## **Original Study**

## "It's Pretty Hard to Tell Your Mom and Dad That You're on a Method": Exploring How an App Could Promote Adolescents' Communication with Partners and Parent(s) to Increase Self-Efficacy in Long-Acting Reversible Contraception Use

Emily B. Shakibnia MPH <sup>1,\*</sup>, Sarah E. Timmons MPH <sup>1</sup>, Melanie A. Gold DO, DMQ <sup>1,2,3</sup>, Samantha Garbers PhD <sup>1</sup>

#### ABSTRACT

Study Objective: Youth-friendly information and support are integral components to promote adolescents' successful use of long-acting reversible contraception (LARC), and smartphone apps offer a promising medium. To inform content development for an app guided by the Health Belief Model, we conducted interviews with adolescent LARC users to assess self-efficacy and experiences with LARC, their communication with partners and parent(s) about LARC, and how apps could support this communication.

Design, Setting, and Participants: We conducted semistructured, in-depth interviews with 30 female adolescent LARC users enrolled in urban school-based health centers.

Interventions and Main Outcome Measures: Descriptive analyses were used to assess demographic characteristics, experience and comfort communicating with current and future partners and parent(s) about LARC, self-efficacy around LARC, and how app elements could support LARC use.

Results: Participants (mean age, 16 years; range, 14-19 years) were predominately Hispanic (77%; n = 23) and black (20%; n = 6). Almost all (97%; n = 29) had told their current partner about their LARC, but of these, only 15 (50%) would feel comfortable talking with a new sexual partner. Most participants (73%; n = 22) had not told their parent(s) about getting a LARC, but many reported they were likely to share app information with their parent(s). Of the few participants who did tell their parent(s), 38% (n = 3) reported that it was difficult to do so. Adolescents described ways in which app use could help initiate conversations with new partners and parent(s).

Conclusion: These findings suggest the potential of a theory-based smartphone app to meet adolescent LARC users' information and support needs. The app should include information on strategies for communicating with future partners and parent(s).

Key Words: Adolescent pregnancy, Unplanned pregnancy, Contraception, Intrauterine device, Contraceptive devices, Partner communication, Parent-child relationship, Smartphone, Mobile application

#### Introduction

In the United States, 75% of pregnancies among adolescent girls aged 15-19 years are unintended.<sup>1</sup> Occurring disproportionately among individuals with lower income and education levels, <sup>1,2</sup> unintended pregnancy is associated with a range of poor health outcomes, such as delay in receiving prenatal care, higher rates of maternal depression and anxiety, lower rates of breastfeeding, and higher rates of child abuse.<sup>3</sup>

Increasing access to contraception is an intervention proven to be effective in decreasing rates of unintended pregnancies, and specifically, adolescent birth rates, in the United States.<sup>4</sup> Organizations such as the American Academy of Pediatrics, the American College of Obstetricians and

Gynecologists, and the Centers for Disease Control and Prevention currently recommend intrauterine devices (IUDs) and contraceptive implants, collectively known as long-acting reversible contraception (LARC), as first-line methods for adolescents.<sup>5</sup> However, adolescents are likely to discontinue contraceptive methods, including LARC, because of undesirable side effects including pain and bleeding.<sup>6</sup> Of those who discontinue their contraceptive method, many will subsequently choose less effective methods or no method at all, thereby increasing likelihood of unplanned pregnancy.<sup>7,8</sup> Thus, creative strategies to promote the continuation of effective LARC methods can help adolescents avoid unintended pregnancies.

An adolescent's sexual partner and parent(s) can play a role in supporting successful use of contraception by encouraging meaningful communication about safer sex and providing support to use a method consistently and correctly. Specifically, greater communication about sex with sexual or romantic partners has been associated with higher levels of contraceptive use among sexually active adolescents. 9,10 Parental involvement is also known to be a

E-mail address: ebs2179@caa.columbia.edu (E.B. Shakibnia).

<sup>&</sup>lt;sup>1</sup> Heilbrunn Department of Population and Family Health, Columbia University Mailman School of Public Health, New York, New York

<sup>&</sup>lt;sup>2</sup> Section of Adolescent Health, Division of Child and Adolescent Health, Department of Pediatrics, Columbia University Medical Center, New York, New York

<sup>&</sup>lt;sup>3</sup> School-Based Health Centers, Center for Community Health and Education, New York-Presbyterian Hospital, New York, New York

Emily B. Shakibnia, Sarah E. Timmons, and Samantha Garbers indicate no conflicts of interest. Melanie A. Gold is on the clinical advisory board for Afaxys, Inc and the clinical advisory board for Bayer.

<sup>\*</sup> Address correspondence to: Emily B. Shakibnia, MPH, Heilbrunn Department of Population and Family Health, 722 W 168th Street, New York, NY 10032; Phone: 212-304-5200.

2

significant influence on an adolescents' ability to initiate and consistently use contraception. <sup>10–12</sup> Encouraging this type of support from an adolescent's social network might also aid in decreasing rates of method discontinuation and unplanned pregnancy overall. <sup>10</sup>

Working from the Health Belief Model, widely considered to be an effective framework for explaining healthpromoting or -harming behaviors particularly among adolescents with regard to contraceptive use, 13 this research specifically examined adolescents' self-efficacy in using LARC methods and perceived barriers in using LARC methods, including the ability to communicate with their sexual partner and parent(s). This examination was informed by the Health Belief Model proposition that if perceived barriers are low, self-efficacy for behavior change will be high. One intervention approach to help adolescents continue using LARC methods by increasing self-efficacy is the use of a smartphone application (app). Smartphone apps have reported success in facilitating health behavior change, including improving family planning knowledge and contraceptive interest.<sup>14</sup> However, current apps aimed specifically at preventing unplanned pregnancies among adolescents would benefit from increased utilization and inclusion of evidence-based best practices. <sup>15</sup> In the context of developing an app informed by the Health Belief Model, this work explored adolescent LARC users' self-efficacy and experiences with LARC methods, their communication with partners and parent(s) about LARC, and how apps could support this communication.

#### **Materials and Methods**

Study Design and Setting

Using a mixed methods approach, we conducted semistructured, in-depth interviews with female adolescents in New York City. A mixed methods approach was used to integrate the unique experiences and preferences of adolescent LARC users in their own words, through openended questions. The study was conducted between May and December of 2016. Patients from 6 New York City school-based health centers (SBHCs) located in Harlem, Washington Heights/Inwood, and the Bronx participated in the study.

#### Participant Recruitment

To be eligible for the study, participants were required to be female, enrolled (at the time of the interview) as a patient at 1 of 6 New York-Presbyterian Hospital affiliated SBHCs in New York City, have received LARC services at the SBHC in the previous 12 months, and must have owned a smartphone. Patients who received LARC services at one of these SBHCs received a flyer about the study or were informed by their SBHC health care provider or health educator about the purpose of the study. Interested patients were given the contact information of the interviewers, and were responsible for reaching out to the primary interviewer to be screened for eligibility and scheduled an

interview at their SBHC site. Participants received a \$25 gift card to a large drugstore chain as an incentive.

A total of 38 potential participants called the interviewer to schedule an interview. Three of those potential participants were ineligible because they did not own a smartphone, 2 were ineligible because they did not have a LARC method, and 3 did not attend their scheduled interview. Ultimately, 30 participants were eligible and participated in the study.

#### Data Collection

Interviewers used a semistructured interview guide to conduct the interviews, designed to be approximately 45-60 minutes long (see Appendix A). Before the interview commenced, informed consent was obtained verbally by the interviewer after participants were explained the purpose of the research study and read the institutional review board-approved consent form. Interviews were audio recorded and used to glean qualitative responses and feedback. Participants were notified that at any time they could skip a question that made them uncomfortable or could discontinue the interview altogether. Working with a team of professional software developers, the authors developed initial content for the app, as described elsewhere. <sup>16</sup> Participants were shown the 5 features of the app, titled: Info About LARC; Getting LARC; Managing Symptoms; Locating Medical Providers; and Talking to Others. Participants were asked questions related to demographic characteristics, self-efficacy, social network communication, app preferences, and impressions of the app content; this study specifically focused on the questions of self-efficacy and communication with sexual partners and parent(s).

#### Data Analyses and Measures

Descriptive analyses were used to summarize adolescents' demographic characteristics, self-efficacy, communication behaviors, and interest in specific app elements.

In a 98-item survey, participants were asked a series of quantitative (approximately two-thirds) and qualitative (approximately one-third) questions regarding management of experienced LARC side effects, information access, communication with sexual partners and parent(s) regarding LARCs, and app preferences and impressions. Using the Health Belief Model domain of Perceived Barriers, self-efficacy was measured by how confidently each participant felt dealing with perceived barriers of her LARC method, such as her confidence in accessing information and resources, and her ability to talk to others, including current and future sexual partners and parent(s), about her LARC method. Self-efficacy items included statements such as "I am comfortable asking my parent(s) to help me find information about my (method)," and "I am satisfied when I am able to find information about my (method)." These statements were rated on a 4-point Likert scale with response options of: strongly agree, somewhat agree, somewhat disagree, and strongly disagree. Overall, 5 of these statements were asked regarding sexual partner and

### Download English Version:

# https://daneshyari.com/en/article/8782042

Download Persian Version:

https://daneshyari.com/article/8782042

<u>Daneshyari.com</u>