EXPERIENCES OF GENDER MINORITY YOUTH WITH THE INTRAUTERINE SYSTEM

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Purpose: For menstruating adolescents identifying as male or gender non-conforming, puberty and the development of unwanted sex characteristics can be associated with significant psychological discomfort, and menarche can be particularly distressing. Menstrual suppression, i.e., the use of hormonal medications to decrease the frequency and volume of menstrual bleeds with the goal of achieving therapeutic amenorrhea, may relieve menstruation-related distress and improve quality of life in gender minority youth (GMY). The levonorgestrel-releasing intrauterine system (LNG-IUS) has emerged as a useful method of menstrual suppression and its long duration of use, favorable bleeding profile, secondary amenorrhea rates, and ease of use make it an attractive option for GMY. The purpose of this study was to evaluate the experience of menstruating adolescents identifying as male or gender non-conforming with the levonorgestrel-intrauterine system (LNG-IUS) as a method of menstrual suppression and compare to that of cisgender youth (CGY) utilizing the LNG-IUS for non-contraceptive indications.

Methods: A retrospective chart review of gender minority youth (GMY), age 12 – 22, who self-selected the LNG-IUS for menstrual suppression between 06/2014 - 01/2018 was conducted. GMY were then matched for age and time of insertion with CGY receiving the LNG-IUS for non-contraceptive purposes. Available participants were contacted by telephone to further explore LNG-IUS experience.

Results: Thirty GMY had the LNG-IUS inserted during the study period and 20 were able to be matched with CGY for age and time of insertion. GMY were significantly more likely to receive sedation for LNG-IUS insertion (50% vs 15%, p=0.04). Otherwise the LNG-IUS experience was similar between groups, including mean number of telephone/office visit encounters for a LNG-IUS concern, expulsion and reinsertion rates, and need for additional medications to control bleeding. On average, the continuation rate was 14.5±8.6 months in GMY and 14.6 ±11.9 in CGY (p=0.97). LNG-IUS removal occurred in 3 (15%) of GMY and 5 (25%) of CGY. Improvement in menstrual dysphoria was reported by 80% of GMY after the insertion of the LNG-IUS and 90% were satisfied with this method.

Conclusions: To our knowledge, this is the first study to evaluate the experience of GMY with the LNG-IUS. The finding of high satisfaction across participants supports our recommendation for the LNG-IUS as a form of menstrual suppression in GMY. Results were reassuring that the experience of GMY was similar to that of CGY, as was the low rate of complications and need for follow-up. Menstrual dysphoria and bleeding pattern improved in the majority of GMY. In conclusion we found that LNG-IUS insertion and utilization were well tolerated and beneficial in GMY seeking menstrual suppression for menstrual dysphoria and should be considered by health care providers.

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INVALIDATION EXPERIENCES AND PROTECTIVE FACTORS AMONG NON-BINARY ADOLESCENTS

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**Purpose:** Mental health disparities among transgender adolescents are well-documented, and have generally been attributed to minority stress. However, significantly less is known about the minority stress experiences of non-binary adolescents, or those who do not identify as solely male or female. In particular, little is known about non-binary adolescents’ experience of the minority stressor of “non-affirmation,” in which one’s gender identity is not affirmed by others. This study qualitatively explored the unique ways that non-binary adolescents experience non-affirmation, how they cope with it, and how it influences their mental health and well-being.

**Methods:** Fourteen non-binary adolescents between the ages 16 to 20 and residing in New York City and the SF Bay Area were included in the sample. Qualitative data collection occurred in two phases, with two interviews conducted with each participant. In Phase one, “lifeline interviews” were conducted, which used visual depictions of the participants’ life histories to display significant events in chronological order. In Phase two, photo elicitation was employed, which used participant-provided photographs as a supplement to verbal-only interviews. At the end of the first interview, participants were given prompts and asked to take photos that corresponded to the major themes explored in the study (such as experiences of stigma and discrimination, types of social support, and strategies of resilience). Participants returned two to three weeks later with their photos, which were used to guide the second interviews. All interviews were audio recorded, transcribed verbatim, coded, and analyzed using thematic analysis.

**Results:** We present participants’ experiences of non-affirmation using the construct of “invalidation,” which we define as the refusal to accept someone’s identity as real or valid. Findings indicate that the experience of invalidation is conceptually distinct from the established minority stressor of “non-affirmation,” due to the lack of societal visibility and understanding of non-binary identities. Non-binary adolescents in this sample experienced myriad forms of invalidation within multiple social contexts, which contributed to negative affective and cognitive processes, including: confusion, self-doubt, rumination, emotional distress, and internalized shame. For many participants, the cumulative stressors related to invalidation contributed to poor mental health outcomes. Several protective factors were also identified that participants found to be helpful in managing invalidation, including social support, engagement in activism, access to gender affirming resources, and internal resilience strategies.

**Conclusions:** This research represents one of the first studies to qualitatively explore experiences of minority stress among a diverse sample of non-binary adolescents. Data from this study suggest that identity invalidation is a unique form of minority stress faced by non-binary adolescents, with significant implications for their social and emotional well-being. These data underscore the importance of designing interventions that aim to prevent invalidation from occurring and to reduce the negative impact of invalidation on non-binary adolescents.

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LONG-TERM EFFECTS OF GAY STRAIGHT ALLIANCES ON PERCEIVED SCHOOL SAFETY AMONG LGB YOUTH IN WESTERN CANADA, USING A NOVEL ANALYTICAL METHOD TO ENHANCE CAUSAL INFERENCE FOR POPULATION HEALTH INTERVENTIONS

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Purpose: Gay Straight Alliances (also known as Gender and Sexuality Alliances, or GSAs) are school-based social clubs designed to support LGBTQ youth inclusion and wellbeing. While intervention studies of participants show promising short term results, studies of their wider effects on school climate, including for youth who do not participate, are limited to cross-sectional correlation studies; randomized trials to infer causality are generally infeasible, because it is difficult to randomize interventions across large populations to start at the same time, and to track changes over equal years. To address these limitations, we aimed to identify potential long-term effects of GSAs on LGB students’ perceived safety in Western Canadian schools, using a new method to evaluate site-level longitudinal effects of non-randomizable population health interventions.

Methods: Data were from 1,625 lesbian, gay, and bisexual (LGB) students in 135 public schools in the province-wide cross-sectional BC Adolescent Health Surveys of 2003, 2008, and 2013 (grades 7-12; 67.4% girls; 77% bisexual; mean age 15.7 years). Individual level variables included a perceived safety scale (6 items, about washrooms, classrooms, hallways, etc., Cronbach α>0.90) and age as a covariate. School level information about GSA presence and length in existence was gathered in 2008 and 2014. We used the Site-Level Longitudinal Effects of Population Health Interventions (SLEPHI) novel design and analytical approach, involving nested multi-group, multi-level modeling of repeated cross-sectional student data (Level 1) within schools (Level 2), across survey years. Length of time since GSA started was calculated for each survey; schools with no GSA at any time point were coded 0. Repeated MG-ML models constrained varying parameters to account for secular trend, cohort effects, measurement error, and measurement equivalence, to address requirements to support causal inference.

Results: In 2003, only 9 schools (7%) had a GSA; by 2013, 64 (52%) did so. Length of GSA ranged from 0-14 years. Controlling for age, the MG-ML models found GSA length was linearly related to increased school-level perceived safety among LGB students (b=0.17, SE=0.07, p=.021), i.e., the longer a school had a GSA, the greater the perceived safety among its LGB students. This relationship remained consistent across all 3 survey years, and for the longest running GSA (14 years).

Conclusions: Even when GSAs started in different years, with potentially different societal influences affecting the survey cohorts, we found LGB students in schools with longer established GSAs reported higher levels of perceived safety throughout various parts of the school, even after 14 years, suggesting a robust protective effect of GSAs on overall school climate, not just for individual participants. Results affirm both cross-sectional school-based survey findings and shorter-term longitudinal studies of GSA participants; health professionals should encourage schools to support GSAs and work to maintain them. As well, this new SLEPHI method evaluates population health intervention outcomes over longer time, with larger samples and lower costs, than typical non-randomized longitudinal studies of individuals over time, a distinct benefit for school-based interventions, where students attend only 4-5 years.

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PHOTOVOICE: EMPOWERING TRANSGENDER AND GENDER-EXPANSIVE YOUTH

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Purpose: Transgender and gender-expansive youth have unique healthcare needs; however, they often eschew visiting health centers given a history of misinformation and discrimination. Photovoice, a community-based participatory research method, is an apt technique to engage this population. This study sought to learn from the unique perspectives of transgender and gender-expansive youth on what may challenge or facilitate gender identity affirmation to improve healthcare usability for those receiving care at a gender affirming clinic.

Methods: We recruited 16 transgender and gender-expansive youth from a gender clinic at a children’s hospital. Eleven transmen and five transwomen (ages 16-21) participated in an initial session that discussed photography techniques, safety, and ethics. Participants were prompted to take photographs for one month to explore how their gender identity affects their social relationships including their clinical care. After one month, all participants engaged in critical reflection of their photos and an in-depth interview with a study member. Of the 16 participants, 6 also participated in a focus group. Interviews and the focus group were audio recorded, transcribed, and analyzed using Grounded Theory.

Results: Three key themes emerged: positive effects of care, gender representation, and advocacy. Participants described many ways that transition and gender affirming care had positively affected their physical, emotional, and social health: “Transitioning has been my process of finding safety and of finding affection, both within and without myself.” Participants also emphasized the importance of representations of gender and trans identity. They confronted how idealized masculine or feminine gender expression should not be an expectation: “I see it so much with the celebrities that are trans and open about it. They present so femininely and it’s a hyper-femininity that not everyone can attain or even wants to obtain.” Other participants mentioned being disregarded by peers, family, and health providers by not presenting convincingly enough or by experimenting with makeup, clothing, or other gendered activities. Some emphasized that being trans is only one part of their identity and they rebuked social relationships or healthcare services that exoticized them as trans above all else: “A really important part of my transition and my journey is [that] another person wouldn’t see me as an object or an oddity.” Lastly, participants expressed the importance of advocacy on behalf of others and recognized that they receive gender affirming care others are not able to access: “If you are in a place of privilege, it is your responsibility as someone who has power in society to stand up for the people who don’t.”

Conclusions: Transgender youth identified many opportunities to improve the quality and accessibility of gender affirming care. Their narratives revealed that youth experience and express gender in complex ways, and experimentation should not impact a person’s ability to affirm their gender identity. To further improve gender affirming care, providers need to take this complexity into account in their provision of comprehensive health services.

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Purpose: Homonegative verbal comments, i.e., degrading or stigmatizing comments in reference to sexual orientation, whether they are direct or overheard, can have negative effects on youth. However, less is known about the association between the source (friends and non-friends) of homonegative comments and psychosocial well-being. Canada has adopted clear laws against discrimination based on gender and sexual orientation, and schools have established practices and policies to protect and empower sexual minority youth. In an increasingly inclusive context like Canada, this investigation examined the effect of the sources of hearing and overhearing comments on psychosocial well-being. Further, participants’ gender identity and sexual minority status were tested as moderators of the links between homonegative comments and psychosocial well-being.

Methods: Data were obtained from a cohort of students in the second year of a four-year school-based Wellness Initiative in urban western Canada (N=1371; 51% male, mean age = 15.26 years, SD 1.5). Students were in grades 8 to 12, and 21% identified as a sexual minority (including mostly heterosexual as members of the sexual minority group). The survey was administered during regular school hours on individual tablets running survey software. Self-reported measures included the Homophobic Content Agent Target (HCAT) Scale, Mattering to Others Questionnaire (MTOQ), Modified Depression Scale (MDS) and Perceived Safety at School Scale. Analyses included chi-square to compare prevalence of overhearing and being targets of homonegative comments by gender and orientation, and by source of the comments (none, friends, others and both). 2 X 4 ANOVAS for gender by source of comments, and for orientation by source, were used to test associations between exposure to homonegative comments and mattering to others, depressive symptoms, and perceived safety.

Results: Homonegative comments were pervasive: only one third (34%) reported no homonegative comments, 13% overheard only friends, another 13% overheard only others, and 37% overheard homonegative comments by both; being directly targeted was somewhat less common, with 53% reporting no comments, 12% targeted by friends, 8% by others, and 24% targeted for comments by both friends and others. Boys reported overhearing \( \chi^2(3)=54.76, p<.001 \) and being targeted \( \chi^2(3)=161.24, p<.001 \) for homonegative comments more than girls, and sexual minority boys and girls were more likely to overhear homonegative comments than non-sexual minorities. ANOVAs showed regardless of orientation, youth who were both targeted and overhead homonegative comments were less likely to perceive themselves as mattering to friends, and had higher scores on depressive symptoms than youth who never heard or were targeted by comments. Gender moderated the association between comments and mattering to friends with boys affected more than girls. Students’ sense of safety at school was positively associated with the absence of homonegative speech or only hearing it from friends, rather than others.

Conclusions: In Canada, despite efforts towards reducing discrimination and fostering inclusion for sexual minority and gender diverse youth, homonegative speech is still present in schools, and sexual minority and heterosexual youth alike continue to experience its negative effects on their sense of safety, mattering to others, and mental wellbeing.

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TRADING SEX AND SEXUAL EXPLOITATION AMONG TRANSGENDER YOUTH IN CANADA
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Purpose: Trading sexual activities for money, drugs, food, shelter, protection or basic needs (also defined as sexual exploitation among adolescents under age 18) can have significant health consequences, and ranges widely among youth sub-groups, from around 1% in school populations to over 40% among homeless youth. Most research has focused on adolescent girls, with some about boys, but limited research includes transgender youth. Transgender youth appear to be more likely to be victims of violence and sexual abuse than their peers, two commonly identified risks for trading sex. This study aimed to identify predictors of trading sex or sexual exploitation among transgender youth in Canada.

Methods: Data were drawn from the 2014 Canadian Trans Youth Health Survey, a national on-line survey of youth age 14 to 25, from those who responded to questions about ever trading sex (N=656). Of those, 276 (42.5%) identified as transmasculine, 107 (16.5%) as transfeminine, and 266 (41%) as non-binary; mean age M=20.68, SD=2.88; 45.5% identified as ethnic minority or mixed ethnicity. We identified predictor variables using bivariate logistic regressions, and odds ratios as indicators of effect size.

Results: A tenth of participants (66, 10.1%) reported having traded sex (22.7% were under 18). Of those who had traded sex, 32.8% were assigned male at birth, and 67.2% were assigned female; 37.9% identified as transmasculine, 22.7% as transfeminine, and 39.4% as non-binary. Youth who had been sexually abused were 20 times more likely to trade sex, and victims of sexual assault were over 7 times more likely. There was no difference among gender identities for trading sex. People who identified as a person of color or mixed ethnicity had higher odds of trading sex than those who identified as white (OR=2.7), and those of Aboriginal or Indigenous ethnicity higher odds (OR=4.1) than their peers. Participants were over 4 times more likely to trade sex if they had run away from home, or obtained trans-related hormones from illicit sources. Those who used injected drugs had higher odds (OR=11.9) of trading sex, as well as those who used illicit drugs (OR=7.9).

Conclusions: No gender differences were found, contradicting the general perception transwomen are at greater risk of exploitation or trading sex, however, visible ethnic minorities appeared more vulnerable, suggesting racism plays a role in exploitation. Sexual abuse as a major predictor emphasizes the need to identify and support victims early; health professionals should screen for sexual abuse among transgender adolescents. Additionally, odds of trading sex were much higher for runaway or homeless youth, those with food insecurity or illicit substance use, suggesting the importance of social safety nets for trans youth. Finally, results suggest the need to improve support and access to hormone treatments for trans youth, as those who cannot get them through health care may access them through illicit sources, and increase their odds of trading sex to afford them.

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