A Qualitative Analysis of Adolescent and Caregiver Acceptability of Universally Offered Gonorrhea and Chlamydia Screening in the Pediatric Emergency Department

Jennifer L. Reed, MD, MS*; Brittany E. Punches, BSN; Regina G. Taylor, MA; Maurizio Macaluso, MD, DrPH; Evaline A. Alessandrini, MD, MSCE; Jessica A. Kahn, MD, MPH

*Corresponding Author. E-mail: jennifer.reed@cchmc.org.

Study objective: We qualitatively explore adolescent and parent or guardian attitudes about benefits and barriers to universally offered gonorrhea and chlamydia screening and modalities for assessing interest in screening in the pediatric emergency department (ED).

Methods: A convenience sample of forty 14- to 21-year-olds and parents or guardians of adolescents presenting to an urban and community pediatric ED with any chief complaint participated in individual, semistructured, confidential interviews. Topics included support of universally offered gonorrhea and chlamydia screening, barriers and benefits to screening, and modalities for assessing interest in screening. Data were analyzed with framework analysis.

Results: Almost all adolescents (37/40; 93%) and parents (39/40; 98%) support offering ED gonorrhea or chlamydia screening. Benefits included earlier diagnosis and treatment, convenience and transmission prevention (cited by both groups), and improved education and long-term health (cited by parents/guardians). Barriers included concerns about confidentiality and cost (cited by both groups), embarrassment (cited by adolescents), and nondisclosure to parents or guardians (cited by parents/guardians). Adolescents preferred that the request for gonorrhea or chlamydia screening be presented in a private room, using tablet technology. Both groups noted that the advantages to tablets included confidentiality and adolescents' familiarity with technology. Adolescents noted that tablet use would address concerns about bringing up gonorrhea or chlamydia screening with clinicians, whereas parents or guardians noted that tablets might increase screening incidence but expressed concern about the lack of personal interaction.

Conclusion: Universally offered gonorrhea and chlamydia screening in a pediatric ED was acceptable to the adolescents and parents or guardians in this study. Offering a tablet-based method to assess interest in screening may increase participation. [Ann Emerg Med. 2017;■:1-10.]

Please see page XX for the Editor's Capsule Summary of this article.

0196-0644/$-see front matter

http://dx.doi.org/10.1016/j.annemergmed.2017.04.017

INTRODUCTION

Background

More than 19 million new sexually transmitted infections are diagnosed annually in the United States, with nearly half occurring in individuals aged 15 to 24 years.[1] Untreated sexually transmitted infections may have serious long-term consequences, including pelvic inflammatory disease, chronic pelvic pain, and infertility. This epidemic in adolescents and young adults contributes to patient recidivism (repeated infections), health care costs relating to morbidity and mortality associated with these diagnoses, and increased HIV and other sexually transmitted infection transmission within the community.[2-4] Therefore, interventions such as improved screening and treatment programs are urgently needed to more effectively decrease sexually transmitted infection rates among adolescents and young adults.[5-7]

Importance

The Centers for Disease Control and Prevention recommends annual chlamydia and gonorrhea screening for all sexually active adolescent girls and boys in high-risk settings.[8] However, many adolescents lack a medical home and thus are one of the most difficult populations to reach for screening.[9] The emergency department (ED) setting is frequented by this high-risk population, many of whom would not otherwise obtain health care.[10-13] In our institution's urban pediatric ED, adolescents compose approximately 20% of the visits. Up to 10% of all adolescents receive gonorrhea or chlamydia testing because

Editor's Capsule Summary

What is already known on this topic

Early identification of adolescents with gonorrhea and chlamydia can improve long-term sexual health.

What question this study addressed

How will adolescent patients and their parents feel about universal gonorrhea and chlamydia screening in the emergency department (ED)?

What this study adds to our knowledge

In a 2-ED study of a convenience sample of 40 adolescents, nearly all patients and parents supported universal gonorrhea and chlamydia screening.

How this is relevant to clinical practice

This small study suggests that patients and parents are amenable to screening for gonorrhea and chlamydia infections. Larger generalizable studies of compliance and effectiveness are needed.

they are symptomatic and approximately 30% test positive for at least one sexually transmitted infection, but asymptomatic adolescents are not routinely screened for gonorrhea or chlamydia. A previous study at our institution demonstrated that almost 10% of patients who were asymptomatic but screened for gonorrhea or chlamydia in the pediatric ED setting tested positive for gonorrhea, chlamydia, or both.[14] Therefore, it is likely that there are more asymptomatic gonorrhea or chlamydia cases coming through the ED that are missed than symptomatic ones, which suggests that there are missed opportunities to prevent gonorrhea or chlamydia in this high-risk population by screening asymptomatic individuals.[15-18]

Expert consensus indicates that research addressing the effectiveness, sustainability, and integration of innovative sexually transmitted infection screening programs in the ED is warranted.[19,20] Essential components of a confidential, universally offered gonorrhea and chlamydia screening process in the ED include acceptance by ED staff, patients, and parents or guardians; reliable follow-up and treatment methods for the patient and his or her partners; and excellent communication of gonorrhea or chlamydia results to ED patients.[21-23] Although a previous quantitative study showed a high percentage of gonorrhea and chlamydia screening acceptance among adolescents in a research setting, a significant gap remaining in the literature is qualitative information in regard to adolescent and parent or guardian acceptance of confidential, universally offered gonorrhea or chlamydia screening and their beliefs about the feasibility of this process implemented in routine clinical care in ED settings.[24]

Adolescents cite concerns for confidentiality and privacy as a potential barrier to disclosing sensitive health information in the clinical setting.[25] Obtaining consent or assent confidentially in the ED for gonorrhea or chlamydia screening can be challenging because of space and privacy issues, difficulty separating a patient from the parent or guardian in an acute setting, and time constraints. Tablet-based interventions may address some of these barriers because adolescents report a preference for sharing sensitive health information electronically rather than in face-to-face interviews.[26,27]

Goals of This Investigation

The objective of this study is to qualitatively explore adolescent and parent or guardian attitudes about benefits and barriers of offering gonorrhea and chlamydia screening to all adolescents in the pediatric ED, as well as the modality of testing; specifically, the acceptability of using a tablet to collect confidential information about risk factors and agreement to screening.

MATERIALS AND METHODS

Study Design and Setting

This was a qualitatively designed study that was conducted in 2 of our institution's pediatric EDs. The first is the main ED, which is an urban, tertiary care, pediatric ED with 87,000 ED visits per year; approximately 20% of the visits are from adolescents aged 14 to 21 years. The second is the satellite pediatric ED, which is located in a northern suburb and has 34,000 annual visits; approximately 13% of the visits are from adolescents aged 14 to 21 years.

Selection of Participants

Male and female adolescents aged 14 to 21 years who presented to the ED with any chief complaint and parents or guardians of 14- to 21-year-olds were eligible to participate. Despite that the 18- to 21-year-old population was considered adult, most adolescent subspecialists and many pediatric EDs care for patients who are aged 18 years or older. At our institution, this 18- to 21-year-old population composes 20% of our total adolescent and young adult population; thus, it was important to include this age group in our sample. Because this age group often visits the ED in the presence of their parent(s) and they are often still covered under their parents' insurance, we included parents of patients aged 18 years or older as well.