Title:
Barriers and Facilitators to Adverse Childhood Experiences (ACEs) Screening in a Family Nurse Practitioner Clinic

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Session Title:
Clinical Poster Session 2 (Monday/Tuesday, 18 & 19 November)

Slot:
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Abstract Describes:
Ongoing Work/Project

Applicable Category:
Clinical, Students

Keywords:
ACE Screening Tool, Adverse Childhood Experiences and Rural nurse practitioners

References:


**Abstract Summary:**

Poster of a Gonzaga Doctor of Nursing Practice candidate's quality improvement project on increasing nurse practitioner awareness and evaluating perceptions of Adverse Childhood Experiences (ACE), ACE screening tool, and piloted brochure of local resources in a rural Montana family nurse practitioner clinic.

**Content Outline:**

This Doctor of Nursing Practice (DNP) quality improvement project is intended to increase nurse practitioner (NP) awareness of Adverse Childhood Experiences (ACE), an ACE screening tool and to evaluate their perceptions of the ACE screening tool and a piloted brochure at a nurse practitioner (NP)
owned and operated family practice clinic in rural Montana. ACEs are becoming more prevalent with both mental health and medical health implications throughout an individual's life. The American Academy of Pediatrics recommends all children be screened for ACEs.

The aims are to

- educate the NPs on ACEs and the ACE screening tool
- evaluate the perceptions of the NPs of the ACE screening tool and
- evaluate the perceptions of the NPs of a piloted brochure.

Nurse practitioners will

- complete a pre-education survey
- receive education on ACEs and the ACE screening tool and
- immediately following this education session will complete the post-education survey to assess knowledge gained.

The NPs will then be provided an ACE screening tool and the brochure for them to review. A survey will then be given on their perceptions of the ACE screening tool and the piloted brochure. The qualitative data gathered on the perception survey will be evaluated and any barriers or facilitators to the ACE screening tool and brochure will be identified for future use.

**Topic Selection:**
Clinical Poster Session 2 (Monday/Tuesday, 18 & 19 November) (26148)

**Abstract Text:**
Understanding of Adverse Childhood Experiences (ACEs) is becoming more prevalent highlighting both mental health and medical health implications throughout an individual's life. ACEs have been shown to negatively impact an individual physically, mentally, and developmentally throughout his/her life (Bellis, Hughes, Leckenby, Perkins, & Lowey, 2014; Dube, Felitti, Dong, Chapman, Giles, & Anda, 2003; Felitti et al., 1998; Park, Videlock, Shih, Presson, Mayer, & Chang, 2016). The American Academy of Pediatrics (AAP) recommends all children be screened for ACEs. Many primary care providers do not screen for ACEs, with provider lack of knowledge of ACEs and ACE screening tools, as well as time constraints being common barriers. (Albaek, Kinn, & Milde, 2018; Esden, 2018; Kerker et al., 2016; Kalmakis, Shafer, & Aponte, 2018; Szilagyi et al., 2016; & Tink, Tink Turin, & Kelly, 2017). Provider’s comfort levels increased with the increase in knowledge of the screening tools and ACEs (Flanagan, Alabaster, McCaw, Stoller, Watson, & Young-Wolff, 2018). One third of the providers on the AAP 2013 Periodic Survey did not ask about ACEs, only 2% used a screening tool and 49% not know about a screening tool (Kerker et al., 2016). There is research into incorporating screening for ACEs in the primary care setting but there is a need for consistent tools (Albaek et al., 2018; Kalmakis et al., 2018; Pardee, Kuzma, Dahlem, Boucher, & Darling-Fisher, 2017; Tink et al., 2017).

This Doctor of Nursing Practice quality improvement project is being performed in a rural Montana nurse practitioner owned and operated family nurse practitioner (FNP) clinic. This project will be completed by May 2019 with possible publication to follow. The rural FNP clinic is in a Northcentral
Montana farming community. The small rural town has a population of 775 people with approximately 6,000 people in a 20-mile radius in the county (U.S. Census Bureau, 2017). A critical access hospital is also in this county, in the next largest town, which is approximately 20 miles away.

This DNP project aims to educate the NPs on ACEs and the ACE screening tool, evaluate the NPs perceptions of the ACE screening tool, and evaluate the NPs perceptions of a piloted brochure. Nurse practitioners will complete a pre-education survey, receive education on ACEs and the ACE screening tool, and immediately following this education session will complete the post-education survey to assess knowledge gained. The pre- and post-education survey contains 10 questions on information about ACEs learned during the education. This data will be analyzed using the Paired t test to assess learning.

The NPs will then be provided an ACE screening tool and the brochure for them to review. The ACE screening tool is the initial ACE survey used in the landmark study by Felitti et al. in 1998. The brochure contains links to local resources for information and support groups for harmful health habits prevention such as local Alcoholics Anonymous and Narcotics Anonymous groups, the Meth Montana website, Suicide Hotline, Sexually-transmitted diseases, information on vaping and the Montana Quit Line number.

A survey will then be given on their perceptions of the ACE screening tool and the piloted brochure. The survey contains Likert scale questions as well as free-text questions to allow for quantitative data as well as qualitative data to be collected. Pearson’s R test will be used to evaluate the survey data on the correlation between increased knowledge and improved comfort in discussing ACEs with patients. The qualitative data gathered on the perception survey will be evaluated and any barriers or facilitators to the ACE screening tool and brochure will be identified for future use.

Research has shown that as knowledge increases, comfort with ACEs improves (Albeck, et al., 2018; Esden, 2018; Flanagan et al., 2018; Kerker et al., 2016; Szilagyi et al., 2016; & Tink et al., 2017). This project will show that as the NPs at a rural Montana family nurse practitioner clinic increase their knowledge of ACEs, they will be more comfortable talking to their patients about ACEs. They will also be more comfortable screening for ACEs and they can tailor their interventions to help prevent harmful health habits from forming in their adolescent patients, such as smoking, misusing drugs, and early promiscuity. These habits can lead to increased risk for chronic mental health and medical health illnesses and early death. This progression is represented by the ACEs pyramid. Screening allows for early intervention to potentially stop this progression.