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Improving Depression Awareness and Screening in a Community College

Shelly Baldwin
Southern Illinois University Edwardsville

Introduction

Mental health is essential to good physical health and overall well-being. Individuals with mental illness often suffer from increased medical problems compared to those without mental health complications (Jao et al., 2019). Depression is a common mood disorder that can have significant negative effects on an individual's mental health and overall sense of well-being especially if the disorder is unrecognized and untreated. In fact, depression is a leading cause of disability worldwide impacting over 264 million people each year (World Health Organization [WHO], 2020). Although depression can affect individuals of any age, gender, ethnicity, or social status, young adults between 18-25 years of age have a higher prevalence (13.1%) compared to other age groups with women (8.7%) more likely to suffer from depression than their male (5.3%) counterparts (National Institute of Mental Health [NIMH], 2017). This data shows that adolescents and young adults are at increased risk for mental health problems such as depression especially as they transition into post-secondary schools.

College students are also more likely to participate in unhealthy and risky behaviors such as tobacco and marijuana use, and binge drinking. Jao et al., (2019) found high alcohol and drug use were associated with a higher proportion of psychological symptoms, mental illness diagnoses, and self-injurious thoughts or behaviors. Young adults that begin smoking and drinking in college are more likely to continue these detrimental behaviors into adulthood. The longer these behaviors continue, the more chronic health conditions, such as heart or lung disease are likely to develop along with substance abuse disorder. The National Alliance on Mental Illness [NAMI] (2020), reports individuals with a serious mental health disorder, such as depression, have a 40% greater risk of cardiovascular and metabolic disease than those without a mental illness. Also, depressed individuals are more likely to report substance use disorder and unemployment. In the United States (U.S.), this accounts for $210 billion in health care costs (Maurer et al., 2018) and approximately $193 billion in lost earnings per year which has a global impact of $1 trillion in lost productivity each year (NAMI, 2020). Add to this the staggering statistics of nearly

800,000 global suicide deaths per year (WHO, 2019) with suicide as the second leading cause of death in individuals aged 10-34 years (CDC, 2019) and it is easy to see our nation's youth are suffering and in jeopardy.

Early recognition and subsequent treatment can help to reduce the high price of physical and psychological disability depressed individuals face along with the significant financial cost to society for long-term sufferers. Colleges and universities can have a meaningful impact with early recognition of depression in the high-risk student population by improving depression awareness and education on college and university campuses. Faculty and staff education on depression and depression screening can reduce stigmas and barriers associated with mental illness. Increased awareness and recognition of depression symptoms will facilitate early access to treatment for students promoting academic success and overall well-being.

Literature Review

Depression screening is recommended by the U.S. Preventative Services Task Force [USPSTF] (2016); however, no recommendation on frequency of screening has been made. This is because there is little evidence to support specific screening frequency. While there is a multitude of valid and reliable depression screening tools currently in use in various clinical and non-clinical settings, the USPSTF has not made any recommendation for use of a universal depression screening tool. Despite no formal recommendation by the USPSTF on frequency or use of a specific tool to screen for depression, evidence supports screening of the general adult population. While there is an array of depression screening tools available, a review of the literature found evidence is limited on depression screening in non-clinical settings, such as colleges and universities, compared to clinical practice areas. Several tools were created for specific populations, such as the elderly, cancer patients, or postpartum mothers but no specific tool is available for college students only.

The most used and studied depression screening tool for the general population is the Patient Health Questionnaire (PHQ). This tool can be administered using the 2-question (PHQ-2) item or the 9-question (PHQ-9) item and is based on feelings from the past two weeks (Hirschtritt & Kroenke, 2017; Maurer et al., 2018; Kroenke et al, 2001; Kroenke et al, 2003). Because the PHQ-2 questions are the first two questions of the PHQ-9 form, the PHQ-9 is typically the version that is administered. Studies show both the PHQ-2 and the PHQ-9 are sufficient for screening depression symptoms (Carey et al., 2016; Dueweke et al., 2018; Kroenke et al, 2001; Kroenke et al, 2003; Levis et al., 2020; Manea et al., 2016) although the PHQ-2 alone should not be used to determine suicide risk (Dueweke et al., 2018). Despite its use mostly in clinical healthcare practice, the sensitivity and specificity of the PHQ tool, combined with open, free public access, makes this tool a viable option for application with college students.

Project Methods

The goal of this project was to improve depression awareness and understanding in a community college setting using a brief depression screening tool and mental health education. Faculty and staff from a central Illinois community college were invited to an educational presentation using Zoom. Before starting the educational presentation, an anonymous depression awareness self-assessment questionnaire was administered to participants. Questions were multiple choice and Likert-type objective responses using the polling feature in Zoom. The PowerPoint education session consisted of a general overview of mental health including depression statistics, depressive symptoms, and complications related to depression. The PHQ-2 tool was introduced and explained along with a discussion on the importance of implementing depression screening and improved depression education and awareness. A post-presentation depression awareness self-assessment questionnaire was given following the same format. The educational presentation including pre and post-survey administration took approximately one hour. A recording of the Zoom presentation was shared with all faculty approximately two days later. The link will remain active indefinitely. Institutional Review Board (IRB) approval was received and shared

with participants before implementation of the quality improvement project. Participation was voluntary and this was indicated in writing on the PowerPoint and stated at the start of the presentation. Participants were able to listen to the education session irrespective of whether they completed the pre or post-survey questionnaires.

Evaluation

The initial pre-presentation survey was comprised of eight questions. Three were multiple-choice, two were true or false, and one was a multiple-response answer. A Likert scale was used for the remaining two questions. The follow-up survey after the education session was a total of ten questions. Four of them were multiple choice with two true or false and four Likert scale responses. Each participant's survey was graded, and answers were recorded. An analysis of responses to each question was performed. Results from the initial survey were intended to evaluate participants' baseline knowledge of depression. Analysis of responses to the initial survey was compared with the first eight question responses on the follow-up survey to identify gaps in education and opportunities for improvement. The remaining questions from the follow-up survey were reviewed to determine participant opinions on the applicability of the PHQ-2 for use with students in the community college setting and the likelihood strategies from the education session on depression awareness would be implemented in their daily work setting.

Seventeen people completed the initial survey with fourteen people completing the follow-up survey. All participants in both surveys correctly identified suicide as the second leading cause of death for those 10-34 years of age. This indicates at least some initial awareness of the seriousness of unrecognized depression. On the initial survey, only 41% of participants were able to correctly pinpoint the PHQ-2 as a tool to help identify depressed individuals compared to 86% of participants on the follow-up survey. Before the education session, only 53% of individuals rated their ability to recognize depressive symptoms as good or average with 47% reporting a good or average comfort level in assessing students

for signs of depression. On the follow-up survey, 93% of individuals felt their ability to recognize depression symptoms was good or average. Participant comfort levels with assessing signs of depression also climbed to 93% post-education session. Out of the remaining two follow-up survey questions, 64% agreed or strongly agreed the PHQ-2 was a useful tool that could be used in the community college setting. Additionally, 64% felt they were very likely or extremely likely to implement strategies learned from the education session.

Results of the surveys showed an overall increase in depression knowledge and awareness with more than half of the participants indicating the PHQ-2 would be a useful tool that could be used with community college students. An added finding from this project is that over half of the participants indicated they would likely implement what they had learned in their daily work. These findings directly address the goal of this quality improvement project which was to improve depression awareness and understanding using education and a brief depression screening tool.

There are several limitations to this project. Only one community college setting was used, and the participant sample size was small. Seventeen individuals completed the initial survey of questions while only 14 participants completed the follow-up survey. A larger sample size would have afforded more significance to the findings. Additionally, because the setting was online and no identifying information of participants was collected, it is not possible to know if the same participants completed both the initial and follow-up survey or if different participants completed only one or the other. Because only fourteen individuals completed the follow-up survey while seventeen completed the initial survey, it is hard to say how the reduced completion rate on the post-survey may have impacted the results. Also, when setting up the surveys, one question on the follow-up was incorrectly set to only accept a single answer instead of the intended multiple responses. This made comparison to the initial survey responses for that question inaccurate. The final limitation of this project was technology. During the Zoom presentation, several glitches with sound and online speed may have negatively impacted the presentation. Participants were

able to use the chat function to communicate and ask questions if needed but it is unknown how much this may have distracted from audience engagement.

Impact on Practice

The impact this quality improvement project had on this clinical site was immediate. Not only did the survey results show a speedy increase in depression awareness and understanding through participant responses, but this carried over into other areas of the campus. Conversations during the presentation identified a weakness with the ability to easily find the current mental health services link on the college website. This concern was presented to the Marketing department and changes were updated the next morning. Also, shortly after the project presentation, a working group of interested individuals came together to develop and implement professional development education for faculty and staff on mental health awareness including recognition of depression symptoms and available resources. A Canvas course has been created to share evidence-based research and other educational materials. Based on the swift actions of just a few faculty and staff, the need for greater awareness and understanding of depression at this community college is being addressed. Although no commitment has been made by the college to utilize the PHQ-2 at this time, it has been discussed as a possible tool for use with all employees and students in the future. The PHQ-2 is a free tool for open use, so no financial limitations are present. It is also possible to implement the use of the PHQ-2 using an online platform. Through these ongoing actions, this project demonstrates sustainability with a college commitment to continued education to promote awareness of depression and other mental illnesses.

Conclusions

Depression will continue to have a significant impact on the health and well-being of individuals regardless of gender, age, or socioeconomic status. As the impact of COVID-19 is evaluated in the months and years to come, the need for education, including treatments, on depression and other mental

illnesses, will be essential. Young adults will remain vulnerable to the effects of depression until a greater understanding and acceptance of this condition is developed. The outcomes of this project demonstrated education can make a difference in depression awareness. Through continued education and screening methods, such as the PHQ-2, community college faculty and staff can enact positive change in depression recognition including the elimination of barriers and stigmas to enhance the lives of those most in need.