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Pregnant Women's Access to Information About Perinatal Marijuana Use: A Qualitative Study

Marian Jarlenski, PhD, MPH [a,*], Jill A. Tarr, LCSW, ACSW [b], Cynthia L. Holland, MPH [b], David Farrell, MPH [c], Judy C. Chang, MD, MPH [b,d]

[a] *Department of Health Policy and Management, University of Pittsburgh Graduate School of Public Health, Pittsburgh, Pennsylvania*
[b] *Magee-Womens Research Institute, University of Pittsburgh, Pittsburgh, Pennsylvania*
[c] *People Designs, Durham, North Carolina*
[d] *Departments of Obstetrics, Gynecology and Reproductive Sciences and Internal Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania*

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A B S T R A C T

Background: Marijuana is the most commonly used illicit substance in pregnancy. Little is known about how pregnant women who use marijuana obtain and understand information about perinatal marijuana use. We conducted a qualitative study among pregnant women who had used marijuana to understand their information-seeking patterns and perceptions of usefulness of available information about perinatal marijuana use.
Study Design: We conducted semistructured interviews with 26 pregnant women who were receiving prenatal care and who either disclosed marijuana use or had urine samples testing positive for marijuana. Interviews assessed women's sources of information about risks of perinatal marijuana use and perceptions regarding the usefulness of such information. Interview data were coded independently by two coders who iteratively refined the codes and reviewed transcripts for themes.
Results: Commonly reported sources of information about perinatal marijuana use included Internet searching and anecdotal experiences or advice from family or friends. Few women reported receiving helpful information from a health care provider or social worker. Women perceived a lack of evidence about harms of perinatal marijuana use, and reported being dissatisfied with the quality of information. Most women said they desired information about the effects of perinatal marijuana use on infant health.
Conclusions: Women who used marijuana before or during pregnancy did not find available information about perinatal marijuana use to be useful, and sought more information pertaining to infant health and well-being. Efforts to reduce perinatal marijuana use should focus on addressing this need in both clinical and public health settings.

Marijuana is a commonly used recreational drug during pregnancy in the United States (Kuczkowski, 2007; Substance Abuse and Mental Health Services Administration, 2008; Westfall, Janssen, Lucas, & Capler, 2006). Seven percent of pregnant women self-report using marijuana during the prior 2 to 12 months (Ko, Farr, Tong, Creanga, & Callaghan, 2015), although studies measuring marijuana use by self-report or urine screens have identified prevalence ranging from 8% to 29% (Chang et al., 2015; Conner, Carter, Tuuli, Macones, & Cahill, 2015; Desai, Mark, & Terplan, 2014).

Assessing the causal effects of perinatal marijuana use on health outcomes is difficult because of the need to interpret evidence from observational studies where unmeasured

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* Correspondence to: Marian Jarlenski, PhD, MPH, Department of Health Policy and Management, University of Pittsburgh Graduate School of Public Health, 130 DeSoto St, A647, Pittsburgh, PA 15261. Phone: +1 412 383 5363; fax: +1 412 624 5363.
E-mail address: marian.jarlenski@pitt.edu (M. Jarlenski).

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confounders may influence observed relationships (Volkow, Baler, Compton, & Weiss, 2014). Prior observational studies among pregnant women have provided mixed evidence with respect to whether perinatal marijuana use is associated with adverse obstetric or neonatal outcomes (El-Mohandes et al., 2003; Varner et al., 2014; Warshak et al., 2015). There may be a dose–response relationship, with heavy prenatal marijuana consumption associated with reduced birth weight and poly-substance use (e.g., concurrent use of marijuana with alcohol or tobacco) may contribute to reduced birth weight and gestational age (Bada et al., 2005; Janisse, Bailey, Ager, & Sokol, 2014). The American Academy of Pediatrics has concluded that perinatal marijuana exposure has negative effects on short-term infant neurobehavior and longer term behavior and cognition in childhood (Behnke, Smith, Committee on Substance Abuse, & Committee on Fetus and Newborn, 2013).

The U.S. policy environment with respect to marijuana use has changed dramatically in recent years. Public opinion data indicate that the public's support for legalizing marijuana (estimated at 53% support in 2015) has increased since the 1990s, with a dramatic increase in public support since 2010 (Pew Research Center, 2015). Generally, the perception of risk of marijuana use has declined among the public, particularly among youth (Schuermeyer et al., 2014). Concurrently, state policies regarding marijuana's legal status have changed dramatically in recent years. As of early 2016, 24 states permitted marijuana for medical use, and of those, 5 also permitted marijuana for recreational use (including the District of Columbia). The changing marijuana policies will inherently affect pregnant women, fetuses, and infants, especially since an estimated 51% of all pregnancies in the United States are unintended (Finer & Zolna, 2014).

However, it is unknown how pregnant women who have used marijuana obtain and understand information about the potential risks of perinatal marijuana use. Understanding how pregnant women obtain and understand this information is important because such information can have a profound influence on individuals' knowledge and attitudes, and can form the basis for behavioral change (Finnegan & Viswanth, 2002; Prochaska & Velicer, 1997). The purpose of our study was to understand information-seeking patterns and perceptions of usefulness of available information about perinatal marijuana use among pregnant women who have used marijuana. Our findings are intended to engender a deeper understanding of pregnant women's experiences with information about perinatal marijuana use that can inform both clinical and public health efforts to reduce perinatal marijuana use.

Methods

Study Participants and Settings

The present study was nested in a large observational study investigating patient-provider communication about substance use in obstetric visits (Chang et al., 2015). The broad study goals were to assess perinatal illicit substance use screening and disclosure by urine screening and direct observation of obstetric visits, with follow-up qualitative interviews of participating patients to assess their views about health communication pertaining to substance use. The study took place in five clinical settings in the Pittsburgh, Pennsylvania area, including one large hospital outpatient clinic and community clinics providing prenatal, gynecologic, and family planning services. The parent study recruited obstetric health care providers and pregnant patients presenting for their first obstetric visit at one of the study sites. Obstetric care providers were recruited and consented before the start of study activity in their scheduled clinic sessions. Patients were informed of the study when they registered for their first obstetric visit and those who expressed interest were then approached by study staff, who reviewed the study and obtained written consent for participation in a patient–provider communication study. All patients had their first obstetric visits audio-recorded.

After the first obstetric visit, patients were asked to complete an interviewer-administered questionnaire. At this time, patient participants were debriefed on the study focus regarding substance use communication and invited to participate in a second phase of the study that involved providing a urine sample for testing for illicit substance use. Participants who agreed signed a second separate consent form. Patient participants who either reported or tested positive for any substance use—tobacco, alcohol, illicit drugs—were invited to return for semistructured interviews within 4 weeks to review their audio-recorded obstetric visit and provide their thoughts regarding the substance use communication.

During the course of the parent study, we noted a higher than expected prevalence of perinatal marijuana use and our preliminary semistructured interviews suggested that women viewed perinatal marijuana use differently than tobacco, alcohol, or other illicit drug use. We thus initiated a study arm to better understand perinatal marijuana use by asking patient participants who reported or tested positive for marijuana use to participate in two additional study visits during the second and third trimesters, which included semistructured interviews. These patients were asked to describe their thoughts, beliefs, and decision making regarding using marijuana during pregnancy. Among the interview questions, we asked the women to describe where they sought and obtained information about marijuana use during pregnancy and their thoughts regarding this information and information-seeking process.

In compensation for their time and participation, patient participants received $20 for the first phase of the study (the audio-recording, post-visit questionnaire, and agreement to allow medical record abstraction), $10 for the second phase (urine testing), and $30 for each semistructured interview. This study was approved by the University of Pittsburgh Institutional Review Board (IRB # PR008090530). A Certificate of Confidentiality from the National Institutes of Health was also obtained for this study, which is designed to provide additional privacy protection for individuals who participate in sensitive health-related research.

Semistructured Interviews

All interviews were conducted in person. In the interviews, broad and open-ended questions were asked to assess specific steps women took to obtain information about marijuana during pregnancy and perceptions of usefulness of information they received about perinatal marijuana use (Table 1). All interviews were audio-recorded and transcribed verbatim. Interviews took place over approximately 2 years, between December 2012 and February 2015. Interview duration ranged from 18 to 43 minutes, with a mean interview duration of 29 minutes.

Interview transcripts were analyzed using directed content analysis methods to identify and code themes about women's information seeking pertaining to perinatal marijuana use. This