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Contraceptive use at last intercourse among reproductive-aged women with disabilities: an analysis of population-based data from seven states

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Abstract

Objective: To assess patterns of contraceptive use at last intercourse among women with physical or cognitive disabilities compared to women without disabilities.

Study design: We analyzed responses to 12 reproductive health questions added by seven states to their 2013 Behavioral Risk Factor Surveillance System questionnaire. Using responses from female respondents 18–50 years of age, we performed multinomial regression to calculate estimates of contraceptive use among women at risk for unintended pregnancy by disability status and type, adjusted for age, race/ethnicity, marital status, education, health insurance status, and parity.

Results: Women with disabilities had similar rates of sexual activity as women without disabilities (90.0% vs. 90.6%, p=.76). Of 5995 reproductive-aged women at risk for unintended pregnancy, 1025 (17.1%) reported one or more disabilities. Contraceptive use at last intercourse was reported by 744 (70.1%) of women with disabilities compared with 3805 (74.3%) of those without disabilities (p=.22). Among women using contraception, women with disabilities used male or female permanent contraception more often than women without disabilities (333 [29.6%] versus 1337 [23.1%], p<.05). Moderately effective contraceptive (injection, oral contraceptive, patch, or ring) use occurred less frequently among women with cognitive (13.1%, *n*=89) or independent living (13.9%, *n*=40) disabilities compared to women without disabilities (22.2%, *n*=946, p<.05).

Conclusions: The overall prevalence of sexual activity and contraceptive use was similar for women with and without physical or cognitive disabilities. Method use at last intercourse varied based on presence and type of disability, especially for use of permanent contraception.

Implications: Although women with disabilities were sexually active and used contraception at similar rates as women without disabilities, contraception use varied by disability type, suggesting the importance of this factor in reproductive health decision-making among patients and providers, and the value of further research to identify reasons why this occurs.

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Keywords: Contraception; Woman; Disability; Reproductive Health; Behavioral Risk Factor Surveillance System

1. Introduction

Nearly one in five, or almost 57 million people in the US have a communicative, physical, or cognitive disability [1]. Two reports by the US Surgeon General [2,3] discuss the exclusion of persons with disabilities from public health programs, and subsequent work has reinforced the persistence of unmet health care needs in this population [4,5]. Poor health outcomes have been documented among persons with disabilities, due in part to the social stigma associated with disability [6,7]. Spurred by passage of the Americans with Disabilities Act (ADA) of 1990 and consequent increase in awareness of the health needs of people with

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disabilities [3,4], healthcare providers have gradually increased their recognition of the importance of sexuality and reproductive health issues among people with disabilities [8–14].

Despite the influence of disability status on reproductive health outcomes, women with disabilities face frequent barriers to accessing timely and appropriate reproductive care, including contraceptive services [15–17]. Data from a US survey of reproductive-aged women revealed that, compared with women without physical disabilities, higher percentages of women with physical disabilities used no contraception (42% vs. 33%), and, among users, women with disabilities had a higher prevalence of permanent contraception but a lower prevalence of hormonal and barrier-method use [18]. Among women with intellectual disabilities residing in government run care facilities in Belgium, approximately 41% did not use any form of contraception, 22% had been sterilized, 18% used oral contraceptives or depot medroxyprogesterone acetate (DMPA), and 1% had an intrauterine device [19]. Likewise, more than half of Dutch women with intellectual disabilities living in residential facilities used no contraception and, among those who did, most (78%) used oral, intramuscular or transdermal hormonal contraception [20]. A recent study using US National Survey of Family Growth data indicates that 27% of women with physical or sensory disabilities at risk for unplanned pregnancy were not using contraceptives and having a disability was associated with decreased odds of using highly or moderately effective contraceptive methods [21].

To date, patterns of contraceptive use among reproductive-aged women with disabilities stratified disability type in the US have not been well described. Using data from the 2013 Behavioral Risk Factor Surveillance System (BRFSS), we aimed to expand the limited knowledge on this topic by comparing contraceptive use among women by disability status and type.

2. Methods

We analyzed data from the 2013 Behavioral Risk Factor Surveillance System (BRFSS), a cross-sectional state-based telephone survey of the US noninstitutionalized civilian population aged ≥18 years [22]. The BRFSS annually collects information on behavioral risk factors, chronic conditions, and preventive health practices. All states use a standard set of core questions; however, states can add optional modules or state-developed questions to their survey. In 2013, seven states (Connecticut, Kentucky, Massachusetts, Mississippi, Ohio, Texas, and Utah) opted to include 12 previously validated reproductive health questions for female respondents 18–50 years of age [23]. The questions collected information on sexual activity, reproductive history, infertility, childbearing intentions, and contraceptive use. BRFSS uses iterative proportional fitting or "raking" to weight the data. This method adjusts for nonresponse, noncoverage, and selection bias. States may choose to sample disproportionately from strata with certain characteristics; no states oversampled individuals with disabilities in 2013 [22].

The 2013 BRFSS included questions on five select disability types: Vision ("Are you blind or do you have serious difficulty seeing, even when wearing glasses?"); Cognition ("Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?"); Mobility ("Do you have serious difficulty walking or climbing stairs?"); Self-care ("Do you have difficulty dressing or bathing?"); and Independent living ("Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?"). Information on hearing disability was not collected until the 2016 BRFSS survey. Women who answered "yes" to one or more of the disability questions were classified as having disability. The state-added reproductive health questions on contraceptive use asked whether the respondent or her spouse or partner did anything at last intercourse to keep from getting pregnant and, if so, the type of method used. Using this information, we categorized responses into 5 groups based on level of effectiveness for prevention of unintended pregnancy during first year of typical use as defined by the World Health Organization [24]. Highly effective methods included male or female permanent contraception and long-acting reversible contraception (LARC) (contraceptive implants or hormonal, copper-bearing, or unknown type of intrauterine device (IUD)). Moderately effective methods included shots or injections, oral contraceptives, contraceptive patch, and rings. Less effective methods included male (or female) condoms, withdrawal, diaphragm, cervical cap, sponge, spermicides and fertility awareness methods. The reproductive health question added to the BRFSS combined diaphragm/cap/sponge as a single response option, making it impossible to differentiate between these methods. Emergency contraception or other methods were considered less effective. We evaluated text responses for "other" contraception evaluated and re-classified into appropriate categories when possible.

We restricted analyses to women at risk for unintended pregnancy, defined as those who were sexually active (i.e., women who did not indicate that they had no partner or were not sexually active when asked about contraceptive use at last intercourse), not currently pregnant, who had not had a hysterectomy, did not have a same sex partner, and reported not wanting a pregnancy at last intercourse. We excluded respondents with missing information on contraceptive use or disability status. We compared the distribution (and 95% confidence intervals [CI]) of demographic (age, race/ethnicity, marital status, education, annual household income, state of residence, and parity) and health care characteristics (health care coverage, having a personal doctor or health care provider and timing of last routine