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Examining Menstrual Health Experiences in Philadelphia, PA: A Qualitative Investigation

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Abstract

Background: While menstruation is a physiologic process, it remains highly stigmatized. Despite the sheer number of menstruators, menstruation is a highly individualized experience, with wide variation in duration, symptoms, and management. This wide variability lends itself to large disparities in access to menstruation management products and subsequently the lived experience of menstruators.

Objectives: The research team sought to understand lived menstrual experiences, symptoms, management tactics, and commonly used and desired resources among 20 cisgendered women aged 18–45 years in Philadelphia.

Design: This project was a qualitative research study.

Methods: We used a collaborative, community-based participatory research approach with No More Secrets, a Philadelphia-based grassroots sexuality awareness and menstrual health hub. Semi-structured telephone interviews were used to gain insight into general menstruation-related experiences, communication, worries, and concerns, with subsequent thematic analysis via Key Words in Context approach.

Results: Four themes emerged following analysis: cycle characteristics, menstruation management, coping resources, and future resources. Participants largely spoke about their menses as a negative experience, asked for more comprehensive, verified sources of information and needed greater access to menstrual management supplies.

Conclusion: Menstruation is a highly individualized experience with a large variety in knowledge, menstrual product use, and individual needs. Despite the individuality of menstruation, our community-based research shows that there is a dire need for interventions that promotes knowledge and access to menstrual care.

Keywords

menstrual equity, menstrual health, menstruation

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Introduction

Menstruation remains a highly stigmatized, socially fraught, and physiologically misunderstood topic at the individual, community, and societal level.^{1–5} Menstruation occurs roughly 400–500 times in an individual's lifetime and lasts ~3–5 days per cycle.^{6,7} While menstruation refers to the physiologic monthly shedding of the uterine lining, which causes visible bleeding, it is often accompanied by other signs and symptoms—most commonly abdominal cramps, bloating, breast tenderness, dysregulated sleep,

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and mood changes.^{7,8} Some people who menstruate experience severe symptoms, such as excessive bleeding, debilitating pain, migraines, or amenorrhea—the absence of menses—which cause physical and emotional distress leading to adverse health and social impacts.⁹ Because roughly half of the world's population will menstruate at some point in their lives, managing menses and the associated symptoms is of the utmost importance.

Menstrual management describes an individual's practices and products used to manage their period and its associated symptoms.¹⁰ Appropriate menstrual management is important to prevent skin irritation and infections of the reproductive and urinary tracts and limit social restrictions due to menstruation.^{11,12} Globally, the most frequently used menstrual management products are pads. However, menstrual product use is largely location and resource-dependent, with many menstruators relying on other materials, such as cotton or straw.¹³ Menstruators report using analgesics including acetaminophen and NSAIDs, heat, herbal remedies, and exercise to treat associated menstrual symptoms.^{14–16} The decision regarding which menstrual management products to use may not always reflect the most effective or comfortable product but product availability, affordability, and user familiarity, highlighting the intersection between menstrual management and period poverty.^{17,18}

Period poverty describes the lack of access to the physical (i.e. menstruation products, sanitation amenities) and social (i.e. education, support) resources necessary to manage menstruation.^{19–22} Prior research has shown that regardless of access to menstrual care, periods are associated with feelings of shame and uncleanness. Lack of care and resource access, as seen in period poverty, combined with the aforementioned feeling creates a societal environment that prevents candid conversation about menstrual needs.^{19–21} Research must seek to understand current and preferred menstrual management practices and desired additional resources, to achieve menstrual equity, the notion that menstruators should be able to manage their menses freely and with dignity.¹⁹ A review of current publications related to menstruation highlights that physiologic, anthropological, and public health research has historically been conducted in primarily low- and middle-income countries, with little focus on period poverty as it pertains to high-income countries, such as the United States. While the period poverty in the low- and middle-income countries is of equal importance, the challenges and potential interventions for these populations differ from those of menstruators in high-income countries, creating an opportunity to investigate the unique challenges of menstrual health pitfalls in this setting.^{7,19–21}

The primary aim of this study is to understand the lived menstrual health experiences among cisgendered women aged 18–45 years living in Philadelphia, PA, USA. Specifically, we hope to appreciate menstrual management

tactics, commonly used menstrual resources, and menstrual education. By better understanding these nuances, we hope to find the areas of menstruation care gaps in which future work can provide intervention through interdisciplinary methods.

Methods

Community-based participatory research approach with No More Secrets Mind Body Spirit, Inc

We employed a collaborative community-based participatory research (CBPR) approach with our community partner No More Secrets Mind Body Spirit, Inc. (NMS). NMS is a Philadelphia-based grassroots sexuality awareness organization and menstrual health agency, owned and operated by a mother–daughter team. NMS has developed the only feminine hygiene bank and in-home delivery service in Philadelphia and the only brick-and-mortar Menstrual Hub and Uterine Care Community Center in the United States.²³ NMS works solely off donations to spread awareness about period poverty, advocate for menstrual equity and equal access to menstrual products, and deliver menstrual hygiene bags filled with 3 months' worth of products to menstruators in need.²³ Their catchment population tends to be Black/African American or Latinx individuals living in North and West Philadelphia neighborhoods.

CBPR is a research approach that prioritizes community member collaboration with scientists to address health disparities using equal buy-in and partnership. NMS and the lead author have been collaborative community–academic partners for several years. In the context of this study, NMS leadership and the research team held weekly meetings discussing the needs of their clients and how they would like to see the area of menstrual health and wellness grow, and hear real-time testimony of what their clients wished to see out of this research project. Moreover, the NMS leadership team has direct lived experience with period poverty and menstrual health needs, and are community members of the neighborhoods which their organization serves. NMS leadership was involved in all aspects of project including conceptualization, planning, implementation, and evaluation, providing a critical voice for their stakeholders. The Thomas Jefferson University Institutional Review Board (#20G.743) approved this study.

Sample and recruitment

We recruited participants using convenience sampling from NMS's Philadelphia catchment population. Eligible participants included cisgendered women, aged 18–45 years, who received a menstrual hygiene bag from NMS in the last 2 years (approximately N=2000). If participants did not meet all these criteria, they did not qualify for this

study and were not sent recruitment material. We sent an Institutional Review Board (IRB)-approved recruitment letter to those individuals via email asking if they would like to participate or not, for potential participants without an email address, we conducted recruitment phone calls reading the letter. Notably, while this project focuses on cisgender women who menstruate, not all people who identify as women menstruate, and not all menstruators identify as women. NMS serves all menstruators, but given the different lived experience that non-cisgender menstruators may have, we did not feel as though it would be appropriate to include them in this study. Investigation of non-cisgender menstruators lived experience deserves its own focus.

Data collection procedures and interview guide

We conducted interviews in Fall 2020 via telephone and recorded via Zoom. Each followed a flexible, semi-structured guide of pre-determined questions and question probes and ran for approximately 30–45 min. The research team developed the interview guide based on a thorough literature review and NMS's prior community work. We pilot-tested and revised the guide before data collection. Pilot testing included a total of four practice interviews, with NMS serving as the research participant and the academic partners serving as the interviewer. Through these practice interviews, question probing and conversation pacing were discussed and modified. The team assigned each participant a unique identifier to protect anonymity during interview recordings. Participants received a US\$5 Walmart gift card and a 3-month menstrual hygiene supply bag on completion of the interview. Interview questions asked about general menstrual health experiences, menstrual health, hygiene communication among friends, family, community members, and healthcare providers, and how communication could impact menstrual experiences. All members of the research team conducted interviews. The Standards for Reporting Qualitative Research (SRQR) guidelines for qualitative research were used throughout the conceptualization of this study and the writing of this article.

Research team

Members of the research team included an academic–community partner Co-Principal Investigator team consisting of a PhD of Epidemiology with mixed-methods research expertise in women's and reproductive health (A.R.C.), and the Founder and CEO of a sexuality awareness non-profit (MEd in Human Sexuality) (L.M.). Two other primary team members included the Executive Director of the sexuality awareness non-profit (N.M.) and two medical student research assistants (B.K. and O.R.). A research coordinator not involved in project conceptualization assisted with conducting interviews,

qualitative coding data, and handling administration duties (B.K.).

Data analysis

A professional transcriptionist, outside of the research team, transcribed the interview recordings. The research team analyzed the interview using the Key Words in Context (KWIC) approach, an exploratory, content-driven investigation presented in the work by Ryan and Bernard.²⁴ The analysis employed a three-level approach to ensure consensus and maximize idea generation.²⁵ Beginning with Level I, transcripts were read and re-read to identify keywords and develop a preliminary codebook. Using the preliminary codebook, the team coded the first two transcripts together and revised the codebook as needed. For subsequent transcripts, all individuals coded independently and reviewed codes as a group. The research team resolved coding discrepancies through consensus discussion. Level II coding ascertained associated patterns presented in the text from Level I. Finally, the KWIC approach identified and organized patterns into themes by Level III.²⁵ The team used the results to prepare written summaries and analytic memos of emergent themes.

Results

The average age of participants (N=20) was 20 years (SD=8.9) and 17 (85%) were Black or African American. Nearly two-thirds of participants reported some college education but no degree (65%, n=13). On average, they had lived in Philadelphia for 28 years (SD=10.4) with 50% currently living in a North Philadelphia zip code. Mean age of menarche was 12 years (SD=2.1).

Four themes emerged from the analysis that embodied the lived experience of the participants, surrounding characteristics and management of their menstrual cycles, resources used to better understand and cope with menses, and resources needed in the future (Figure 1). Themes, patterns, sample codes applied, and exemplar quotes that highlight the themes that emerged through analysis can be found in Table 1.

Theme 1: menstrual characteristics underscore burdensome cycle attributes

In total, 16 participants described their menstrual characteristics, particularly in terms of uncomfortable physical symptoms, irregularity, and heaviness. However, 13 participants emphasized they have extreme cramps and pain during their period, while 8 experienced heavy flow, severe bleeding, or clots. Three participants noted that their cycles are long, one participant described that she did not get her period for 2 months but then it returned for several weeks. Three participants described frequent headaches during

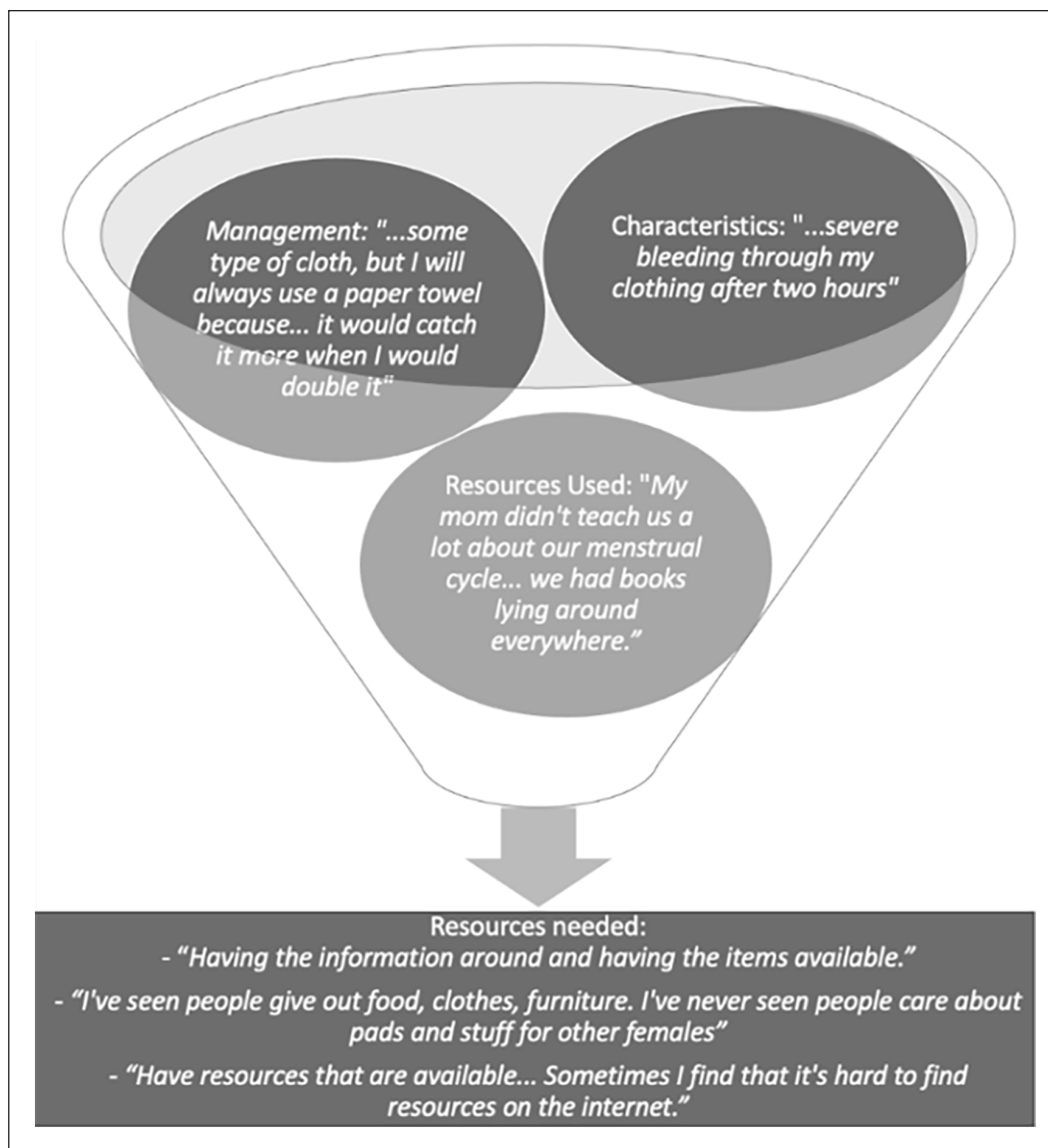


Figure 1. Using community input to inform advocacy.

menses, while three others stated that they get physically ill due to extreme pain. Three participants said they felt emotional lability, with feelings of stress or general mood swings during their period. Two participants said their periods were irregular or unpredictable, while two others stated that their periods were uncomfortable.

Theme 2: menstrual management processes focused on products and medication

In total, 10 participants discussed period management processes; described largely by traditional and non-traditional products used and various medications. Menstrual products used included paper towels, rags, tissues, cloths, doubled-up pads or period panties, and period-designated underwear. Four discussed menstrual pain management. Three used

heating pads, hot water bottles, over-the-counter medications, such as Tylenol or Aleve, or prescription medication for extreme pain. One said they try to relax and get comfortable by watching a movie. Four stated that they started birth control to manage their cycle, with two saying that birth control slightly improved their discomfort, one saying it made her feel bloated and uncomfortable, and one saying it made her period worse.

Theme 3: community-based resources and independently sought Internet resources were predominately used to understand menstruation

Eight participants discussed resources they previously used to better understand menstruation. Three denoted that

Table 1. Theme, patterns, codes, and exemplar quotes from participants regarding menstrual experiences, resources, and needs.

Themes	Patterns	Codes	Exemplar Quotes
Menstrual characteristics underscore burdensome cycle attributes. (N = 16)	Menstrual characteristics were described in terms of uncomfortable physical symptoms, irregularity, and heaviness.	Bleeding, blood, cramps, pain, duration, flow, intensity, long, heavy, stress, worry, irregular	<ul style="list-style-type: none"> I've even had such severe bleeding earlier on where I've soiled through my underpants and my clothing after two hours.¹⁰ I didn't get a menstrual for like maybe two months, and then I just got it last month. And it stayed on for almost two weeks and I'm like, "Oh gosh, I don't like this. Like when is it going to stop? When is it going to end?"⁶
Menstrual management processes focused on products and medication. (N = 10)	Menstrual management processes were described by traditional and non-traditional products used and OTC and Rx medications.	Product, pads, underwear, panties, towel, cloth, medicine, birth control, relax	<ul style="list-style-type: none"> A paper towel, more than one paper towel, using. . . What was the other one? Oh, a cloth, some type of cloth, but I will always use a paper towel because, to me, it would catch it more when I would double it.⁹ I buy the period panties and sometimes I'll double up.³ Mandatory that you got to wear the overnight pads, you can't wear an orange pad, a yellow pad. The only time that you can wear those type of pads is when you don't see the clotting no more, when the bleeding is not as heavy no more, your stomach is not cramping up.²
Community-based resources and independently sought internet resources were predominately used to understand menstruation. (N = 8)	Previously used resources focused on community programs, self-driven exploration via books and the internet, and seldomly doctors.	NMS, doctors, books, internet, mom, track	<ul style="list-style-type: none"> No More Secrets. I never had, I never knew that it was even places that gave out pads. I never seen no other places do this. I don't see no other places. I've seen people give out food, clothes, and furniture. I've never seen people care about pads and stuff for other females, I never seen it. I've only seen it with No More Secrets.¹⁵ The resources from the doctors. There was a lot of resources they gave me. I always save my handouts, they gave me a lot of handouts, talking about your menstrual. And they also taught me how to use the app on a phone. The Period Tracker, you can put the date in, and then, they show you when you're ovulating, when the period comes on, you put in when it ends. And then, the calendar actually estimates when it will come back on.¹⁴ My mom actually didn't teach us a lot about our menstrual cycle. It was kind of more of those things like we had books lying around everywhere. So, of course, I read some.¹⁰
Menstrual resources need to include both educational information and products. (N = 4)	Menstrual resources need to be broad, easily accessible, and diverse, and provided in connection with products themselves.	Information, knowledge, access, supplies, school	<ul style="list-style-type: none"> Information on how to better deal with heavy periods, for me. Have resources that are available. . . Sometimes I find that it's hard to find resources on the internet. I just think it should be like a better keyword that brings that certain type of resource up, easier to find. Don't hide it behind the link behind the link, just make it easier. It shouldn't be a rock and a hard place to find.¹ I feel like guidance, I feel like having the information. I feel like, not to sound too cruel, but at least people of your own race.² Having these supplies, when you have the supplies in the bathroom like they used to. That's one thing, I mean. Having them available. Having the information around and having the items available.³

they used community programs through *No More Secrets*, two said books or self-learning, and one said they would google to research. Two participants denoted their doctors as resources but had mixed experiences. One said their doctor would share information, but it left them still confused and unsure of certain things, while the other said that their doctors would provide them with handouts and show them how to use apps on their phones to track. One participant said they also used a period-tracker app; however, their doctor did not recommend it.

Theme 4: menstrual resources need to include both educational information and products

Only four participants gave varied responses to what resources would make their periods a better experience. Overall, menstrual resources need to be broad, easily accessible, diverse, and provided in connection with products themselves. One said that finding more reliable resources online and ensuring that valid information is needed, while another mentioned that schools and hospitals need to have more educational workshops. A third participant stated that doctors need to do more research so as not to push birth control as the best option for menstrual management and that additional information and guidance—especially written by and for persons of the same race are needed. Finally, one participant stated that menstrual products needed to be free in all bathrooms for people.

Discussion

Through qualitative analysis, we explored menstruation symptoms, management, and resources, and identified possible areas for menstrual care intervention or support among women in Philadelphia. Overall, participants spoke about their menses as associated with two types of burdensome symptoms—bleeding and systemic. The approach to managing these symptoms was similarly divided into strategies to mitigate the effects of each. Participants spoke about the paucity of trusted resources for education on menstruation and wellness products within the North Philadelphia area, citing *No More Secrets* as their primary source of trusted information and provided insight into the existing immediate need for more accessible, verified information centers for menstrual education concurrent to the availability of low or no-cost menstrual products.

Participant description of menstrual experiences was consistent with the existing literature, focusing on adverse characteristics and characteristics of their cycle.^{7,14,26,27} Although participants did not directly mention menstrual stigma, they largely described unpleasant side effects or symptoms associated with menstruation. Notably, prior research has demonstrated that, due to the negative stigma surrounding menstruation, women are more likely to frame all of their descriptions and experiences of menses in a negative light,

which causes the perpetuation of the internal and extrinsic stigma that is pervasive throughout society.^{4,27} One way of combatting this stigma is to recognize the physical, emotional, and economic barriers that menstruation pose, that impact an individual's ability to function within society.^{28,29} Moreover, participants grouped menstrual management tactics into ways of coping with bleeding and tending to systemic symptoms. Participants used both traditional and non-traditional menstrual products, pads, and tampons and rags, towels, and cloth, to manage their bleeding. In conjunction with prior research, these needs demonstrate a growing demand to address period poverty and highlight menstrual inequities, as no menstruator should have to use paper towels to manage their period.^{7,14,26,27}

When asked about the resources participants used to enhance understanding and management of menses, participants spoke about the service in question—*No More Secrets*. Self-teaching through books or the Internet was another common method of garnering information, while physicians and other medical personnel were not a central source of information for participants. Community-based resources, which serve as hubs of information sharing, also often have a role in disseminating tangible menstrual management resources, such as pads and tampons.²⁸ Meanwhile, self-teaching has the added benefit of anonymity which could be a highly desirable quality for this population for whom menstrual stigma is high.³⁰ Participants stated they felt misunderstood, judged, or given incorrect information when speaking to their medical team, subsequently causing low utilization and avoidance of these services. The lack of trust in the medical field is a longstanding concern, particularly for marginalized persons, and is amplified by the fact that many medical and healthcare professionals make patients feel unseen, disgusting, or overly dramatic about their menses, which only further engrains the well-documented preexisting stigma felt in society.^{31,32} Understanding the resources that participants prefer, use, and avoid can better inform the development of targeted programs—to create and enhance heavily used programs or improve those participants avoided.

Participants expressed interest in having more validated and accessible information regarding menstruation and greater access to free or low-cost management supplies. Fortunately, education and supplies are areas that community-based menstrual organizations are well suited to provide, and address two constructs of period poverty—education and physical products. In general, the participants of this study preferred a local, centralized hub as a place to gather verified information and tangible hygiene resources to manage their menstrual cycles. Investing in these agencies could fill the voids of reliable information dissemination and product distribution that participants expressed during this study. Other than *No More Secrets*,²³ organizations such as *Helping Women Period*,³³ *Alliance for Period Supplies*,³⁴ *#HappyPeriod*,³⁵ and *She Supply*,³⁶ all private menstrual health organizations, provide information and products to women in their communities.

Future research should further evaluate the existing community-based menstrual resource landscape and explore ways to promote further development of existing and new programs, and investigate sustainable funding means for such programs to maximize their ability to impact all menstruators in need of information or supplies.

Our investigation of the lived experiences of menstrual health management using qualitative methods yielded rich data that quantitative studies often miss, but more specifically our work contributes to an under-investigated area of women's health research. Moreover, we leveraged an existing community-academic partnership and relied on our partner's input throughout the duration of the project.¹⁹ However, we are not without limitations. We employed a convenience sampling approach from a single metropolitan city; and as is the nature of CBPR, the participants used NMS, an organization oriented around reducing period poverty, thus narrowing our sample population and limiting generalizability.

Conclusion

Through this study, we garnered novel insight into the lived experiences of menstruators, specifics of unmet menstrual needs in an urban setting, and characterized potential solutions—guided by community members with lived experiences—to improve menstrual experiences.²¹ Through our analysis, we identified three areas that can provide feasible solutions: education, supplies, and advocacy. Participants asked for comprehensive, verified, trustworthy sources of information and greater access to menstrual management supplies. It is critical to note that these must occur in tandem to reach menstrual equity. However, to truly make the biggest impact and normalize menstrual needs—both in terms of knowledge and resources, federal, state, and local policy changes that provide menstrual products free of charge is imperative. We must continue the conversation around menstruation in the community with the goal of decreasing stigma and normalizing menstruation as a physiologic process through accessible, scientific, educational materials.⁷ Our research is just the beginning of identifying the needs of menstruators in our communities, with dire need for future work to focus on assessing community-based interventions and policy change that reduces period poverty and normalizes menstruation.¹⁰

Declarations

Ethics approval and consent to participate

This study was approved by the Thomas Jefferson University Review Board (#20G.743) All participants were recruited via either IRB-approved recruitment email or IRB-approved telephone inquiry script. Participants were subsequently consented to the study prior to their interview. All participants underwent

written informed consent prior to the interview. Informed consent was documented via individual forms.

Consent for publication

All participants gave consent to publish their anonymized data for the purposes of this research.

Author contributions

Allison R Casola: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Supervision; Validation; Visualization; Writing—original draft; Writing—review & editing.

Oriana Pando: Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Validation; Visualization; Writing—original draft; Writing—review & editing.

Lynette Medley: Conceptualization; Data curation; Investigation; Project administration; Resources; Supervision; Validation; Writing—review & editing.

Brianna Kunes: Conceptualization; Formal analysis; Investigation; Methodology; Software; Validation; Visualization; Writing—original draft; Writing—review & editing.

Nya McGlone: Conceptualization; Data curation; Investigation; Project administration; Resources; Supervision; Validation; Writing—review & editing.

Olivia Rea: Data curation; Formal analysis; Investigation; Methodology; Writing—original draft; Writing—review & editing.

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Competing interests

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Availability of data and materials

The data used for this article are not available to respect the anonymity of participants.

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Supplemental material

Supplemental material for this article is available online.

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