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Exploring Young Adults' Contraceptive Knowledge and Attitudes: Disparities by Race/Ethnicity and Age

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A B S T R A C T

Background: Half of pregnancies in the United States are unintended, with the highest proportions occurring among Blacks, Hispanics, and teenagers. Understanding differences in knowledge and attitudes about contraception by race/ethnicity and age can improve efforts to reduce disparities in unintended pregnancy.
Methods: This analysis used data from the 897 female respondents in National Survey of Reproductive and Contraceptive Knowledge, a survey exploring young adults' knowledge and attitudes about contraception and pregnancy. Bivariate and multivariate logistic regression analyses were used to assess racial/ethnic and age group differences in knowledge and attitudes about contraceptives.
Findings: Hispanics and teenagers (aged 18–19) had lower awareness of available contraceptive methods, and lower knowledge about individual methods compared with White women and young adults (age 20–29). For example, Hispanics (74%) and teenagers (77%) were less likely to have heard of the intrauterine device (IUD) than were White women (90%) and young adults (90%), and were less likely to know that a woman experiencing side effects could switch brands of oral contraceptive pills (72% of Hispanics vs. 86% of White women; 76% of teenagers vs. 90% of young adults). Hispanics born outside the United States had lower knowledge about contraceptives than U.S.-born Hispanics. For example, foreign-born Hispanics were less likely than U.S.-born Hispanics to have heard of the IUD (59% vs. 82%) or the vaginal ring (55% vs. 95%).
Conclusions: Lower contraceptive knowledge among teenagers and Hispanics, particularly immigrants, suggests the importance of disseminating family planning information to these women as one means to address disparities in unintended pregnancy.

Nearly half of the 6.7 million pregnancies in the United States are unintended (Finer & Zolna, 2011), with the highest proportions of unintended pregnancies occurring among racial/ethnic minorities and adolescents (Finer, 2010; Finer & Zolna, 2011). Non-use of contraception, use of less effective methods, and inconsistent use of contraception contribute to high unintended pregnancy and to disparities in unintended pregnancy by race/ethnicity and age (Finer & Zolna, 2011; Jones, Mosher, & Daniels, 2012; Martinez, Copen, & Abma, 2011). Black and Hispanic women at risk of unintended pregnancy are less likely to use a method compared with White women (Frost, Singh, & Finer, 2007; Krings, Matteson, Allsworth, Mathias, & Peipert, 2008; Raine, Harper, Paukku, & Darney, 2002; Raine, Minnis, & Padian, 2003; Wu, Meldrum, Dozier, Stanwood, & Fiscella, 2008), and are more likely to use less effective barrier methods (Dehlendorf et al., 2011; Frost & Darroch, 2008). Blacks and Hispanics also have relatively higher rates of contraceptive discontinuation, inconsistent use (Kost, Singh, Vaughan, Trussell, & Bankole, 2008; Wu et al., 2008) and method failure (Kost, et al., 2008). There are similar differences by age, with teenagers at risk of unintended pregnancy being less likely to use contraception—and more likely

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to discontinue their method—than older women (Vaughan, Trussell, Kost, Singh, & Jones, 2008).

Knowledge about birth control is one likely factor influencing contraceptive use. Limited research suggests that misinformation and misperceptions regarding method side effects and efficacy are prevalent (Gilliam, Davis, Neustadt, & Levey, 2009; Sangi-Haghpeykar, Ali, Posner, & Poindexter, 2006), as are unwarranted concerns about the impact of contraceptive use on future fertility (Guendelman, Denny, Mauldon, & Chetkovich, 2000) and other negative health outcomes (Gilliam et al., 2009). A qualitative study of Hispanics found that erroneous beliefs contributed to use of less effective methods, as well as to interruption and discontinuation of contraceptives (Gilliam, Warden, Goldstein, & Tapia, 2004). Analyses of the National Survey of Reproductive and Contraceptive Knowledge, a nationally representative survey of men and women of reproductive age, have found that contraceptive knowledge is associated with contraceptive behaviors, including anticipated likelihood of unprotected sex, the effectiveness of methods used, and consistency of use (Frost, Lindberg, & Finer, 2012; Rocca & Harper, 2012).

How racial and ethnic differences in contraceptive knowledge and attitudes contribute to differences in contraceptive use has not been extensively investigated. One analysis of the National Survey of Reproductive and Contraceptive Knowledge data found racial and ethnic differences in attitudes about contraception, pregnancy and fertility, as well as lower knowledge of effective contraceptive methods among Hispanics compared with Whites (Rocca & Harper, 2012). Only contraceptive knowledge, however, partially accounted for use of less effective methods among Hispanics.

This analysis builds on prior research with the National Survey of Reproductive and Contraceptive Knowledge by exploring racial/ethnic disparities in specific areas of contraceptive knowledge. In addition, given the high unintended pregnancy rate and lower contraceptive use among adolescents (Finer, 2010), we also examine disparities in knowledge by age. Both prior analyses of these data used composite knowledge scales and did not examine how specific aspects of knowledge differed by race/ethnicity; neither study assessed disparities by age. In view of the prior finding that Hispanics have the lowest levels of knowledge (Rocca & Harper, 2012), we also investigated whether contraceptive knowledge among Hispanics varied by nativity. Further elucidating differences in contraceptive knowledge and attitudes by race/ethnicity and age will aid development of targeted interventions to improve contraceptive knowledge, with the ultimate goal of decreasing disparities in unintended pregnancies.

Methods

Study Sample/Population

We examined data from the 2009 National Survey of Reproductive and Contraceptive Knowledge, a nationally representative survey of 1,800 unmarried men and women aged 18 to 29 in the United States. The survey—conducted by the Guttmacher Institute and the National Campaign to Prevent Teen and Unplanned Pregnancy—was the first national survey to capture in-depth information on knowledge and attitudes regarding contraceptives and pregnancy. Detailed descriptions of the sampling methods (Frost et al., 2012) and survey methodology (Kaye, 2009) have been published elsewhere. Briefly, this survey sampled young adults between April 2008 and October 2009 via random digit dialing of landlines, a targeted sample of listed landline numbers, and a random sample of cell phone numbers, with an approximate response rate of 20% for each sample frame (Kaye, 2009). Blacks and Hispanics were oversampled to allow for subgroup analysis. Surveys were conducted in English and Spanish. For this analysis, we included all female respondents.

Measures

Contraceptive knowledge and attitudes

A series of items were used to measure contraceptive knowledge and attitudes. We assessed contraceptive method awareness using questions about whether participants had heard of 12 contraceptive methods (yes, no/don't know). Contraceptive knowledge was examined using a series of true/false questions on correct use of, and facts about, six methods: The intrauterine device (IUD), contraceptive implant, injectable contraception (medroxyprogesterone acetate, Depo), oral contraceptive pill (OCP), vaginal ring, and condom. Responses were coded as correct versus incorrect/don't know. For one question on whether an IUD is likely to cause infection, we classified responses of not likely or slightly likely as correct to account for the transient increased risk at the time of insertion (Farley, Rosenberg, Rowe, Chen, & Meirik, 1992). We included three questions assessing knowledge of the relative efficacy of pairs of methods (IUD vs. OCP, Depo vs. OCP, Depo vs. condom, OCP vs. condom): Participants were asked to indicate which method was more effective, or whether both were equally effective. Response options were coded as correct versus incorrect, including "both equally effective" as incorrect (Hatcher et al., 2011). We also examined self-perceived knowledge of individual methods with items asking whether the respondent perceived herself to know nothing, a little, a lot, or everything about individual methods (dichotomized as everything/a lot vs. all others). Another question asked whether the participant perceived herself to have all the information she needed to avoid unplanned pregnancy (dichotomized as strongly agree vs. all others).

Finally, we examined attitudes thought to affect contraceptive use. One set of questions evaluated the importance of specific method characteristics to women (e.g., effectiveness, cost, ease of use). Response options were not at all, slightly, quite, and extremely important; for analyses, the scale was dichotomized as extremely important versus other. A final question assessed whether participants felt it was mainly a woman's responsibility to make decisions about birth control (dichotomized as strongly/somewhat agree vs. strongly/somewhat disagree).

Sociodemographic variables

Our primary independent variables of interest were self-reported race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, other) and age. We initially used three age groups (18–19, 20–24, 25–29); however, because knowledge and attitudes were similar among women 20–24 and 25–29, we present results for two groups (teenagers [ages 18–19] and young adults [ages 20–29]). We also included measures of whether the participant had any children, sexual activity (sex last 12 months, had sex but not in last 12 months, never had sex), nativity (U.S. born, foreign born), and insurance status (private, Medicaid, other). Considering that many participants had not completed their education, we created a categorical education variable combining the highest education completed and whether the participant was still in school: Less than high school and not in school; high school/some college and not in school; less than high school/high school/some college and in school; and college degree. These categories were selected to capture both education and whether the participant was likely on track to obtain more education, while being