Improving Identification, Management, and Referral of Depressed and Suicidal Youth

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Introduction

Delays in pediatric mental health services are most often due to primary care providers (PCPs) not identifying, managing, or referring children, or lack of access to services.[1, 2] Mental health disorders produce the highest disability impact in pediatrics when compared to all other chronic health problems.[3] Between 9–14% of children 0 to 5 years of age are affected by social and emotional difficulties that limit their capability to fully participate in events, entirely benefit from educational opportunities, avoid risky behaviors as a teen, and prevent emotional unpredictability as an adult.[4] Nearly 40% of children develop mental health disorders with only 30% receiving care, and on average, there is an 8 to 10 year delay between the start of symptoms and the employment of interventions.[2] Around 4 to 8 million children have significant psychosocial dysfunction and 1/3 to 2/3 of these children are not identified, managed, or referred for care by their PCPs.[1] The primary care setting is perfectly positioned to serve as a vital access point for early identification, service delivery, and connection to mental health services because nearly 90% of children in the U.S. regularly see a PCP.[5] The American Academy of Pediatrics[6] and the U.S. Preventive Services Task Force[7] recommend that PCPs assess and provide treatment for depressed youth. The purpose of this evidence-based practice project was to increase confidence and practice in the identification, management, and referral of depressed and suicidal youth. This project focused on establishing a systematic screening process for high risk youth, offered a mental health training for PCPs on appropriate evaluation and management of depression and suicidality, and implemented a Mental Health Resource and Intervention (MHRI) Quick-Guide to help guide PCPs during the referral process.

Literature Synthesis

Suicide is recognized as the second leading cause of death in 15- to 19-year-old adolescents.[8] Adolescents who are diagnosed with major depressive disorder (MDD) have an increased risk of suicidal behaviors.[9] In primary care, the diagnosis of MDD in children and adolescents is under identified and undermanaged.[10] Research of completed suicide shows that more than 50% of victims had a diagnosis of MDD at their time of death, but only 50% of adolescents are diagnosed before reaching adulthood.[11] Almost 90% of youth visit their PCP annually creating the potential to identify mental health disorders and provide early intervention.[12] Management of depressed and suicidal youth may well improve with the PCP's comfort level with the subject of suicidality, as well as quick access to proper community resources and mental health providers.[8] The Iowa Model[13] provided guidance in the evaluation and application of research findings to aid in developing a mental health training and resources for PCPs regarding care of depressed and suicidal youth.

Methodology

This DNP project was deemed not human subjects research. The setting was at Medical Associates Pediatric Clinic in Dubuque, IA, and the population included 6 pediatricians and 3 nurse practitioners (NP). From May 2019 to July 2019, data was gathered to assess PCPs' depression and suicidality screening and referral practices prior to interventions. In October 2019, a mental health training utilizing evidence-based research and expert knowledge was provided to the PCPs. The training session offered education

on administering the PHQ-9 Modified to youth with significant PHQ-2 screening results and/or symptoms of depression, and a hardcopy of the MHRI Quick-Guide was given to all PCPs to be used in clinical practice for referral of youth. Providers were not required to attend the training but were able to access the information through meeting minutes and handouts that were given to all staff not in attendance. A pre-survey was administered prior to the training session (October 2019), and a post-survey was given 3 months later (January 2020). From October 2019 to January 2020, data was collected to compare PCPs' screening and referral practices post-interventions.

Evaluation

To evaluate implementation of the PHQ-9 Modified and the MHRI Quick-Guide, qualitative and quantitative statistics were used to identify changes in PCP screening and referral practices. Results revealed a 34% increase in the number of PCPs who implemented the PHQ-9 Modified post-training. The pre-post survey results indicate the training significantly increased PCP confidence in utilization of screening tools to assess for depression in children (6-12 years) ($t(6) = -6.71$, $p \leq .001$). Post-survey results indicated that 67% of PCPs used the MHRI Quick-Guide for referral, and PCPs reported it was beneficial to have a list of contacts/resources, and knowledge of what age and insurance type mental health providers see. To evaluate PCPs' confidence and practice, a paired *t*-test was performed to determine if the change between pre-post reported confidence levels was statistically significant. Regarding depression in children, training significantly increased PCP confidence in conducting an assessment ($t(6) = -4.57$, $p \leq .006$), providing non-pharmacologic ($t(6) = -2.91$, $p = .034$) and pharmacologic treatments ($t(6) = -3.87$, $p = .012$), and conducting a visit after discharge from inpatient psychiatric care ($t(6) = -3.95$, $p = .010$). Training did not significantly increase PCP confidence in adolescents with depression. Concerning suicide, training significantly increased PCP confidence in conducting an assessment in children ($t(6) = -3.00$, $p = .030$), answering most questions caregivers have about suicidality in both age groups ($t(6) = -3.37$, $p = .019$), and the clinic's emergency action plan (children: $t(6) = -7.00$, $p \leq .001$; adolescents: $t(6) = -4.00$, $p = .010$). Overall, a comparison between pre-post survey scores indicated that the intervention significantly increased PCP confidence in treating depression and suicidality (children: $t(8) = -6.59$, $p \leq .001$; adolescent: $t(8) = -3.32$, $p = .021$), depression care ($t(8) = 5.53$, $p \leq .003$) and suicide care ($t(8) = 6.15$, $p \leq .002$) in both age groups. Limitations of this project include a small sample size, and participants were drawn from a pediatric primary care clinic which may not represent all primary care clinics in the state of Iowa.

Conclusions

Intensive training on depression and suicidality can be effective in improving PCP confidence and practice in the identification, management, and referral of youth in a pediatric primary care setting. The training session improved PCP confidence and practice in identification, management, and referral of depressed children ages 6-12 years but did not significantly impact adolescents ages 13-18 years. Pre-data supported the statistical differences within the two age groups because many PCPs were already identifying, treating, and referring adolescents with mental health disorders prior to the training. When considering suicide versus depression, PCPs were more confident in treating depression than suicide both pre- and post-intervention, but interventions did improve PCPs' confidence in providing suicide care for both children and adolescents. Early mental health identification and intervention provided in primary care settings may decrease negative long-term effects of mental health disorders on today's youth. Over half of the PCPs plan to use the PHQ-9 Modified screening tool in future practice, and a NP within the clinic will maintain the MHRI Quick-Guide. Results will be shared with project stakeholders and within a multidisciplinary healthcare group at a poster presentation.

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