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Preventive Medicine 153 (2021) 106789

Contents lists available at ScienceDirect

Preventive Medicine

journal homepage: www.elsevier.com/locate/ypmed

Short Communication

Self-rated mental health among sexual health service clients during the first months of the COVID-19 pandemic, British Columbia, Canada

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ARTICLE INFO

Keywords:
Mental health
Sexual health
Service integration
Syndemic theory

ABSTRACT

We investigated self-reported mental health during the first three months of the COVID-19 pandemic (March–May 2020), using a survey of HIV-testing and sexual health service clients from British Columbia, Canada ($N = 1198$). Over half (55%) reported their mental health as poor at the beginning of the COVID-19 pandemic, more than double that of the general Canadian population in the same time frame (22%). Acknowledging that this burden of poor mental health that is likely to persist in the coming years, we propose that sexual health clinics should facilitate access to mental health supports as a low-barrier point of primary care contact.

1. Introduction

Mental health concerns are common among individuals accessing sexually transmitted infections (STI) and HIV testing, prevention, and treatment services (Salway et al., 2019). The co-occurrence of elevated mental health conditions among individuals at risk of STI and HIV has been called a syndemic—or, synergistically interacting epidemics—and is explained by mental and sexual health being correlated and having shared root causes (Singer et al., 2017). These root causes include social and structural factors that stigmatize and marginalize some members of society (e.g., discrimination, social exclusion) and consequently produce maladaptive social and behavioral strategies (e.g., social avoidance or isolation, sexual compulsivity) that in turn lead to negative cognitive-affective responses (e.g., poor mental health) as well as sexual activities associated with STI or HIV transmission (Hatzenbuehler et al., 2013; Pachankis, 2015). Acknowledging the interconnectedness of STI/HIV and mental health, the large burden of unmet mental health needs among STI clinic clients, and the opportunity for low-barrier (i.e., free of cost, not requiring identification/insurance) sexual health services to serve as a stopgap for clients without access to routine primary care providers, we have previously called for sexual-mental health service bundling, an approach we termed 'syndemic service integration' (Salway et al., 2019).

The COVID-19 pandemic has unfortunately led to a worsening of mental health among the general population (Statistics Canada, 2020). The threat of COVID-19 infection itself has increased anxiety about health, while COVID-19 public health control measures, including workplace closures and social distancing, have contributed to additional stress, as well as the loss of many interpersonal forms of support (Park et al., 2020). Accordingly, the Canadian national prevalence of poor self-rated mental health has increased from approximately 7% pre-COVID-19 to 18% at the beginning of March 2020, and 22% at the beginning of May 2020 (Statistics Canada, 2020; Mawani and Gilmour, 2010). Although nearly everyone has experienced some form of psychosocial impact during the early phase of COVID-19, declines in mental health in Canada have been most pronounced among younger individuals, those with existing mental illness, people with disabilities, Indigenous people, and lesbian, gay, bisexual, transgender, queer, and Two-Spirit (LGBTQ2) people (Jenkins et al., 2021). These same groups had inequitable access to mental health services pre-COVID-19, suggesting that poorer mental health reported by these populations may have be exacerbated by disruptions in access to supportive mental healthcare during COVID-19

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https://doi.org/10.1016/j.ypmed.2021.106789
Received 20 April 2021; Received in revised form 3 August 2021; Accepted 4 September 2021
Available online 8 September 2021

(Salway et al., 2019).

Sexual health service clients are a client group inclusive of those at higher risk for STI/HIV that experiences a large burden of mental health concerns, with up to 30% meeting thresholds indicative of clinically significant anxiety or depression, and 7% reporting recent thoughts of suicide (Achterbergh et al., 2020; Salway et al., 2019). In one study, the prevalence of poor self-rated mental health among sexual health clinic clients (14%) was twice the prevalence in age-adjusted estimates from the general population (7%) (Mawani and Gilmour, 2010; Salway et al., 2019). Most of these clients—71% in one study—have not yet had a chance to talk with a provider about their mental health concerns; in other words, a majority of sexual health service clients have unmet mental health service needs (Achterbergh et al., 2020; Salway et al., 2019). This high level of need is compounded by limited primary care access for many sexual health service clients, with 42% reporting no regular healthcare provider (or 'family doctor') in one study (Salway et al., 2019). We previously demonstrated how sexual health services act as a stopgap, offering a point of health service continuity and referral in the absence of other primary care attachments (Black et al., 2020).

Given the opportunity for low-barrier sexual health services to address clients' unmet mental healthcare needs by connecting them to care, and the loss of these critical points of service during the early phase of the COVID-19 pandemic (Stephenson et al., 2020), we investigated self-reported mental health during the first three months of the COVID-19 pandemic (March–May 2020), using a survey of sexual health clients from British Columbia, Canada. As a secondary objective, we explored differences in self-reported mental health across socially defined sub-groups, including LGBTQ2 people, Indigenous people, and other racialized minorities.

2. Methods

We used previously established methods to survey individuals who recently accessed a provincial public health STI/HIV clinic or an online STI/HIV testing service, *GetCheckedOnline* (Gilbert et al., 2019). Sexual health service clients who had visited the clinic or used *GetCheckedOnline* within 12 months of the start of the COVID-19 pandemic (March 15, 2019 – March 17, 2020) and who gave consent to be contacted were sent an invitation to answer the survey via e-mail. The survey ran from July 21 to August 4, 2020, and reminder e-mails were sent to eligible participants thrice during this period. Additional methodological details are described elsewhere (Gilbert et al., 2021).

The questionnaire included a broad range of questions related to changes in sexual behavior, access to STI/HIV prevention and treatment, and the following measure of mental health; "In the first few months after the pandemic began (March to mid-May 2020), how would you have rated your mental health?: [excellent; very good; good; fair; poor]". Consistent with common practice and validation studies of self-rated mental health measures, we collapsed the latter two response options representing poor self-rated mental health (Mawani and Gilmour, 2010). Self-reported age was categorized into three age groups: <30, 30–39, and 40+, in order to ensure an approximately even distribution of participants by tertile. Sexual minorities, or lesbian, gay, bisexual, or queer people, were identified by asking, "what best describes your sexual identity? [Gay/lesbian (homosexual); Bisexual; Queer; Pansexual; Other]." Transgender (trans) people were identified by asking, "do you identify as transgender, have lived experience as trans, or have a history of gender transition?" Indigenous and other racialized minorities (non-white) were identified by asking, "which of these do you identify with? [Arab, West Asian; Black; East Asian; Indigenous (First Nations, Inuit, Métis); Latin American; South Asian; Southeast Asian; Other]."

Analyses were descriptive, and comparisons between socially defined sub-groups were evaluated using a *Chi-square* test, $p < 0.05$ considered statistically significant. The study protocol was reviewed and approved by the Behavioral Research Ethics Board of the University of British Columbia.

3. Results

A total of 1198 sexual health clients responded to the survey, representing 28% of those invited to participate (42% among *GetCheckedOnline* clients, 27% among clinic clients), with further details described elsewhere (Gilbert et al., 2021). Most (71%) were under 40 years old, 4% of respondents were Indigenous, 24% identified with another racialized identity, 47% were gay, lesbian, bisexual, queer, or pansexual, and 3% were trans (Table 1).

Overall, 55% reported their mental health as poor (25% as poor on the 5-point scale, 30% as fair on the 5-point scale; hereafter collapsed into one category) at the beginning of the COVID-19 pandemic (March – May 2020), while 25% reported their mental health as good, 13% as very good, and 7% as excellent. The prevalence of poor self-rated mental health at the start of the pandemic was 17% greater (absolute difference) for Indigenous respondents and 12% lower (absolute difference) for racialized non-Indigenous respondents, as compared with white respondents ($p < 0.05$). The prevalence of poor self-rated mental health was 8% greater (absolute difference) among those <30 years of age and 6% greater (absolute difference) among those 30–39 years of age, as compared with respondents aged 40 and older ($p < 0.05$). The prevalence of poor self-rated mental health at the start of the pandemic was 17% greater (absolute difference) for trans respondents, as compared with cisgender respondents, though this difference was not statistically significant.

4. Discussion

Over half (55%) of sexual health service clients in British Columbia, Canada, self-rated their mental health as poor at the start of the COVID-19 pandemic (March – May 2020). This prevalence estimate is more than double that of the general Canadian population in the same time frame (22%) (Statistics Canada, 2020). In comparison with the prevalence of poor self-rated mental health pre-COVID-19, the prevalence of poor self-rated mental health tripled post-COVID-19, in both the general

Table 1
Self-rated mental health among sexual health service users during the COVID-19 pandemic, March–May 2020.

Self-reported sub-populations	N (column %)[c]	Poor mental health spring 2020[d] n (row %)
Total sample		
Overall	1198	653 (54.5)
Age		
<30	439 (36.7)	256 (58.3)*
30–39	411 (34.4)	245 (59.6)*
40+	345 (28.9)	149 (43.2)
Race/ethnicity (mutually-exclusive)		
Indigenous	46 (3.9)	34 (73.9)*
Racialized, non-indigenous	289 (24.4)	129 (44.6)*
White[a]	848 (71.7)	479 (56.5)
Sexual identity		
Gay, lesbian, bisexual, queer, pansexual, other	566 (47.5)	317 (56.1)
Straight	625 (52.5)	333 (53.3)
Trans status[b]		
Yes	31 (2.6)	22 (71.0)
No	1151 (97.4)	621 (54.0)

[a] White only, White and West Asian, White and Latin American.
[b] Question: Do you identify as transgender, have lived experience as trans, or have a history of gender transition? Yes, No, Prefer not to say.
[c] Percentages calculated excluding missing values.
[d] Selected "Fair" or "Poor" to: In the first few months after the pandemic began (March to mid-May 2020), how would you have rated your mental health?
* $P < 0.05$ based on *Chi-square* test.

population (7% pre-2020 versus 22% in spring 2020) and the population of sexual health service clients (14% pre-2020 versus 55% in spring 2020) (Mawani and Gilmour, 2010; Salway et al., 2019). As with analyses of sexual health clients' mental health pre-COVID-19 (Salway et al., 2019), social disparities were inconsistent, with some (notably, Indigenous clients) but not all socially defined sub-groups faring worse at the start of the pandemic. Although we did not have a sufficient sub-sample of trans respondents to achieve statistical significance, we believe the magnitude of difference in poor self-rated mental health between transgender (71%) and cisgender (54%) clients warrants attention. As with Canadian surveys of the general population during the first few months of the COVID-19 pandemic (Gadermann et al., 2020), we found a greater burden of poor self-rated mental health among younger age groups, a pattern that may reflect greater precarity in life circumstances (including those related to employment/career) at earlier stages of life, and in turn, increased distress in response to uncertainty and activity restrictions during the COVID-19 pandemic (Glowacz and Schmits, 2020).

In light of these findings, we call for greater opportunities to assess sexual health service clients for mental health concerns and provide or refer to mental health supports. Given that the COVID-19 pandemic has accelerated the provision of online or virtual mental health supports, these services should be given particular attention, and may be especially appealing to clients of online STI/HIV services (Rajkumar, 2020). In interviews with sexual health providers and administrators, we previously learned that trust in mental health service provision—particularly trust that the mental health providers are sex-positive, and trans, and LGBQ-affirming—is an important prerequisite to assessing and referring sexual health clients (Black et al., 2020). With this in mind, our team has compiled a searchable online database (http://mindmapbc.ca) of local low-barrier mental health services, with the ability to filter services to identify those that are LGBTQ2-affirming and those that are available online or virtually. Given the disparity in self-rated mental health by Indigeneity in our survey data, we are further working with Indigenous colleagues to add the ability to filter for services that are Two-Spirit and Indigenous centered.

Notwithstanding the urgency of these actions, we acknowledge that confidence in our findings may be limited by the nature of our sample and the measures we have used. As a non-probabilistic sample, we are uncertain the degree to which survey respondents represent the larger client population, particularly given that only 28% of invited clients answered the survey. For example, supposing that clients experiencing mental distress were more likely to respond to the survey—e.g., out of hope/interest in having someone hear about their experiences—we may have overestimated the prevalence of poor self-rated mental health in this sample. The online nature of this survey further limited our access to all members of the source population of sexual health service users, notably excluding those without e-mail addresses or otherwise unable to receive or respond to online questionnaires, as reflected in the higher response rate among *GetCheckedOnline* clients, as compared with clinic clients.

Self-rated mental health has been previously validated and has strong predictive power of prevalent diagnostic interview-measured disorders, especially depression and bipolar 1 (Mawani and Gilmour, 2010). Nonetheless, self-rated mental health misclassifies some individuals with mental morbidity assessed through diagnostic interviews, among whom 42% (for depression) self-rate their mental health as good (Mawani and Gilmour, 2010). This suggests that we may have underestimated the prevalence of poor mental health in our sample. We additionally acknowledge that a global measure of mental health does not inform us of the specific mental health conditions clients were experiencing during the summer of 2020; in our previous survey, we found that the most common mental health needs corresponded to anxiety (29%), depression (26%), and suicidal ideation (7%). We did not measure whether respondents were able to access mental health treatment and thus cannot estimate the levels of unmet service needs; however, other concurrent surveys in Canada demonstrated very low uptake of virtual mental health resources during the spring of 2020 (Richardson et al., 2020).

As a next step, we propose that researchers and service administrators conduct in-depth consultations with sexual health clients to understand how sexual health services can feasibly integrate mental health services and/or assess and refer clients to appropriate mental health services in a timely fashion. The psychological impact of the COVID-19 pandemic is expected to be profound and long-lasting, following experiences of historically comparable events (Holmes et al., 2020). This means that sexual health clinics should prepare for increased demand in mental health services in the coming years. In this sense, COVID-19 presents an opportunity to accelerate interventions that were underway before 2020, including expansion of online STI/HIV services and integration or bundling of sexual and mental health services.

Declaration of Competing Interest

TG was an investigator on research grants funded by Gilead and Merck. The remaining authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Acknowledgments

Funding: This work was supported by the Canadian Institutes of Health Research (CIHR) Team Grant: HIV Implementation Science – Component 2 Grant (CTW – 155387).

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