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STI education for adolescents

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Introduction of the Problem

Sexually transmitted infections (STIs) are a rising concern in adolescents; therefore, proper education in this population is critical to prevent STIs. In their article on adolescents' perceptions of sexual health education programs, Corcoran et al. (2020) conclude that adolescents are a key target in sexual health education. Still, they are rarely consulted when developing sexual health programs. Hence, listening to adolescents' opinions and considering their unique nature is crucial to developing sexual health education that meets their needs.

Literature Review

According to the Centers for Disease Control and Prevention (CDC) (2022), more than half (53%) of STI cases reported in 2020 were adolescents and young adults aged 15-24. These diseases include chlamydia, gonorrhea, genital herpes, syphilis, and HIV. For example, in 2020, the CDC reported 1,579,885 cases of Chlamydia trachomatis infection, making it the most common sexually transmitted disease in the United States. Most reported chlamydia cases (61%) involved persons aged 15–24. Albert et al. (2013) theorizes that brain centers in charge of planning and rationalization develop slower than those responsible for controlling emotions and gratification in adolescents, increasing risky sexual interactions, especially when intense feelings and hormones are involved (Albert et al., 2013).

As adolescents navigate this complex life stage, access to age-specific anticipatory guidance is crucial as they have a greater chance of contracting STIs. Adolescents' brains are still maturing concerning STIs, including their ability to calibrate the likelihood of danger versus reward. Consequently, thrill-seeking and experimentation are typical accompaniments of increased self-awareness and identity during adolescence (Agwu, 2020). As a result of a combination of biological and behavioral factors, adolescents are especially susceptible to STI

infection. Behaviorally, adolescents are more likely to participate in unsafe sexual behavior, such as multiple sexual partners or sex without protection. These risky behaviors are partly due to the prefrontal cortex, responsible for executive function, maturing throughout adolescence. In their study, Lederer and Vertacnik (2021) found that even late adolescents' STI knowledge is lacking; therefore, providers must provide young patients with accessible education about identifying, preventing, and treating these conditions.

Owing to the lack of suitable educational materials, the knowledge of sexually transmitted infections (STIs) continues to be an issue in adolescents. Creating an age-appropriate educational tool for the teenage population could help reduce sexually transmitted infections in this age group. According to Corcoran et al. (2020), programs for sex education are created without any consideration for adolescents, which is problematic because sexual health education is especially pertinent to adolescents. In their article, Anderson et al. (2020) state that clinicians are the preferred resource for sexual information and critical facilitators of sexual health screenings. One of the methods identified to address the educational needs of adolescents is through digital media technology. According to Chavez et al. 2014, digital technology may play a significant role in promoting the sexual health of adolescents due to its ability to work in multiple cultural groups and be a flexible, individualized tool for disseminating STI education.

The literature review focused on evidence-based guidelines and educational tools for adolescent STI education. Research shows that adolescents comprise most of the STI cases in the United States. Unfortunately, there has not been enough age-appropriate education to target this population. Studies demonstrate that there is a need for clinic based STI education for adolescents. As a trusted resource for health information, pediatric providers have a significant role in addressing this unmet need for STI education by providing evidence-based STI education

during office visits. For these efforts to be successful, discussions on STIs should be normalized and incorporated into primary care visits.

Project Methods

The primary goal of this project was to create an evidence-based, age-appropriate educational tool for adolescents to help reduce the incidence of sexually transmitted infection (STI) in this age group. The project was implemented at a pediatric clinic in an urban area in southern Illinois. Currently, the clinic does not have an adolescent STI education tool. First, we created an education handout regarding STIs and STI prevention. Next, we created a dynamic QR code to access the flyer digitally on a patient's mobile device. The QR code was printed and placed in an accessible location in the office. The office already uses the Guidelines for Adolescent Preventive Services (GAPS) questionnaire as part of routine care. The GAPS questionnaire asks, "Would you like to receive information or supplies to prevent pregnancy or sexually transmitted infections?" (American Medical Association,1998). Patients who answered "yes" or "not sure" to this question were offered access to the digital handout.

Evaluation

Our goal with the evaluation was to determine if the educational tool was accessed through the QR code. To track the utilization of the tool, we created a dynamic QR code, which allowed us to capture the number of scans, the location of the scanners, and time in real-time. This information allowed the generation of data on the total number of scans and provided demographics of the scanners and the device they used. At the completion of the project, a report was generated on the total number of scans. The QR code indicated that only three scans occurred, which was insufficient to generate any significant data analysis. Two of the three patients who scanned the QR code were female, and one was male. They were fifteen to

seventeen years old. When discussing the project implementation with the providers, they admitted they rarely offered the QR codes to patients during their office visits.

Limitations

Several limitations created setbacks during the implementation phase of the project. The limitations include the timing of the implementation period, which was after "physical season," when most adolescents come for wellness visits and physicals before the beginning of the school year. Thus, our timing meant fewer older kids coming in for physicals. Additionally, when a few of those older kids came in, one of the providers admitted that things got so busy that she forgot to hand out the flyer. They also encountered patients who came in for STI concerns but were not interested in the educational material. In addition, there were personnel issues that affected the implementation of the project. It was essential from the beginning that clinic leadership supported the project. It is important to note that the physician and the clinic's owner did not participate in this project. For the nurse practitioner who participated, the clinic had many staffing changes that saw two nurse practitioners leave and one nurse practitioner reduce her status to working one day a week. Lastly, there was a mix-up about whether to give out the flier in printed form versus the QR code as the project intended. As a result, no printed-out flyers and QR codes were readily available in rooms to give to patients.

Impact on Practice

Education of adolescent patients about STIs can be achieved using an educational tool. Prior to implementation of the project, the clinic did not have any education to give patients when they asked for information on STIs. With the creation of a flier and QR code, the providers would have a readily available educational tool on STIs that they could give to patients. A QR code is ideal for this population because it allows them to access STI information discreetly on

their smartphones. Evidence suggests that clinic-based education is an effective way to provide STI education. Conversations on sexuality during well-child visits with all children and teenagers in the pediatric office have potential to be more effective for teens when initiated routinely and freely. Overall, the nurse practitioners felt this is a good clinical handout to have, and if they had it earlier in the summer/early fall, they would have seen more of the target population and handed it out to them.

Conclusion

Research shows that adolescents make up most of the STI cases in the United States. Unfortunately, there has not been enough age-appropriate education to target this population. Studies demonstrate that there is a need for clinic based STI education for adolescents. As a trusted resource for health information, pediatric providers have a significant role in addressing this unmet need for STI education by providing evidence-based STI education during office visits. For these efforts to be successful, discussions on STIs should be normalized and incorporated into primary care visits.

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