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Preventive healthcare services use among transgender young adults

Annie-Laurie McRee, DrPH [Assistant Professor],

Division of General Pediatrics and Adolescent Health, University of Minnesota, 717 Delaware St., 3rd Floor, Minneapolis, MN 55414, USA, Phone: (612) 626-0162, almcre@umn.edu

Amy L. Gower, PhD, and

Division of General Pediatrics and Adolescent Health, University of Minnesota, Minneapolis, MN 55414, USA, gowe0009@umn.edu

Paul L. Reiter, PhD

Division of Cancer Prevention and Control, The Ohio State University College of Medicine, Columbus, Ohio 43201, USA, paul.reiter@osumc.edu

Abstract

Background/Aims: Existing research on the health of transgender young adults focuses largely on gender-related care with little attention to important preventive healthcare services such as well-visits, vaccination and screening.

Methods: We analyzed data from a national sample of transgender young adults in the United States who were 18–26 years of age and completed an online survey during Fall 2013 ($n=34$). Most respondents were 22–26 years old (59%) and non-Hispanic White (68%). We calculated descriptive statistics (i.e., frequencies and percentages) to describe transgender young adults use of preventive healthcare services, with particular attention to vaccination against human papillomavirus (HPV) and sexual health services. We also examined the acceptability of home-based self-testing for sexually-transmitted infections (STIs), which could be a novel strategy for increasing screening among this population.

Results: Only 35% of respondents reported either receiving a routine check-up (past year) or initiating the HPV vaccination series (1 dose). Among unvaccinated respondents, the most commonly reported reasons for not getting HPV vaccine were: not being sexually active (32%); having only 1 sexual partner (23%); and being unaware of the vaccine (23%). Fewer than half of respondents had been tested for STIs (47%) but most (71%) were willing to use an STI self-test at home.

Discussion: Findings suggest that the healthcare needs of transgender young adults are not being adequately addressed. Efforts to increase providers' capacity to effectively and appropriately

Correspondence to: Annie-Laurie McRee.

(Corresponding author).

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serve transgender young adults—such as a wider variety of exam, preventive services, and testing options (e.g., self-collected samples)—are needed.

Keywords

gender identity; transgender; youth; well-visit; HPV vaccination; STD/STI testing

Transgender and gender non-conforming people experience a broad range of health disparities compared to their cisgender (i.e., sex assigned at birth and gender identity match) peers, ranging from mental health problems, such as anxiety and depression, to physical health problems, including sexually transmitted infections (STIs) and obesity (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013; Bouman et al., 2017; Clark et al., 2014; Eisenberg et al., 2017; Feldman, Romine, & Bockting, 2014; Millet, Longworth, & Arcelus, 2017; Veale, Watson, Peter, & Saewyc, 2017). *Healthy People 2020* calls for research to understand factors predicting health in this understudied population (U.S. Department of Health and Human Services). Much of the existing research in this area has focused on transgender adults, with specific attention to gender-related care. Comparatively less research has included transgender adolescents and young adults, who require the same age-appropriate preventive care as their cisgender counterparts, including well-care visits, screening, and immunizations (Society for Adolescent Health and Medicine, 2013), yet experience different health risks and barriers to care. Young adulthood is a key time for transitions in healthcare. During the period from 18–26 years, youth generally transition from a parent/guardian’s health insurance coverage to independent coverage (Park, Scott, Adams, Brindis, & Irwin, 2014). This transition from adolescent- to adult-focused care may also coincide with the selection of a new healthcare provider, allowing an opportunity to access more gender-competent healthcare providers if that was not an option previously. Unfortunately, data suggest this population may have lower healthcare utilization than cisgender populations with perceived discrimination by healthcare providers being a primary cause (Clark, Veale, Townsend, Frohard-Dourlent, & Saewyc, 2018; Macapagal, Bhatia, & Greene, 2016; Poteat, German, & Kerrigan, 2013). Hesitancy to disclose gender identity and/or sexual orientation can be a key barrier to care, and this information may be particularly relevant to clinical decision making when caring for sexually active young adults (Macapagal et al., 2016). Lack of disclosure may be due to patient and/or provider attitudes and behavior (e.g., providers not asking about identity, or patient belief that identity is not relevant for healthcare) (Rossman, Salamanca, & Macapagal, 2017) or clinic materials (e.g., paperwork and electronic records that do not include gender identity) (Cahill & Makadon, 2014) and could contribute to negative healthcare experiences for young adults who identify as transgender (Macapagal et al., 2016). Furthermore, considerations specific to this population around genital examination including the roles of patient gender dysphoria, limited provider training, and genital changes due to hormone therapy that may make genital exams more uncomfortable, may also be barriers to accessing important preventive services, such as Papanicolaou (Pap) and STI tests (where indicated) (Felman & Goldberg, 2006; Peitzmeier, Reisner, Harigopal, & Potter, 2014). In sum, underutilization of preventive care by transgender young adults is a problem that necessitates creative solutions. The present study examines use of preventive healthcare services among transgender young adults, with particular attention to HPV vaccination and services related

to sexual health including acceptability of at-home STI testing, which could be a novel alternative strategy for increasing preventive screening among this population.

Methods

Study Design

We analyzed data from an online survey conducted in October and November of 2013 with a national sample of young adults (Harris Interactive, 2013b). Respondents were recruited through the Harris Interactive Online Panel, a voluntary research panel which includes respondents throughout the United States (U.S.) and is similar to the U.S. population on several demographic characteristics (Harris Interactive, 2013a; McRee, Katz, Paskett, & Reiter, 2014; Reiter, McRee, Katz, & Paskett, 2015). In exchange for completing surveys, panel members receive points that can later be redeemed for rewards. Individuals were eligible to participate in our survey if they were aged 18–26; lived in the U.S.; and identified themselves as lesbian, gay, bisexual or transgender. The study was approved by the Institutional Review Board at The Ohio State University. Of 2,014 eligible individuals, 1,005 provided informed consent and completed the survey. The present analysis uses data from respondents who self-identified as transgender on the survey company's demographic screener ($n=34$) which used a single item to assess LGBT identity (heterosexual or straight, lesbian, gay, bisexual, transgender). As this approach confounds gender identity and sexual orientation, we added follow-up survey questions assessing sex assigned at birth (male, female) and current gender identity (male, female, transmale/transman, transfemale/tranwoman, genderqueer, other) among those respondents who identified as transgender on the screener (Sausa, Sevelius, Keatley, Iñiguez, & Reyes, 2009). Half of respondents in our analytic sample (50%, $n=17$) identified as a trans man or trans male (Table 1). Most respondents were: between the ages of 22–26 years (59%), non-Hispanic White (68%), had annual household incomes less than \$50,000 (US), and lived in suburban (44%) or urban (35%) areas.

Measures and analyses

We developed survey items based on existing items in the literature. Questions about general healthcare access and experiences included respondents' health insurance status and receipt of a routine checkup in the past year (Table 2). We assessed whether respondents had disclosed their sexual orientation or gender identity to their healthcare provider and their perception of ever having been discriminated against by a provider because of their sexual orientation or gender identity (Rainbow Health Initiative, 2013). The survey also assessed whether respondents had ever received any shots of human papillomavirus (HPV) vaccine (Brewer et al., 2011), a vaccine which protects against a common STI that can cause multiple types of cancer (Petrosky et al., 2015). Unvaccinated respondents then indicated the main reason why they had not yet gotten any HPV vaccine shots and their intentions to get vaccinated in the next year (Reiter, Brewer, McRee, Gilbert, & Smith, 2010; Reiter, McRee, Katz, & Paskett, 2015).

Sexual health and healthcare questions assessed: respondents': sexual experience; history of HIV testing; whether respondents had ever had a test for STIs ("such as gonorrhea,

chlamydia or syphilis, not including HIV”); and whether they had ever been told by a provider that they had HIV, HPV, genital warts, or another STI. After providing a brief description of a hypothetical self-test for STIs that would involve collecting a urine specimen or using a swab to get a genital specimen that is then mailed to a doctor for testing (McRee, Esber, & Reiter, 2015; Thompson et al., 2015), the survey assessed respondents’ willingness to perform a self-test for STIs and asked what concerns they would have about using a home-based test for STIs (check all that apply).

We calculated descriptive statistics (i.e., frequencies and percentages) for all variables using Stata/IC version 13 (StataCorp, College Station, TX).

Results

Healthcare access and experiences

Most respondents had health insurance, either through a parent’s plan (65%) or themselves (21%), though, notably, 15% indicated having none (Table 2). Only 35% reported having received a routine check-up in the past year. Two thirds of respondents (65%) indicated that they had disclosed their sexual orientation or gender identity to their healthcare provider, and about a quarter (27%) felt a provider had discriminated against them because of their sexual orientation or gender identity.

HPV vaccination.—About one-third (35%, $n=12$) of respondents reported having received any shots of HPV vaccine. Eight (67%) of those who had initiated HPV vaccination (24% of total sample) had completed the 3-dose series. Among unvaccinated respondents, the most common main reasons for not getting HPV vaccine were: not being sexually active (32%); having only 1 sexual partner who does not have HPV (23%); and never having heard of the vaccine (23%). When asked about their intentions to get HPV vaccine in the next year, half (50%) of unvaccinated respondents were undecided.

Sexual healthcare.—Overall, 63% of respondents reported ever having vaginal, anal or oral sex. Fewer than half of all respondents had ever had a test for STIs (47%) or HIV (42%) and few reported ever having received an STI diagnosis from a healthcare provider (9%). Most respondents (71%) were willing to use an STI self-test at home. The most commonly reported concerns about using an STI self-test were that the test might not be accurate (68%) and that they might do the test incorrectly (65%). Fewer respondents reported preferring to see a doctor for a test (41%), not wanting to send the test through the mail (21%), or concern that the test might hurt (15%) or be embarrassing (12%).

Discussion

Findings from this national sample suggest that the regular, preventive healthcare needs of transgender and gender non-conforming young adults are not being adequately addressed. While young adults generally have lower levels of health services use than other age groups, a substantially lower proportion of young adults who identified as transgender—just 1 in 3—reported receiving a routine check-up in the past year, compared to 49%–58% among general populations of young adults (Adams, Park, & Irwin, 2015). Other research also finds

a similar pattern of differences among adolescent populations (Rider et al., 2018). Many young adults in our sample reported either not disclosing their gender identity to a provider, or perceiving discrimination by a provider; these, coupled with stressors, such as fear of stigma (Hendricks & Testa, 2012), could play a role in low preventive healthcare services use among this population. Further, young adults receiving gender-affirming medical interventions (e.g., hormone therapy) may be less likely to seek routine preventive care as they are already under the care of a specialist who may not provide such services. However, receipt of preventive care provides critical opportunities screening and counseling about behavioral health risks that are the key source of morbidity and mortality among this age group (Eisenberg et al., 2017; Park et al., 2015; Ozer, Urquhart, Brindis, Park, & Irwin, 2012). This is one of the first studies, to our knowledge, to assess HPV vaccination among transgender youth (Gorbach et al., 2017). Only one-third of young adults in this sample had received at least one dose of HPV vaccine, a proportion that is similar to vaccination coverage among a national sample of female young adults in the general population during the same time period but higher than among males (37% and 6%, respectively; Williams et al., 2015). Respondents' reasons for not yet getting vaccinated point to information gaps that can also be addressed in future interventions. As the vast majority of unvaccinated respondents either intended to get vaccinated against HPV or were undecided, it is particularly important to provide strong, quality recommendations targeted to young adults as these are a strong and consistent predictor of vaccination (Gilkey et al., 2016). Given lower levels of services used among transgender young adults, it becomes especially important for healthcare providers to take advantage of every clinical opportunity, including visits for acute care, to promote routine screening and immunization. Further offering HPV and other recommended vaccines in alternative settings, such as pharmacies, could also increase access for populations—such as transgender young adults—who do not regularly access healthcare services in a clinic setting (Shah, Gilkey, Pepper, Gottlieb, & Brewer, 2014).

Many young adults in this study had never been tested for STIs. There are likely a variety of reasons for this, some stemming from gender identity (e.g., unwillingness to access services due to anticipated discrimination) and others more general. However, we found that most were willing to use an STI self-test at home, similar to previous findings among other populations (McRee et al., 2015), as well as recent research which finds high levels of acceptability for self-sampling for HPV (Seay et al., 2017). These results are encouraging given the low level of STI testing in the sample, and they further suggest that self-testing could be a viable way to screen transgender young adults, providing a promising alternative to clinician-collected samples among a population with documented barriers to accessing care.

Study strengths include a national sample of transgender young adults and inclusion of a range of measures of health and healthcare services. However, caution is needed when interpreting findings due to the small sample size, a common issue in research with small, hard-to-reach populations. Given our sample size, we were unable to examine differences in healthcare services identified in previous research, such as those based on race and ethnicity (Seelman, Young, Tesene, Alvarez-Hernandez, & Kattari, 2017; White Hughto, Murchison, Clark, Pachankis, & Reisner, 2016). The inclusion of gender identity measures on national

population-based surveys, such as the National Health Interview Survey, would allow for further probing of important differences in care, and is critical for monitoring trends in health status and health care utilization over time. Additional limitations include a cross-sectional design, a modest response rate, and a single item of LGBT identity used as a survey screener. Our measures of sexual behavior and healthcare services were based on self-report. However, previous research supports the reliability of young adults' reports of both sexual behavior (Sieving et al., 2001) and HPV vaccination (which results in a net bias of only 2% compared to medical records (Rolnick et al., 2013)). Anonymous, web-based administration of our survey may increase reliability of sensitive items such as sexual behavior. The survey did not assess respondents' specific sexual practices, mental or physical health problems, or whether respondents received any gender-affirming medical interventions. Finally, our findings regarding HPV vaccination intent and willingness to use an STI self-test may overstate actual practice as intentions do not always translate into health behavior (Ajzen, 2011).

Conclusion

Many transgender young adults are not receiving preventive healthcare services, including those related to HPV vaccination and sexual health. Given the documented barriers to care, novel approaches are needed to address this issue. For example, our findings suggest that use of home-based self-testing could improve STI screening rates and offer an alternative strategy to augment traditional clinic-based testing. A wider variety of exam, preventive services, and testing solutions, coupled with recommended training and education for providers in offering gender-competent care (Society for Adolescent Health and Medicine, 2013), could support health professionals in meeting transgender young adults' health needs in patient-centered ways.

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Table 1

Sample demographic characteristics

	<i>n</i>	(%)
Demographic characteristics		
Gender identity ^a		
Male, trans male or trans man	17	(50.0)
Female, trans female or trans woman	10	(29.4)
Genderqueer	7	(20.6)
Sex assigned at birth		
Female	23	(67.6)
Male	11	(32.4)
Age		
18–21	14	(41.2)
22–26	20	(58.8)
Race / Ethnicity		
Non-Hispanic White	23	(67.7)
Non-Hispanic Black	2	(5.9)
Hispanic	5	(14.7)
Other race/ethnicity	4	(11.8)
Education		
Less than college	9	(26.5)
Some college	13	(38.2)
College degree or more	12	(35.3)
Relationship status		
Never married, divorced, widowed, separated	23	(67.7)
Living with a partner, civil union, married	11	(32.4)
Employment status		
Currently employed	18	(52.9)
Not employed	11	(32.4)
Student	5	(14.7)
Annual household income		
<\$50,000	21	(61.8)
\$50,000	9	(26.5)
Not reported	4	(11.8)
Urbanicity		
Rural	7	(20.6)
Suburban	15	(44.1)
Urban	12	(35.3)
Region of residence		
East	11	(32.4)
Midwest	5	(14.7)
South	9	(26.5)

	<i>n</i>	(%)
West	9	(26.5)

Note. Percentages may not sum to 100 due to rounding.

^aAmong respondents who identified as transgender

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Table 2

Health and healthcare services among transgender young adults

	<i>n</i>	(%)
General healthcare services and experiences		
Insurance status		
No health insurance	5	(14.7)
Insures self (work, school, etc.)	7	(20.6)
Insured through parent's plan	12	(64.7)
Usual place for health care		
Private doctor's office	19	(55.9)
Community clinic or school/university clinic	10	(29.4)
None or emergency room	5	(14.7)
Had a routine check-up in past year		
No	22	(65.7)
Yes	12	(35.3)
Disclosed sexual orientation or gender identity to a healthcare provider		
No	12	(35.3)
Somewhat	4	(11.8)
Yes	18	(52.9)
Perceived discrimination by healthcare provider		
No	20	(58.8)
Yes	9	(26.5)
Don't know	5	(14.7)
HPV vaccination		
Received any shots of HPV vaccine		
No	22	(64.7)
Yes	12	(35.3)
Intent to get vaccinated in next year ^a		
No	4	(18.2)
Undecided	11	(50.0)
Yes	7	(31.8)
Sexual healthcare		
Ever had sex ^b		
No	13	(38.2)
Yes	21	(61.7)
Ever had a test for HIV		
No/don't know	20	(58.8)
Yes	14	(41.2)
Last time had an STI test (other than HIV)		
Never/don't know	19	(52.9)
1 year ago or less	13	(38.2)
Over 1 year ago	3	(8.8)

	<i>n</i>	(%)
Ever told by provider had...		
HIV	1	(2.9)
HPV infection	0	--
Genital warts	1	(2.9)
Other STI (e.g., gonorrhea, Chlamydia, herpes)	1	(2.9)
Willingness to us a self-test for STIs		
Not willing	3	(5.9)
Not sure	8	(23.5)
Willing	24	(70.6)

Note. Percentages may not sum to 100 due to rounding.

HIV=human immunodeficiency virus; HPV=human papillomavirus; STI=sexually transmitted infection

^a Among unvaccinated respondents (*n*=22)

^b Defined as “vaginal, anal, or oral sex”