



Original article

Sexual Health Experiences Among High School Students With Disabilities


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A B S T R A C T

Purpose: The purpose of this study was to investigate the sexual experiences of adolescents with and without disabilities.

Methods: Data were from the 2015 and 2017 Oregon Healthy Teens survey, a state-wide representative sample of 11th grade students. We compared teens with and without disabilities on whether or not they had ever had sexual intercourse (N = 20,812). Among those who had ever had intercourse (N = 8,311), we used multivariable Poisson regression to measure the association between disability status and the prevalence of five sexual experiences.

Results: After adjusting for sociodemographic characteristics, the prevalence of ever having had intercourse was 25% higher among teens with disabilities than among those without (adjusted prevalence ratio [aPR] 1.25, 95% confidence interval [CI]: 1.20–1.30). Among students who had had intercourse, the prevalence of having had intercourse before the age of 15 years (aPR 1.25, 95% CI: 1.14–1.47), having ≥ 2 lifetime sexual partners (aPR 1.13, 95% CI 1.07–1.19), having ≥ 2 sexual partners in the previous three months (aPR 1.23, 95% CI: 1.00–1.52), having used alcohol and/or drugs at the last intercourse (aPR 1.28, 95% CI: 1.10–1.48), and having condomless sex at the last intercourse (aPR 1.17, 95% CI: 1.08–1.27) was higher among students with disabilities than among students without disabilities. After accounting for sexual abuse, each of these associations was attenuated and most were no longer significant.

Conclusions: Youth with disabilities are sexually active. Findings highlight the need for increased attention to sexual abuse prevention, sexual health promotion, and risk reduction efforts for this population.

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IMPLICATIONS AND CONTRIBUTION

Teens with disabilities are more likely to have experienced sexual abuse, had multiple sexual partners, used drugs or alcohol before intercourse, or had condomless sex compared with their non-disabled peers. Preventing sexual violence and facilitating positive sexual development is essential to reducing health disparities affecting adolescents with disabilities.

The reproductive health needs of people with disabilities have gained increasing attention in recent years. There is a rapidly

growing body of research on topics such as contraception use and pregnancy among women with disabilities [1–3]. However, sexual activity among teens with disabilities remains understudied. In the United States, only a handful of population-based studies have focused on this population, and much of that work was conducted more than 10 years ago.

Some previous studies indicated that youth with physical and/or sensory disabilities were at least as likely to be sexually

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active during high school as their peers without such disabilities [4,5]. Conversely, individuals identified as having “low cognitive abilities” appeared less likely to be sexually active during adolescence or early adulthood compared with peers with average cognitive abilities [6,7]. Evidence on the timing of first sexual contact has been mixed, with some studies finding no difference between individuals with mild to moderate disabilities and those with no disabilities [8,9], while others have reported a higher prevalence of early sexual intercourse among youth with disabilities [10,11]. Among teens who are sexually active, those with disabilities may be more likely to have multiple sexual partners or have condomless sex than youth without disabilities [5,6], but more current research is needed in this area.

Current data on sexual activity among teens with disabilities are crucial to inform interventions for reducing the risk of negative health outcomes such as sexually transmitted infections, unplanned pregnancy, and sexual victimization. The purpose of this study was to use recent population-based survey data to compare sexual experiences of high-school students with and without disabilities.

Methods

Data source

The Oregon Healthy Teens (OHT) survey is an anonymous survey to monitor the prevalence of health behaviors (e.g., drug consumption, diet and exercise, sexual activity) among adolescents in Oregon. It is administered biennially to 8th and 11th grade public school students. The OHT uses a multistage sampling design, and the data are weighted to represent the entire statewide population of students at each grade level. We conducted cross-sectional analyses of pooled OHT data from 2015 and 2017. Across both years, 169 schools in 35 (of 36) Oregon counties participated in the survey. We limited analyses to 11th grade students because eighth graders were not asked about disability. Our institutional review board determined that the study did not require institutional review board oversight.

Disability identification

Disability was assessed with six questions adopted by the Department of Health and Human Services as the minimum standard for disability data collection in population-based health surveys [12]. The questions were as follows: (1) Do you have serious difficulty hearing? (“hearing disability”); (2) Do you have serious difficulty seeing, even when wearing glasses or contact lenses? (“vision disability”); (3) Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? (“cognitive disability”); (4) Do you have serious difficulty walking or climbing stairs? (“mobility disability”); (5) Do you have difficulty dressing or bathing? (“self-care disability”); and (6) Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor’s office or shopping? (“independent living disability”).

We created a dichotomous variable indicating whether a teen answered yes to any of the disability questions versus none of them. We also created separate, mutually exclusive variables to compare teens in specific disability groups with those with no disabilities in our descriptive analyses. The proportion of

students with only a hearing or only a vision disability who had had intercourse was similar (45% and 40%, respectively). Therefore, owing to small sample sizes, students with only a hearing or vision disability were combined into a sensory only group. Additional groups included cognitive only; mobility only; ≥ 2 types of sensory, cognitive or mobility disability; and any independent living/self-care difficulty, regardless of any other reported disability [13].

Sexual experiences

Sexual intercourse was assessed with the question, “Have you ever had sexual intercourse?” (yes or no); intercourse was not defined. Among those who had ever had intercourse, we compared teens on five aspects of their sexual experiences: (1) age at the first intercourse; (2) a lifetime number of sexual partners; (3) the number of sexual partners they had within the three months before completing the survey; (4) whether or not they used alcohol or drugs the last time they had intercourse; and (5) whether or not they or their partner used a condom the last time they had intercourse. We categorized age at the first intercourse as younger than 15 years versus at least 15 years because 15 is the legal age of consent in Oregon [14]. We grouped the number of lifetime sexual partners into two or more versus fewer than two, which was the median value for the analytic cohort. We grouped the number of sexual partners in the past 3 months into two or more versus fewer than two because only 14% of the sample reported having ≥ 2 partners for this question.

Covariates

Gender was categorized as male, female, or nonbinary (the latter option was only provided on the 2017 survey). Race and ethnicity categories were American Indian or Alaska Native, Asian, Black, Native Hawaiian or other Pacific Islander, non-Hispanic white, Hispanic of any race. Sexual orientation was categorized as heterosexual; lesbian, gay, or bisexual; or questioning. The OHT survey includes the Family Affluence Scale-II as an indicator of socioeconomic status; we categorized scores as low, middle, or high affluence [15]. Students reported if they had ever been forced to have sex, been pressured to have sex, or had sexual contact with an adult; we coded each as a binary variable and refer to these collectively as abuse variables hereafter.

Derivation of analytic study samples

We created two analytic study samples for our analyses (Figure 1). The first analytic sample was created to assess the association between disability status and whether students had ever had intercourse. Of 25,494 11th grade students, we excluded those who were missing data for disability status ($n = 1,154$; 4.5%), whether they had ever had intercourse ($n = 961$; 3.8%), and other independent variables ($n = 2,567$; 10.1%); resulting in 20,812 students for this analysis. Of these, 8,673 students had had intercourse. Among these 8,673 students, we created a second analytic sample to assess the association between disability status and specific sexual experiences. We excluded students who were missing data for number of lifetime sexual partners ($n = 122$; 1.4%), number of sexual partners in the previous 3 months ($n = 83$; 1.0%), age at the first intercourse ($n = 32$; 0.4%), use of alcohol or drugs at the last intercourse ($n = 67$;

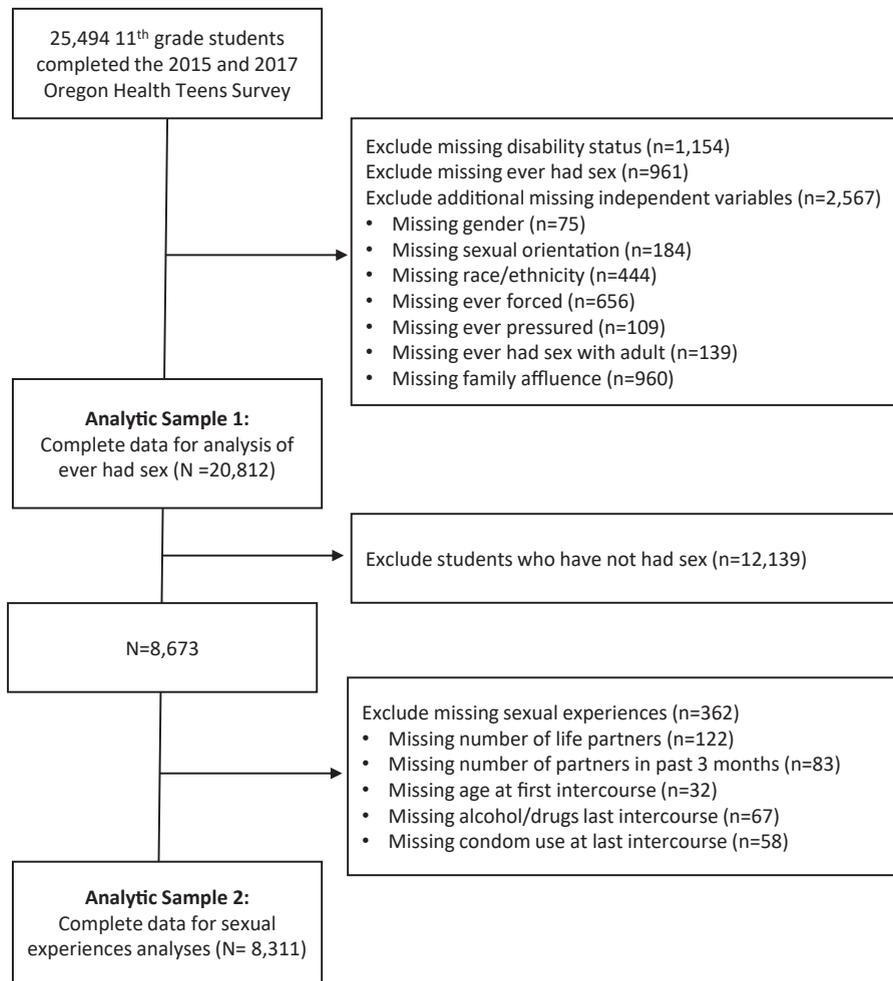


Figure 1. Generation of analytic study samples.

0.8%), or use of a condom at the last intercourse ($n = 58$; 0.7%). The final sample size for analyses of sexual experiences was $n = 8,311$.

Statistical analysis

Among students who had had intercourse, we calculated unweighted counts and weighted proportions with 95% confidence intervals (CIs) for sociodemographic characteristics, abuse variables, and sexual experiences by disability status. We also calculated the proportion of students who reported each abuse and sexual experience variable by disability subgroup. We assessed differences in the weighted proportions of sociodemographic characteristics, abuse variables, and sexual experiences by disability status or disability subgroup using survey design-based F-tests where “no disability” was always the referent group.

Differences in sexual experiences vary with gender, sexual orientation, race/ethnicity, and socioeconomic status [16]. We used Poisson regression to calculate prevalence ratios as a measure of the association between disability status (any vs. none) and sexual experiences while controlling for gender, sexual orientation, race/ethnicity, and family affluence. Owing to

small sample sizes, we did not conduct regression analyses by disability subgroup.

Sexual abuse may lie on the causal pathway between disability status and sexual experiences. People with disabilities are more likely to experience sexual abuse compared with those without disabilities [17]. Evidence also suggests that youth who have been sexually abused have a higher probability of being younger at the first consensual sex, having sex under the influence of alcohol or drugs, and/or having condomless sex [18,19]. Therefore, as a sensitivity analysis, we report an additional model for each sexual experience that is further adjusted for potential mediating factors of whether a student was ever forced to have sex, pressured to have sex, or had sex with an adult. Because young age at the first intercourse is associated with sexual abuse and the sexual experiences of interest [20], we also included a dichotomous indicator of age at the first intercourse ($< \text{or} \geq 15$ years) in the additional models of sexual experiences other than age at the first intercourse. We used Stata 14.2 (College Station, TX) for all analyses.

Results

A total of 29.3% of 11th graders reported at least 1 disability. Of these, 30.5% responded affirmatively to more than 1 disability

question. Students with disabilities were significantly more likely to have had sexual intercourse than those without disabilities (48.5% vs. 37.8%; Figure 2). When disability status was disaggregated, the proportion of students who had had sexual intercourse was significantly higher for cognitive only (48.5%), ≥ 2 sensory/cognitive/mobility (52.9%), and any independent living/self-care (49.8%) than those with no disability. Sensory-only and mobility-only groups did not differ significantly from no disability.

Among students who reported having had intercourse (analytic sample 2), those with disabilities were more likely to be female or nonbinary and substantially more likely to identify as lesbian, gay, or bisexual compared with students without disabilities (Table 1). They were also somewhat less likely to identify as non-Hispanic white and more likely to report low family affluence. These patterns paralleled those seen in analytic sample 1 (see Supplemental Table 1).

A significantly higher proportion of students with disabilities reported having been forced or pressured to have intercourse and having had sexual contact with an adult compared with their nondisabled peers (Table 2). Overall, teens with disabilities were significantly more likely to report having had intercourse before the age 15 years, having at least two lifetime sexual partners, having at least two sexual partners within the past 3 months, using alcohol and/or drugs the last time they had intercourse, and having condomless sex the last time they had intercourse. Differences were also significant for most disability subgroups. However, differences between students with only sensory disabilities and those with no disability were not statistically significant. Differences between students with only mobility disability and those with no disability were only statistically significant for ever having had sex with an adult (Table 2).

After adjusting for sociodemographic characteristics, the prevalence of ever having had sex was 25% higher among teens with disabilities than in those without (aPR 1.25, 95% CI: 1.20–1.30; Table 3). When this model was further adjusted for potential mediating factors of abuse, the association was attenuated but still statistically significant (adjusted prevalence ratio [aPR]

1.11, 95% CI: 1.07–1.16). Among students who had had sex, the adjusted prevalence of having had sex before the age of 15 years, having ≥ 2 lifetime sexual partners, having ≥ 2 sexual partners in the previous three months, having used alcohol and/or drugs at the last intercourse, and having condomless sex at the last intercourse was higher among students with disabilities than among students without disabilities. After accounting for sexual abuse variables, each of these associations was attenuated, and the associations between disability and number of lifetime sexual partners, sexual partners in the prior 3 months, and use of alcohol or drugs before intercourse were no longer significant.

Discussion

This investigation adds to a handful of studies that have examined sexual experiences among teens with disabilities in the United States. Our findings confirm that teens with disabilities are sexually active. However, unlike some previous studies, there was no disability group in our study in which the proportion of teens that had ever had intercourse was smaller than the proportion of sexually active youth without disabilities. Teens with disabilities of every type except sensory only and mobility only were significantly more likely to have had intercourse compared with teens without disabilities. Our findings suggest that complexity of disability (i.e., multiple disability types or presence of independent living/self-care limitations) may be more closely associated with abuse and sexual experiences than disability type per se, with the exception of cognitive disability only. These results underscore the need for increased attention to sexual health promotion, as well as abuse prevention and risk reduction efforts for this population.

In our regression analyses, teens with any disability were substantially more likely to have had intercourse compared with teens without disabilities. They were also more likely than teens without disabilities to be younger than the age of 15 years at the first intercourse, have had ≥ 2 sexual partners in their lifetime and ≥ 2 sexual partners in the 3 months before survey, used alcohol and/or drugs at the last intercourse, and not used a

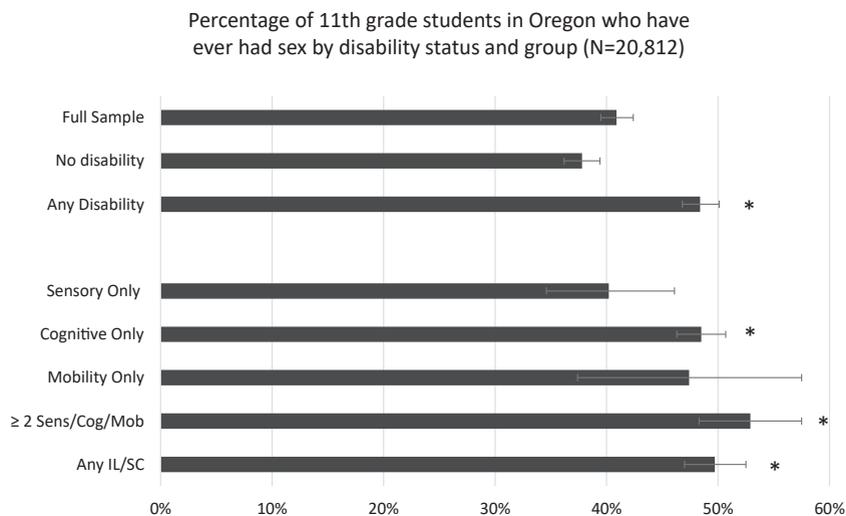


Figure 2. Percentage of 11th grade students in Oregon who have ever had sex. Estimates are weighted to account for complex sampling of Oregon public high school students. Disability categories are mutually exclusive. Error bars represent 95% confidence intervals. *Statistically different from students who report No Disability; survey design-based F test, $p < .05$. IL/SC = independent living/self-care.

Table 1
Characteristics of 11th grade students who have had sexual intercourse, Oregon Healthy Teens Survey, 2015 and 2017

	All (N = 8,311)			No disability (N = 5,473)			Disability (N = 2,838)			p value ^b
	N	% ^a	[95% CI] ^a	N	% ^a	[95% CI] ^a	N	% ^a	[95% CI] ^a	
Gender										<.001
Male	3,855	45.8	[44.3,47.3]	2,865	51.9	[50.1,53.7]	990	34.2	[31.4,37.1]	
Female	4,257	51.8	[50.4,53.2]	2,518	46.5	[44.7,48.4]	1,739	61.8	[59.1,64.4]	
Nonbinary	199	2.4	[2.0,2.9]	90	1.5	[1.2,2.0]	109	4.0	[3.2,5.1]	
Race/Ethnicity ^c										.21
American Indian/Alaska Native	196	2.3	[1.7,2.9]	125	2.3	[1.7,3.0]	71	2.2	[1.6,3.1]	
Asian	137	1.8	[1.2,2.6]	92	1.8	[1.1,3.0]	45	1.7	[1.2,2.4]	
Black	140	1.7	[1.3,2.2]	91	1.6	[1.2,2.2]	49	1.8	[1.3,2.6]	
Native Hawaiian/Pacific Islander	66	0.8	[.6,1.0]	43	0.8	[.6,1.1]	23	0.8	[.5,1.3]	
White	5,450	64.7	[61.3,68.0]	3,645	65.8	[62.5,69.0]	1,805	62.7	[58.4,66.8]	
Multiracial or other	407	4.4	[3.8,5.1]	257	4.4	[3.7,5.3]	150	4.4	[3.6,5.4]	
Hispanic	1,915	24.3	[21.3,27.6]	1,220	23.3	[20.4,26.4]	695	26.3	[22.4,30.8]	
Sexual orientation										<.001
Heterosexual	7,085	84.9	[83.7,86.1]	4,992	91.3	[90.3,92.3]	2,093	72.9	[70.2,75.3]	
Lesbian, gay, or bisexual	1,043	12.7	[11.7,13.8]	392	7.1	[6.2,8.1]	651	23.4	[21.1,25.8]	
Questioning	183	2.3	[1.8,3.0]	89	1.6	[1.2,2.2]	94	3.8	[2.6,5.4]	
Family Affluence Scale-II										<.001
Low	941	11.1	[9.8,12.5]	527	9.6	[8.2,11.3]	414	13.9	[12.5,15.4]	
Middle	3,158	38.2	[36.5,40.0]	1,993	36.9	[34.9,39.0]	1,165	40.7	[38.4,43.1]	
High	4,212	50.7	[48.6,52.8]	2,953	53.5	[50.7,56.2]	1,259	45.4	[43.1,47.7]	

CI = confidence interval.

^a Weighted percentages and 95% confidence intervals based on a representative sample of 11th grade students in Oregon.

^b p-value for F-test of weighted percentages comparing any disability to no disability.

^c All racial groups are non-Hispanic; the Hispanic ethnicity group includes Hispanics of any race.

condom at the last intercourse. Our findings regarding numbers of sexual partners are consistent with prior research using national data, which found that high-school students with physical disabilities or long-term health problems had significantly higher odds of having had intercourse with more than four partners during their lifetime compared with students without disabilities [5]. We further observed that teens with disabilities were significantly more likely than those without disabilities to have had multiple partners within the three months before survey. This suggests that teens with disabilities are less likely to be having intercourse in the context of a long-term relationship than may be the case for teens without disabilities.

Previous research also has found disability-related differences in use of contraceptive methods, including condoms. In 1

national study, girls with low cognitive abilities were significantly less likely to have used contraception at both first and most recent intercourse compared with girls with average cognitive abilities [6]. Another study found that boys with disabilities were at least as likely as boys without disabilities to have used contraception at the first intercourse; however, among those who used contraception, boys with learning disabilities or emotional conditions were significantly less likely to have used condoms compared with boys without disabilities [10]. These results parallel our findings that teens with disabilities were significantly less likely to have used a condom at the last intercourse compared with teens without disabilities. Lack of condom use increases the risk of sexually transmitted infections (STIs). In a study using national survey data, sexually active boys and girls

Table 2
Prevalence of sexual experiences by disability type among Oregon 11th grade students who have had sex (N = 8,311), Oregon Healthy Teens Survey, 2015 and 2017

	No disability N = 5,473	Any disability N = 2,838	Mutually exclusive disability categories				
			Sensory only N = 221	Cognitive only N = 1,423	Mobility only N = 64	≥ 2 Sens/Cog/Mob N = 287	IL/SC N = 843
			% [95% CI] ^a	% [95% CI] ^a	% [95% CI] ^a	% [95% CI] ^a	% [95% CI] ^a
Abuse							
Ever forced to have sex	7.1 [6.3,8.0]	20.6 [18.6,22.7]	10.0 [6.6,14.8]	16.1 [14.1,18.2]	14.0 [5.4,31.7] ^b	21.9 [16.7,28.1]	31.2 [26.0,36.9]
Ever pressured to have sex	15.7 [14.5,17.0]	34.1 [31.9,36.3]	13.4 [9.1,19.3]	32.4 [29.4,35.5]	24.2 [12.6,41.5] ^b	27.8 [21.6,34.9]	45.4 [40.2,50.8]
Ever had sex with an adult	8.7 [7.8,9.8]	21.5 [19.3,23.8]	8.4 [5.3,13.1]	19.7 [17.4,22.2]	19.8 [9.0,38.1]^b	20.4 [15.2,26.7]	28.5 [23.9,33.6]
Sexual Experience							
< 15 years at first sex	23.1 [21.7,24.6]	31.1 [28.5,33.9]	30.6 [23.2,39.2]	28.9 [25.4,32.8]	30.8 [18.1,47.1]	33.4 [25.7,42.1]	34.3 [29.4,39.5]
≥ 2 lifetime partners	50.8 [48.8,52.7]	58.9 [56.5,61.3]	56.4 [46.6,65.8]	59.6 [56.6,62.4]	55.7 [40.5,69.9]	61.5 [53.9,68.6]	57.8 [52.9,62.5]
≥ 2 partners in last 3 months	10.8 [9.6,12.0]	13.0 [11.5,14.7]	12.9 [8.7,18.8]	13.2 [11.2,15.5]	19.6 [9.7,35.6] ^b	15.7 [10.0,23.9]	11.2 [9.0,14.0]
Used alcohol/drugs	14.1 [12.6,15.9]	18.7 [16.9,20.7]	12.7 [8.8,18.1]	18.6 [16.3,21.2]	14.9 [8.6,24.6]	19 [14.1,25.2]	20.7 [17.5,24.3]
Condomless sex	35.4 [33.3,37.5]	44.5 [41.8,47.3]	32.8 [24.8,42.0]	45.8 [42.2,49.4]	41.9 [26.8,58.7]	42.4 [36.2,48.8]	46.4 [41.2,51.6]

CI = confidence interval; IL/SC = independent living/self-care.

Bolded values are significantly different from No Disability, p < .05. Design based F-test of weighted percentages.

^a Weighted column percentages and 95% confidence intervals based on a representative sample of 11th grade students in Oregon.

^b Estimate may be unreliable, relative standard error between 30 and 45.

Table 3

Relative prevalence of sexual experiences among those with any disability compared with those without disability, Oregon Healthy Teens Survey, 2015 and 2017

	PR	95% CI
Ever had sex (N = 20,812)		
Crude	1.28 ^a	1.23,1.34
Adjusted for potential confounders ^b	1.25 ^a	1.20,1.30
Further adjusted for potential mediators ^c	1.11 ^a	1.07,1.16
Sexual experiences among those who have had sex (N = 8,311)		
First intercourse younger than 15 years of age		
Crude	1.35 ^a	1.23,1.47
Adjusted for potential confounders ^b	1.25 ^a	1.14,1.38
Further adjusted for potential mediators ^c	1.10 ^a	1.00,1.22
≥ 2 sexual partners in lifetime		
Crude	1.16 ^a	1.11,1.22
Adjusted for potential confounders ^b	1.13 ^a	1.07,1.19
Further adjusted for potential mediators ^d	1.03	.98,1.08
≥ 2 sexual partners in past 3 months		
Crude	1.21 ^a	1.00,1.46
Adjusted for potential confounders ^b	1.23 ^a	1.00,1.52
Further adjusted for potential mediators ^d	1.06	.86,1.32
Used alcohol or drugs at last intercourse		
Crude	1.32 ^a	1.14,1.53
Adjusted for potential confounders ^b	1.28 ^a	1.10,1.48
Further adjusted for potential mediators ^d	1.12	.96,1.32
No condom at last intercourse		
Crude	1.26 ^a	1.15,1.37
Adjusted for potential confounders ^b	1.17 ^a	1.08,1.27
Further adjusted for potential mediators ^d	1.12 ^a	1.03,1.22

PR = prevalence ratio; CI = confidence interval.

^a Statistically significant $p < .05$.

^b Adjusted for sex, race/ethnicity, sexual orientation, and family affluence. Owing to small cell sizes, race and ethnicity were grouped into non-Hispanic white, non-Hispanic other race, Hispanic of any race.

^c Adjusted for potential confounders plus ever forced to have sex, ever pressured to have sex, ever had sex with adult.

^d Adjusted for potential confounders plus age at first intercourse, ever forced to have sex, ever pressured to have sex, ever had sex with adult.

with low cognitive abilities were much more likely to report having had STIs compared with sexually active teens with average cognitive abilities [6]. Similarly, a study linking special education enrollment data to Medicaid claims found that higher proportions of adolescents receiving special education had received STI treatment compared with teens not in special education [21].

We are unaware of prior research on the use of alcohol or drugs at the time of intercourse among people with disabilities. Substance use in the context of sexual activity is of concern because it is associated with decreased condom use [22], increased number of sexual partners [23], and sexual victimization [24]. Our finding that the prevalence of substance use at the last intercourse was elevated among teens with disabilities is consistent with the overall pattern of higher levels of abuse and sexual experiences that may confer risk.

Studies regarding age at the first intercourse among individuals with disabilities have yielded mixed results. One study found that young adults with severe physical or sensory disabilities had a slower progression to first vaginal sex, first oral sex, and first sexual experience compared with young adults without these disabilities [7]. In that study, no significant differences in timing of sexual experiences were found between individuals with mild or moderate physical disabilities and young adults without disabilities [7]. However, consistent with our results, an earlier study reported that high-school students with various types of disabilities were significantly more likely to

have had early intercourse compared with teens without disabilities [11].

Having sex at an early age may predispose teens to other sexual risks [25] and may have contributed to patterns of sexual experiences we observed among teens with disabilities. In Oregon, individuals younger than 15 years are not legally able to consent to sex under any circumstances [14]. Thus, sexual intercourse before age 15 years is by definition nonconsensual. It is likely that many or most of the early intercourse experiences – and perhaps many of the subsequent sexual experiences – of teens with disabilities were abusive in nature. Numerous studies have found that high proportions of individuals with disabilities experience sexual abuse [17,26]. Like early first intercourse, sexual abuse is associated with subsequent sexual experiences that pose health risks [19]. While we did not conduct a formal mediation analysis, our findings suggest that early sexual intercourse and abuse may account for much of the observed association between disability status and sexual experiences that can increase exposure to health threats such as STIs. Preventing abuse of youth with disabilities and treating the resulting trauma from abuse are important strategies for improving sexual health outcomes later in adolescence and adulthood. Moreover, evidence suggests sexual orientation and gender minority youth are at a greater risk of sexual violence [27], and in our data, a higher proportion of adolescents with disabilities identified as sexual and/or gender minorities than their nondisabled peers. Further investigation of the intersection between disability status, sexual and gender identities, and sexual violence is needed.

This study has limitations. The OHT survey provides no information about age of disability onset, and the data are cross-sectional; we specified disability status as the independent variable, but it is possible that sexual experiences preceded disability. While it is unlikely that the sexual experiences in this study would cause motor or sensory impairments, they could have contributed to some of the cognitive disability reported in our sample. Similarly, we posited that sexual abuse may be a mediating factor in this study, but the timing of abuse in relation to disability onset and additional sexual experiences is unclear and we were unable to fully interrogate this hypothesis. Longitudinal studies that investigate the temporal relationships among disability, sexual abuse, and subsequent sexual experiences are needed. The OHT survey does not define “sexual intercourse,” and regardless of disability status, students interpret the term in different ways [28]. The lack of specificity in language could mean that students interpret “sexual intercourse” to include sexual activities beyond vaginal or anal penetration (e.g., oral sex). Nevertheless, engaging in these activities at a young age, with multiple partners, under the influence of drugs/alcohol, or without barrier protection where appropriate could still increase the risk of STIs or sexual victimization, thus warranting examination in this study. Alternatively, some teens with disabilities may interpret “sexual intercourse” more narrowly (e.g., including only consensual sexual activity), which could mean that associations between intercourse and disability are underestimated in our analyses. Finally, individuals with disabilities are a heterogeneous group, yet our numbers were too small to conduct separate multivariate analyses by disability type.

Despite these limitations, our findings have important implications. The sexuality of people with disabilities is often ignored or suppressed, and youth with disabilities have a history of being excluded from sexual health education [29–31]. Moreover, the needs of students with disabilities are unlikely to be

met by traditional school-based U.S. sexual education. As of June 2020, only 29 states plus the District of Columbia mandate any sexual education at all [32]. Existing programs often follow an abstinence-focused curriculum. In contrast, comprehensive sexuality education promotes a broader curriculum to foster healthy sexual development throughout childhood and adolescence. In addition to providing medically accurate sexual health information, comprehensive approaches also offer opportunities to develop and practice communication, decision-making, boundary setting, and negotiation skills that can help prepare young people for healthy sexual and nonsexual relationships [33]. A growing body of evidence suggests comprehensive sexuality education programs can reduce or delay sexual activity, decrease the number of sexual partners, reduce STIs, and increase the use of condoms and contraception [16,33,34]. A comprehensive approach – complete with accommodations to facilitate learning – is needed for teens with disabilities who may have limited access to sexual information and opportunities to build healthy relationship skills.

Efforts to improve the health of teens with disabilities must also address larger social factors that increase their risk of sexual victimization [26]. Our bivariate analyses suggest that abuse may be associated with certain disability types, yet these results should be interpreted with caution. Nonsignificant associations between abuse and sensory-only or mobility-only disability groups may be a result of limited statistical power to detect differences. Historically, individuals with disabilities have been stigmatized, marginalized, and isolated – conditions that increase their risk for sexual abuse [35]. Abusers often choose victims with low self-esteem, few strong relationships for disclosing abuse, and a limited capacity to assertively say “no.” [36] Thus, the severity of disability and one’s individual level of vulnerability may be stronger predictors of abuse than the type of the disability itself. Limited data suggest this is true [37], although more research is needed.

While awareness of sexual abuse of people with disabilities in the United States has grown recently [38], research on effective strategies to prevent and respond to violence against people with disabilities is limited in quality and scope [39]. Identifying effective interventions depends on high-quality data; improvements in the quantity and rigor of intervention research in disability and violence are greatly needed [40]. These efforts, combined with improved sexual health education, are vital to support positive sexual development and improve health outcomes in youth with disabilities.

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Supplementary Data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jadohealth.2021.03.001>.

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