in SBHCs across the nation since 201317. The program was developed by Pamela Goldberg, a critical care nurse and licensed therapist. She oversees the website [www.selforprevention.com](http://www.selforprevention.com) which provides ongoing support services for the training, implementation, evaluation and maintenance of STEP UP programs.

**SUMMARY**

There are enormous potential benefits from implementing an upstream mental and behavioral health prevention program among Jackson county adolescents. Beyond the intended purpose of pro-actively equipping youth to deal with depression and anxiety, programs like STEP UP have been proven to reduce suicide rates, improve academic outcomes by boosting emotional intelligence17. Early prevention strategies are the most effective and cost-efficient means of addressing the health issue that Jackson county residents have voted their number one concern for three-years running: mental health2. We have within our reach the means to make an enormous impact on our children’s futures. It is, after all, the youth of today who will shape the world of tomorrow. Retro-active mental health care has been the traditional focus of mental health services in Jackson county. The county receives $28 million annually to provide mental health services to the counties’ 65,000 OHP patients19. The bulk of these funds are directed towards treatment programs for substance abuse. We have within our grasp the means to reduce this expense through innovative, low-cost, evidence-based initiatives like STEP UP.

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