Reducing the incidence of fetal alcohol syndrome in rural american indian populat...

Introduction

Fetal alcohol spectrum disorders is a highly prevalent condition associated with a broad range of neurobehavioral deficits, from mental retardation following high-dose gestational alcohol exposure to more subtle behavioral problems following moderate gestational exposure (Guerriet al., 2009; Streissguth and O'Malley, 2000). It is an epidemic that has become all-consuming to some American Indian populations and can have dire consequences on future generations of a community. Despite the high prevalence of Fetal alcohol syndrome, there are few therapeutic options for mitigating the neurobehavioral consequences of this disorder. It is the responsibility of the providers caring for the American Indian population to educate and counsel pregnant women on how to properly care for themselves as well as their unborn children during pregnancy. Through educational programs, personalized training for providers as well as one-on – one counseling for mothers and families, this is a crisis that ARNP's can undertake and overcome for the sake of future generations.

Literature Review

Section I- Literature Review

The purpose of this study is to demonstrate and explain the effectiveness of the implementation of a counseling and treatment program for women in the American Indian community who are pregnant or of childbearing age in an outpatient setting that will promote wellness in the care and management of women; thus a comprehensive literature review search was conducted finding articles related to the severity of the effects alcohol has on an unborn

fetus during development as well as treatment options and community programs that have improved the outcomes of these communities.

The term Fetal Alcohol disorder Spectrum describes a range of conditions in children that is a direct result of prenatal alcohol exposure. These conditions can present as behavioral, physical or cognitive and the severity has a direct correlation to the amount of alcohol the mother consumed while pregnant. The prevalence of FASD varies among communities based on alcohol consumption patterns, birth control use, and occurrence of modifying factors (May et al., 2009).

It is believed in part that the reason the fetus has such severe developmental complications is due to the effects the alcohol consumption has on the development of the hippocampus white in utero. This region of the brain plays a crucial role in cognition, stress, and mood regulation. Preclinical studies in rodent models have demonstrated that exposure to even moderate levels of alcohol during gestation results in long-term impairments of hippocampal function. These include persistent alterations in hippocampal synaptic plasticity (Fontaineet al., 2016; Krawczyk et al., 2016) as well as impaired capacity for adult hippocampal neurogenesis (Gil-Mohapelet al., 2010). From a care management view point, the only strategy that can be successful in management and prevention of fetal alcohol syndrome is to ensure that women are not drinking alcohol during pregnancy.

According to Healthy People 2020, fetal alcohol syndrome is a topic and objective that needs to be monitored and addressed. It was adapted in 2001-

2004 and has been maintained and monitored each year since. It is MICH-25 objective: Reduce the occurrence of fetal alcohol syndrome (FAS).

“ The 2001-2004 estimates for FAS were determined using data from seven state-based FAS surveillance programs. The analyses included children who were born during 2001-2004 to a mother residing in a surveillance area at the time of the birth of the child, and who met the surveillance case definition for confirmed or probable FAS. The denominator consisted of live births to women residing in the selected surveillance area as determined by birth certificate data. Race/ethnic specific prevalence was calculated using mother’s race/ethnicity from birth certificates (HealthyPeople2020. gov.)

Purpose

The purpose of this study is to demonstrate and explain the effectiveness of the implementation of a counseling and treatment program for women in the American Indian community that are pregnant or of childbearing age in an outpatient setting that will promote wellness in the care and management of women so that the families can get the care they need and the children have the ability to reach their full potential and function in society.

Overview of the Problem

Fetal alcohol Disorder Spectrum is a condition that affects children worldwide. According to the CDC’s National Center for Health Statistics guidelines, Prevalence of FAS was highest among American Indian/Alaska Native children (2. 0 [CI = 1. 4–2. 8] per 1, 000 children aged 7–9 years) in the 2010 census (CDC. org). This is the highest prevalence among

populations. There are many factors that can contribute to these statistics, such as, lack of knowledge, lack of support from family or significant others as well as lack of community healthcare presence to guide and teach the patient. This is where this program was designed to be put in place. By providing support for these women through education programs as well as providing interventions such as medications, counseling, information and support we can intervene and make a difference in the lives of the women of the community as well as the lives of their unborn infants.

Public health centers need to be established in communities where the need is the greatest. This is the ideal setting for the APRN to perpetuate therapeutic interventions in the American Indian society. During the initial phase of implementation, an element of trust needs to be established with the female population that are of childbearing age as well as those that are currently pregnant. During the screening phase, the APRN will implement alcohol intake screening as well as social service programs. A California study found that pregnant women who received alcohol screening and brief intervention at a social service agency were five times more likely to abstain from alcohol during the remainder of their pregnancy and delivered infants who were healthier on several newborn measures (O'Connor, 2007.) During the implementation phase, APRN as well as Case Management services will be introduced to the clients presenting to the clinic. Informational flyers will be posted in critical access locations as well as at community functions. Participants will be asked to call the office and make appointments to be seen and screened for the program. This screening method offers discretion as well as respects the privacy of the participants to be able to discuss the

details and conditions in the office confidentially and privately. During the initial assessment, the APRN will assess the patient's current condition; amount of alcohol consumed daily, positive or negative current pregnancy status, as well as the patient's willingness to make changes in current lifestyle choices. The initial assessment by the Case Management will determine the patient's current financial and social resources as well as current support system, if any, that is in place. Counseling sessions will be scheduled to evaluate and implement behavioral changes to encourage patient's to assess their own values and goals. This strategy empowers the patient so that they feel in control of their care and future decisions in regards to the health and well-being of themselves as well as their unborn children. A schedule of appointments will be tailored to fit the needs of the patient according to results of the data collected from APRN and CM.

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