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Exploring self-care practices and health beliefs among men in the context of emerging infectious diseases: Lessons from the Mpox pandemic in Brazil

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Abstract

Our goal was to explore self-care practices among men who have sex with men in the context of Mpox in Brazil. This study used qualitative research methods, including interviews and thematic analysis, to collect and analyze data from male participants across the Brazilian territory. The narratives unveil men's perspectives on self-care, risk reduction, and health beliefs during the Mpox pandemic. Our findings highlight a multifaceted approach to self-care among men, encompassing hygiene, physical contact management, mask usage, skin lesion vigilance, and adherence to official guidelines. Men's attitudes toward sexual behaviors emphasize the importance of reducing sexual partners, practicing safe sex, and combating misinformation through accurate information dissemination. The development of these behaviors and self-care practices can be facilitated by nurses guided by Dorothea Orem's Self-Care Theory, supported by patient-centered care, with strategies to address and confront the stigma associated with the disease and provide emotional support. Thus, the study underscores the pivotal role of self-care

in mitigating infection risks, especially in the context of emerging infectious diseases. It acknowledges the impact of socio-cultural factors and healthcare policies on men's preventive measures. However, it also recognizes limitations, such as potential bias due to stigma concerns and a nonrepresentative sample. Ultimately, the research advocates for tailored education, promotion of gender equity, and healthcare empowerment to effectively manage health risks in such contexts.

KEYWORDS

Brazil, health beliefs, infectious diseases, men's health, Mpox pandemic, self-care practices

1 | BACKGROUND

The emergence of Mpox as a Public Health Emergency of International Concern has challenged the global understanding of public health (Nuzzo et al., 2022). Originating from vulnerable areas in Africa, Mpox has expanded its reach, causing concern in over 110 countries, including nonendemic regions in the Americas and Europe (Zumla et al., 2022). This spread underscores global health vulnerability and highlights the need to enhance prevention and response strategies, posing challenges to healthcare professions like Nursing in promoting self-care.

Men, particularly men who have sex with men (MSM), have been the most affected groups in the current Mpox outbreak, with the highest number of reported cases (Dijck et al., 2023; Iñigo Martínez et al., 2022; Pollock et al., 2023; Siegenbeek van Heukelom et al., 2023). In the United States, as of July 2022, 94% of confirmed Mpox cases occurred among MSM (Philpott et al., 2022). Among 45 European Union countries, this prevalence reached 96% among self-identified MSM (World Health Organization, 2023). High HIV positivity rates (Siegenbeek van Heukelom et al., 2023; Silva et al., 2023), receptive anal sex without condoms (Iñigo Martínez et al., 2022; Siegenbeek van Heukelom et al., 2023), substance use (Siegenbeek van Heukelom et al., 2023), multiple sexual partners (Van Dijck et al., 2023; Iñigo Martínez et al., 2022; Siegenbeek van Heukelom et al., 2023), and bacterial co-infection (Siegenbeek van Heukelom et al., 2023; Silva et al., 2023) are among the determinants of transmission. Studies (Antinori et al., 2022; Thornhill et al., 2022) indicate significant Mpox transmission through intimate contact between symptomatic and asymptomatic men, especially within the lesbian, gay, bisexual, transgender, queer, intersex, asexual, pansexual, nonbinary, and other sexual and gender orientation and variation (LGBTQIAPN+) community, leading to adverse consequences, such as difficulty in disease control (Logie, 2022; Yagüe-Pasamón, 2023).

In the Americas, Brazil faces a particularly concerning scenario regarding Mpox since its expansion, as it was the first nonendemic country to report deaths due to this disease (Lozada-Martinez et al., 2022; Menezes & Miranda, 2022; World Health Organization, 2022), ranking fourth in mortality by June 2023, with 16 reported deaths (Brazil & da, 2022). An estimated 11,000 confirmed cases of the disease were reported in Brazil (World Health Organization, 2022). In 2022, an average of 13 cases per day was reported, with an increase during school vacation periods (Evangelista et al., 2022). Males accounted for 96.2% of all Brazilian cases, and among those who reported their sexual behavior, self-identified MSM represented 84.1% of cases, with sexual transmission (82%) during casual sexual encounters (66%), resulting in skin eruptions, fever, genital lesions, and headaches (Brazil & da, 2022; Mungmunpuntipantip & Wiwanitkit, 2023; Pinto-Pulido et al., 2023; Schrarstzhaupt et al., 2022). Additionally, the impact of disease-related stigma in Brazil has led to a conservative and discriminatory wave against the LGBTQIAPN+ population, particularly targeting gay men and MSM, with homophobic statements from the former president opposing the acquisition of vaccines for Mpox epidemic control (Sousa et al., 2022).

In the context of health crises like Mpox and COVID-19 (Muniz et al., 2022), understanding the role of self-care in maintaining human integrity is of utmost importance (Orem et al., 2001). By promoting reflection, awareness, and education about the disease, self-care empowers individuals to adopt preventive measures, providing crucial information about transmission, symptoms, and safe practices. It also serves to regulate actions to provide necessary materials and strategies for life, growth, and human development (Martin et al., 2018; McEwen & Wills, 2016; Sousa, 2020). It plays a dual role, promoting both individual and collective health while addressing gender nuances and prevention practices.

The challenge that Brazil faces is multifaceted, involving cultural, psychological, and social aspects of self-care among MSM. It is essential to redefine the concept of care, increasing awareness about the disease, prevention, and overcoming stigmas associated with vulnerable groups, considering the multiple dimensions of the logic of care involved—ontological, political, organizational, and opposition to neglect, for example (Martin et al., 2018). Given the current scenario and the relevance of self-care in the prevention of Mpox, it is crucial to explore the practices adopted by MSM residing in Brazil, as there are gaps in scientific knowledge that explain how male self-care, deficits, and self-care capacity emerged during the Mpox outbreak. Therefore, this research aims to answer the question: How have adult men promoted self-care in the context of Mpox transmission in Brazil? Our objective was to explore the self-care of MSM in the context of Mpox in Brazil.

2 | METHODS

2.1 | Study design and participants

This is a qualitative study conducted via an online survey nationwide in Brazil (Braun & Clarke, 2014; Clarke & Braun, 2013). Eligible participants were adult cisgender and transgender MSM residing in Brazil. Tourists in the country during the data collection period and Brazilians residing outside Brazil for any reason were excluded.

2.2 | Data collection

Data collection occurred between September 2022 and April 2023. Given the qualitative nature of this study, and the fact that it was conducted in a country of continental proportions, where each state/district presents considerable disparities, it was necessary to use comprehensive strategies to ensure representativeness across the national territory.

For this purpose, we utilized two online recruitment strategies to establish a convenience sample of participants for this study. The initial strategy used was snowball sampling, which involved selecting 20 initial contacts (seeds) (Parker et al., 2019), men engaged in sexual relationships with men. This encompassed diverse characteristics, including different regions of Brazil, both urban/metropolitan and rural/interior areas, racial/ethnic backgrounds, income levels, and educational backgrounds, to ensure sample diversity.

To identify these seeds, out of the 11 researchers, two cisgender male researchers, adults aged 20–32 years, who identify as gay and have extensive experience in qualitative research with other MSM, created public profiles with real names and personal photos. They subsequently identified themselves as researchers on location-based dating apps such as Grindr and Hornet. In direct conversations with active users, they introduced themselves and explained the research's intentions and purposes. Subsequently, they shared a survey link along with instructions to invite other MSM from their social circle, with the aim of enhancing the sample's representativeness. This approach enabled the engagement of the first individuals present online on these dating apps who met the participation criteria.

Simultaneously, we implemented a second recruitment strategy by promoting the research on widely used social media platforms such as Facebook, Instagram, and Twitter (referred to as X in 2022). Having a presence on these digital channels facilitated access to participants beyond urban areas, considering Brazil's vast territorial expanse (Sousa et al., 2023).

2.3 | Questionnaire data collection

Data collection was conducted through the REDCAP platform (Harris et al., 2009) linked to a Brazilian public university. Before administering the questionnaire, it was subjected to a content-face validation process with input from five experts and five participants, ensuring its relevance and suitability for the proposed theme. The research instrument was structured into a section for collecting sociodemographic information (age, gender identity, sexual orientation, marital status, race/ethnicity, educational level, and income) and health-related information concerning Mpox (number of sexual partners, prior Mpox diagnosis, knowledge or intimate contact with individuals who tested positive for Mpox).

To comprehensively understand the experiences of Mpox and the adoption of self-care, and based on the choice of qualitative research, the questionnaire included four open-ended questions, aimed at exploring behaviors, sexual practices, experiences associated with Mpox, the use of health services, and perceptions related to fear and stigma associated with the disease:

1. What comes to mind when you hear the term monkeypox/mpox?
2. As a man, in the context of mpox infection, what would you do to protect yourself and/or others close to you against mpox?
3. What do you know about mpox? Describe your knowledge about this disease in your own words.
4. As a man, and based on your personal experience, what are the main challenges for the control and prevention of mpox in the Brazilian male population?

The choice of open-ended questions allowed for a more in-depth and richly detailed approach, giving participants the opportunity to express their experiences in a narrative and elucidative manner, providing a comprehensive and detailed view that is fundamental for informing effective prevention strategies and promoting self-care.

Considering the large sample size, the rapid expansion of the research among participants, and in order not to exclude any experiences, we analyzed the open-ended responses of all participants.

2.4 | Data analysis

The data were subjected to a series of rigorous procedures to ensure their quality. This process included data tabulation, validation checks, integrity verification, and the removal of incomplete and duplicate responses. Subsequently, the interviews were transcribed and refined to adhere to the Portuguese language's grammar, verb agreement, idiomatic expressions, and vocabulary. All participant responses to the qualitative questions were analyzed, involving a comprehensive analysis of the data.

The responses obtained from the interviews were subjected to lexical analysis using the software Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires (IRaMuTeQ), version 07 alpha 2. Lexical analysis is a fundamental approach in qualitative research, aimed at understanding the meaning and structure of words within a text. This analytical technique focuses on identifying key terms, language patterns, and semantic relationships present in the textual content. Particularly in qualitative

research involving large volumes of text, lexical analysis is crucial for organizing and interpreting information, allowing researchers to extract meaningful insights on specific themes.

In the first stage of our data's exploratory analysis, we conducted Descending Hierarchical Classification (DHC) with IRaMuTeQ. This statistical technique, used in multivariate analyses, groups terms at different hierarchical levels based on their similarities, forming a dendrogram. The process groups the most similar terms into larger classes, following a logic of descent. This method provided a structured view of the relationships among elements, allowing for a visual understanding of similarities and differences within the data set (de Souza et al., 2018), which favored thematic analysis. DHC enables the identification of the semantic/terminological set used by participants to express the content of the meanings attributed to the object of study. Based on the content of this semantic set, the authors seek, through exhaustive readings of the corpus, to understand the uses of these terms, the contexts of semantic production, and the meanings attributed by the participants.

The criteria established for the inclusion of terms in their respective semantic classes were as follows: frequency greater than twice the average occurrence in the corpus and association with the determined class by a χ^2 value equal to or greater than 3.84, considering that the calculation is defined based on 1 degree of freedom and a significance level of 95%.

In the second stage, from the DHC generated by IRaMuTeQ, reflexive content analysis was conducted. After reviewing the formed semantic classes, thematic clusters or specific areas of interest were identified, directing the content analysis to explore the meaning and context of these clusters more deeply. Understanding the hierarchical relationships among elements allowed for a more refined and contextualized approach in interpreting the content, providing a solid foundation for reflexive content analysis. Thus, descending hierarchical classification served as a guide for reflexive analysis, facilitating the extraction of more complex meanings and the identification of intricate patterns within the analyzed data set.

Next, we used the Reflexive Thematic Analysis developed by Virginia Braun and Victoria Clarke (de Souza, 2019). Considering the volume of data and the aim for reflexivity within it, we adopted a fluid and flexible coding approach to achieve immersion and deep engagement with the data, which justified processing the data through software. As a result, the analysis entailed a continuous interplay between the database, coding of textual excerpts, analysis of these excerpts, identification of data patterns, and their reporting—all aimed at uncovering themes. This approach is designed to identify, analyze, and report thematic patterns within the data.

In the data analysis, we aimed for the reflexivity of qualitative research (Watt, 2007). This approach was chosen for its ability to offer meaningful insights into phenomena in the field of Nursing and Health, leveraging the empathy between the researcher and the participants, as well as the diversity of techniques and approaches used. This facilitated the construction of essential relationships, especially during an epidemic outbreak like Mpox.

Dorothea Orem's Self-Care Theory assisted us in examining the domains of self-care, self-care deficit, and the self-care support system among MSM in the context of Mpox. The theory was selected for this study due to its capacity to encompass various dimensions of the relationship between individuals' self-care and health needs identification by nurses. This includes their requirements as expressions of therapeutic needs, interaction with the external environment and groups of other individuals, and health outcomes understood as the product of nursing care.

This choice allowed for a comprehensive understanding of the presentation of self-care needs modes defined by Orem as universal, developmental, and health deviation, and their manifestation in the context of Mpox transmission (McEwen & Wills, 2016; Sousa et al., 2022). However, the knowledge derived from our study can be utilized by nurses regardless of their adherence to this specific theoretical approach.

2.5 | Ethical considerations

The project was approved by the Research Ethics Committee with Human Beings. Criteria for data security and protection were established in accordance with Resolutions 466/2012, 510/2016, and 674/2022 of the National Health Council of Brazil. The Informed Consent Form was read and signed by all participants.

3 | RESULTS

The final sample of this study comprised 727 MSM, predominantly adults aged 30 years or older (370; 51%), cisgender (697; 96%), gay (625; 86%), single (567; 78%), individuals with nonwhite skin color (450; 62%), those with higher education (618; 85%), formal income (509; 70%), and engaging in both fixed and casual sexual partnerships (378; 52%). Concerning variables related to the Mpox context, the majority did not report a previous diagnosis of the disease (621; 85.47%), did not know anyone diagnosed with Mpox (450; 62%), and had no intimate contact with diagnosed individuals (523; 72%).

The analyzed data were derived from 727 open-ended text responses. When processed in IRaMuTeQ, it generated a corpus with 32,219 occurrences of words, which were categorized into 1265 distinct forms. This indicated many semantically similar words/vocabularies, dividing the text into 873 text segments (TS). Of these, 817 TS, corresponding to 93.59% of the total, were considered relevant by the software and retained for further analysis. On average, each TS automatically created by IRaMuTeQ contained 36 words, providing sufficient granularity for thematic analysis.

The aim of this processing was to identify indicators of meaning in the respondents' answers. As a result of the Descending Hierarchical Classification (DHC), we identified three main thematic classes, as illustrated in Figure 1. These classes represent groupings of expressions and words that participants used to ascribe meaning to the discussion objects. The thematic classes were titled as follows:

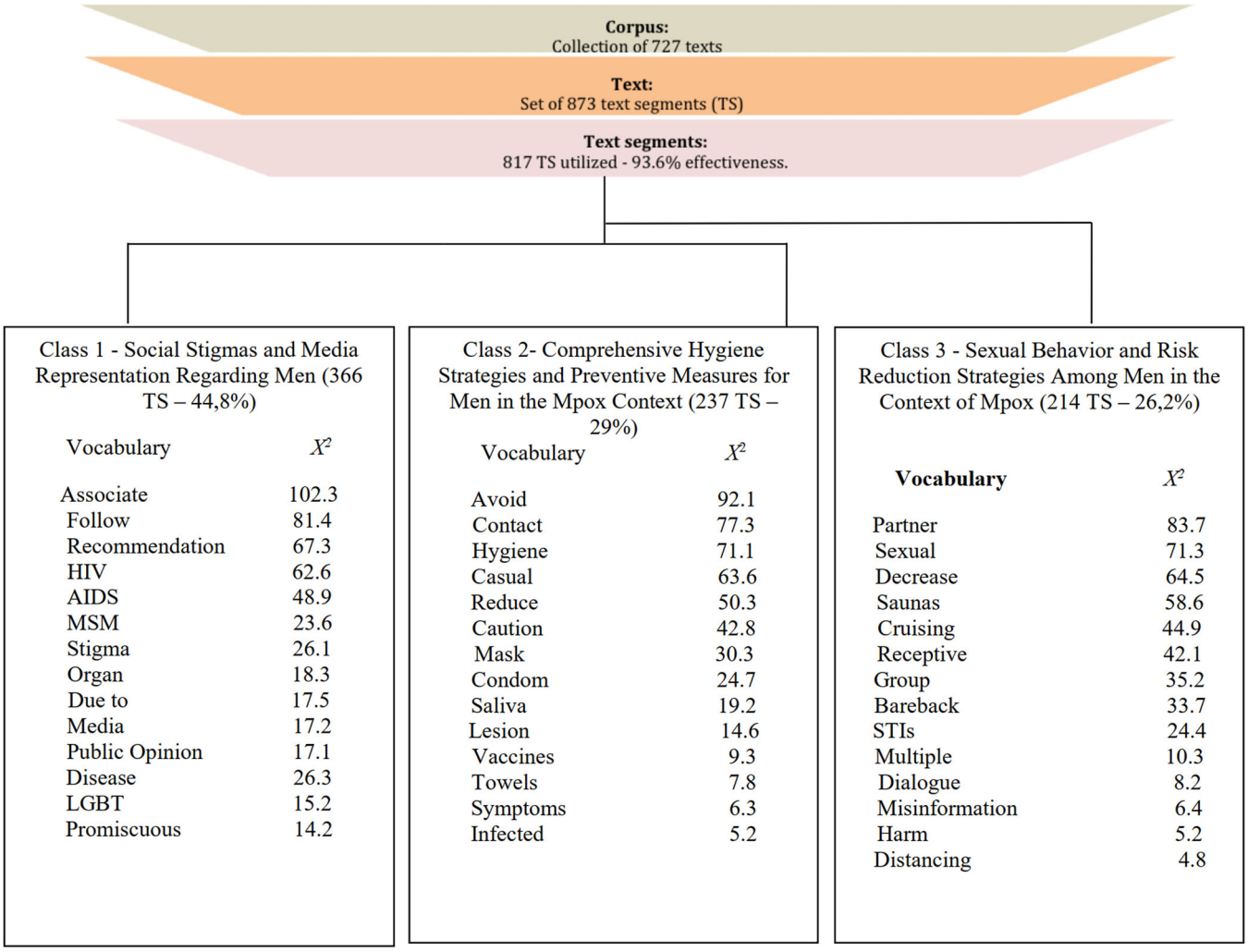

FIGURE 1 Dendrogram representing the Descending Hierarchical Classification of words organized by classes, with reference to men's self-care in the context of Mpox, Brazil, 2022–2023.

1. Class 1—Social stigmas and media representation in relation to men: This class focused on how men are perceived and portrayed in the context of Mpox, particularly in terms of social stigmas and media narratives.
2. Class 2—Comprehensive hygiene strategies and preventive measures for men in the context of Mpox: This class concentrated on the various hygiene practices and preventive strategies adopted or suggested for men to mitigate the spread of Mpox.
3. Class 3—Sexual behavior and risk reduction strategies among men in the context of Mpox: This class delved into the sexual behaviors and risk reduction strategies used by men in the context of the Mpox outbreak, highlighting how they navigate their sexual health and risk in the face of the epidemic.

Theme 1: Social stigmas and media representation regarding men.

During the coding process, key categories emerged, including "Discrimination," "Media Stigmatization," "Association with HIV/AIDS," and "LGBTQIAPN+," with the main subthemes being the "Impact of Media on Public Opinion" and "Marginalization of Groups," especially the LGBTQIAPN+ community, which is disproportionately affected:

> [...] the monkeypox pandemic is infecting and causing suffering in people, especially the LGBTQIAPN+ community, who are experiencing discrimination because the disease is being associated with anal sex practices. (M183)

> [...] a stigmatized disease associated with MSM by the media. (M308)

> [...] The media doesn't help either; it consistently reinforces a direct connection of monkeypox with MSM. It's as if it's a sentence of guilt just for being who we are. They are painting us as the sole and primary culprits for the spread of monkeypox, which is totally unjust. (M234).

> […] a stigmatized disease similar to the stigma experienced by people living with HIV/AIDS as a man, what I would do to protect myself and those close to me against monkeypox would be to reduce the number of sexual partners. (M666)

> […] This is absurd! The way they portray monkeypox as a 'gay disease' imposes an unnecessary burden on us. They need to understand that we are all vulnerable, regardless of sexual orientation or practices. This association only reinforces prejudice against us for being who we are. (M701)

> […] I posted a photo on Twitter with my boyfriend and received comments like: "another gay engaging in risky behavior and spreading the monkey disease." (M708)

Theme 2: Comprehensive hygiene strategies and preventive measures for men in the Mpox context.

A wide range of precautions and highly specific measures have emerged from the narrative content, outlining the actions that men have adopted to mitigate the risk of Mpox infection as a form of self-care. During the thematic analysis process, key categories stood out, including "hygiene," "physical contact management," "mask usage," "skin lesion attention," and "adherence to official guidelines." These, in turn, gave rise to subthemes such as "general hygiene and safety practices," encompassing broader prevention measures, and "targeted measures against Mpox," focusing on specific strategies to reduce virus exposure.

> […] We should implement the same restrictive measures as for COVID-19, along with specific preventive measures, especially avoiding contact with individuals who have skin lesions. (M43)

> […] Use masks in public, refrain from close contact and sexual activities with individuals who have skin lesions or are infected with monkeypox, practice hand hygiene, abstain from sharing bedding, towels, utensils, glasses, personal items, and sex toys. (M198)

> […] Steer clear of crowded places due to the heightened risk of physical contact. Utilize Personal Protective Equipment recommended by the Ministry of Health, such as wearing masks, and avoid sharing objects. (M341)

An exploration of this category highlights a diverse array of health measures that have been adopted in response to the Mpox threat. Among various actions, there is a prominent emphasis on the critical importance of intensive hand hygiene, careful restriction of physical contact, proper and consistent mask usage, and special vigilance regarding skin lesions, which could potentially serve as an entry point for the virus:

> […] I attempt to take precautions based on COVID-19 since it's also a virus, right? Therefore, I wash my hands and check for any minor wounds in the anal region, but it's not possible to guarantee 100%. (M88)

> […] Protecting oneself is quite challenging because it's not clear how it's transmitted yet. Thus, we have to adopt general measures, such as using a mask, wearing a condom, and practicing hand hygiene. (M157)

> […] While staying at home and avoiding gatherings with other gay individuals would be ideal, I believe the primary focus should be on using masks and refraining from sharing personal items. I'm unsure if avoiding crowded places really makes a difference, as one can still meet someone at home by arranging through Grindr. (M512)

The statements also reveal the use of less effective measures in protection against Mpox, highlighting the need for better dialog with this population.

> […] I've seen images of monkeypox sores, and I definitely want to avoid that. I'm taking precautions to minimize contact with other people's fluids, avoiding handshakes, refraining from sharing utensils and towels. Additionally, I've resumed wearing masks in public spaces. Given the current outbreak in São Paulo, I'm even avoiding the gym for now. (M398)

> […] I'm cautious about interacting with individuals who appear to have a cold or any visible sores, no matter how minor. (M622)

Theme 3: Sexual behavior and risk reduction strategies among men in the context of Mpox.

The central concern of men revolved around the supposed sexual transmission of the disease and preventive measures associated with sexual practices. During the categorization process, key categories gained prominence, including "partner reduction," "casual sex," "information and misinformation," "social distancing," and "condom use." These categories, in turn, gave rise to potential subthemes, including "risky sexual behaviors and harm reduction strategies," "the need for information and prevention in the sexual context," and "social distancing as a protective measure."

A detailed analysis of this category reveals a set of lexical contents capturing men's attitudes toward risky sexual behaviors and harm reduction actions related to Mpox. It highlights men's perception of the correlation between the Mpox epidemic and

sexual practices, emphasizing the importance of reducing the number of sexual partners and avoiding casual encounters.

> […] Advising against frequenting saunas and orgies and avoiding multiple partners. (H318)

> […] In general, I'm avoiding crowded places like parties and saunas. (M427)

> […] I'm focusing on being with steady partners, those whose exposure history I somewhat know — where they've been, with whom, or those I trust aren't having risky exposures. Monkeypox seems worse than COVID-19 because it's highly asymptomatic. (M488)

> […] Using condoms, even though they don't guarantee prevention, and avoiding engaging with multiple sexual partners. (H391)

> […] Engaging in open communication with my sexual partners and reducing the number of casual sexual encounters, especially during periods of high transmission. (H444)

Furthermore, men express concerns about the quality of information available for Mpox prevention. They emphasize the need to educate society with accurate information and address issues of misinformation and homophobia.

> […] In general, there is a lot of uncertain information, which leaves me in doubt. At least for me, several aspects are unclear. Do I need to use a condom? Is it necessary? Does PrEP provide protection, or do I need to use prophylactic antibiotics? Not even the Brazilian Ministry of Health knows if it's an STD or not, or how to protect oneself. Until a bunch of people die, they won't pay attention. So, we have to do the basics: avoid living and keep avoiding behaviors again, even though not long ago, we had to do that for COVID-19. (M138)

> […] Informing myself about transmission and prevention methods, passing on this information to others while avoiding fake news and homophobia. (M232)

> […] There is a lack of information on the subject that needs to be widely disseminated through knowledge of prevention strategies. (M619)

> […] These testimonies also capture the relationship between the Mpox threat and vulnerability to sexually transmitted infections, explaining the emphasis on condom use during sexual activity. (M375)

> […] My focus has been on maintaining condom use in all sexual relations I have for now, even with a steady partner. (M464)

> […] It seems that our only weapon for now, until the vaccine arrives, is the condom. But I've read that it helps but doesn't fully protect because lesions can be in other parts of the body … meaning there's not much to escape. If you have sex, you expose yourself, even if there's no penetration. (M229)

These results highlight men's reactions to risks associated with Mpox transmission through sexual behaviors. Additionally, they underscore the importance of education, social distancing, and condom use as fundamental strategies for reducing infection risks and disease containment. Dorothea Orem's Self-Care Theory also applies here, as it encompasses the actions that men are taking to reduce the risk of sexual transmission of Mpox. The search for accurate information, the adoption of safe sexual practices, and the reduction of risky behaviors can be seen as manifestations of self-care guided by nurses, as defined by Orem (Figure 2).

4 | DISCUSSION

This study aimed to explore men's self-care in the context of Mpox in Brazil. The findings highlighted the centrality of men's attention to the disease and helped understand how male self-care relates to virus transmission in the investigated country, revealing manifestations of stigmas, discriminatory actions, and violence against infected men, especially among MSM, people living with HIV, and individuals from the LGBTQIAPN+ community. Additionally, it revealed the sanitary and protective measures available to this population and the factors influencing men's exposure to Mpox through sexual activities/behaviors, as well as the adoption of corresponding risk reduction strategies.

The transmission of Mpox reached Brazil during the overwhelming course of the COVID-19 pandemic, significantly impacting the male population. Despite the extensive focus on mitigating COVID-19, men's perception of Mpox, referred to as Monkeypox at that time, was marked by ignorance and the need for information, particularly about transmission methods, self-care, health-related content dissemination, and preventive measures (Sousa et al., 2022). Temporally, the situation experienced by study participants involved adapting and readapting to daily life amid the threat of a new wave of COVID-19. This may explain men's concerns about mask usage, human contact, avoidance, the role of infectious disease doctors, and condom use during sexual activity (Almeida et al., 2020; Brasil et al., 2022).

4.1 | Relevance of self-care practices and nursing

When considering self-care practices in the face of global public health emergencies such as Mpox and COVID-19, the significance of nursing

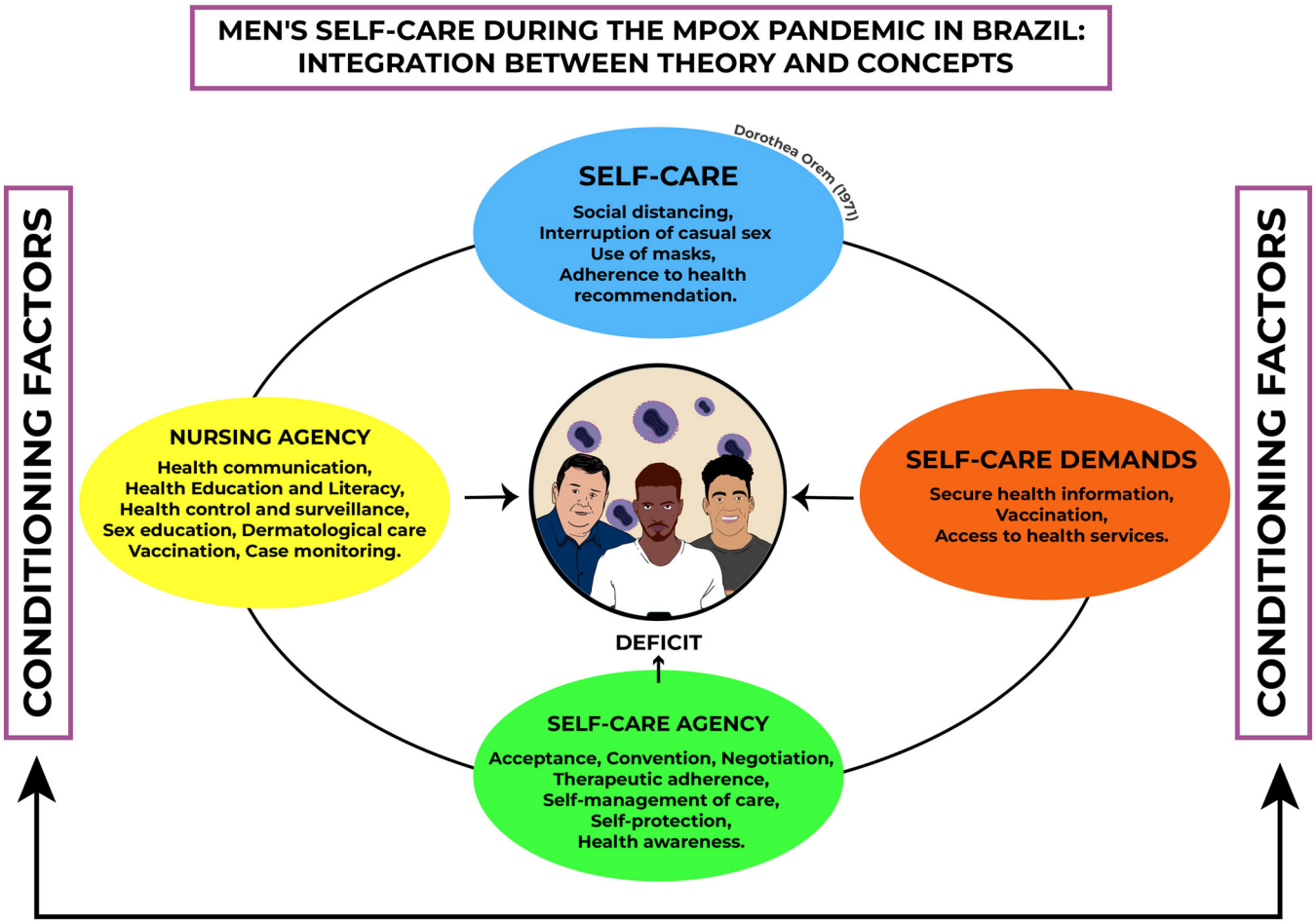

FIGURE 2 Manifestations of self-care guided by nurses.

science is elucidated with a critical–reflective perspective in the realm of healthcare delivery, management, and education within health models, in alignment with theoretical–philosophical constructs that underpin care (Almeida et al., 2020; Nascimento et al., 2021). In this context, it is pointed out that the universal concepts of health development and deviation associated with (self)care, as present in Dorothea Orem's General Nursing Theory of Self-Care Deficit, help to explain the autonomy and protagonism of individuals affected by an illness in their health-related decisions. Nurses can adopt strategies for men's self-care, such as seeking accurate information and focusing on their emotional well-being to cope with the negative impact of media and stigma. The scenario regarding Mpox is potentially emerging for nursing care, and these concepts also constitute knowledge that reinforces educational interventions and care provided by different actors in the health–disease process (Khademian et al., 2020; Nasiri et al., 2023; Orem et al., 2001).

Another point highlighted by the study results was the epidemic context of Mpox perceived by men concerning sexual behaviors, where there was a need to reduce the number of sexual and/or affective partnerships, as well as the multiplicity of sexual partnerships and/or casual sex. Additionally, they emphasized, as a population segment, MSM and the vaccination scenario (Augsburger et al., 2022). The understanding of care practices and their evolution among men facing illness experiences, both in the context of Mpox and in other health situations, is not limited to individual choices alone. Care practices are strongly shaped by the sociocultural and structural context in which individuals are embedded. In this sense, factors such as gender norms, disease-associated stigma, and specific vulnerabilities of social groups, such as MSM, can influence how men construct and exercise their care practices when facing illness. Additionally, low levels of health literacy and other social categories can create obstacles to understanding and adopting effective self-care measures. Therefore, understanding care practices needs to consider the broader contexts that influence men's health and illness-related choices.

4.2 | Challenges and the need for intervention

The sociocultural aspects of the Mpox pandemic have been significant in shaping men's experiences, highlighting social distancing as a crucial measure for disease control. However, while effective for health, this measure presents challenges such as prolonged confinement and disruption of social bonds, particularly in the context of the COVID-19 pandemic (Bergman et al., 2022; Hraib et al., 2022; Pourrezaei et al., 2023).

Understanding the role of misinformation is essential in understanding the dynamics of Mpox among Brazilian men. Rumors and false information, especially prevalent on social media, significantly affect individuals' health perceptions. Our study indicates that many men likely base their health decisions, including prevention and treatment-seeking, on unverified or misleading online information. Furthermore, the spread of misinformation may reinforce the stigma associated with Mpox, negatively impacting men's willingness to seek health services or engage in preventive practices.

A proactive governmental communication strategy, considering the sociocultural and psychosocial aspects of the population, is vital to foster a broader and more participatory public understanding (Rajkhowa et al., 2023). The Brazilian response to Mpox remains inadequate and fragmented. There is a lack of specific treatments, and the implementation of preventive measures is limited. The virus's spread shows particular nuances in men, necessitating public policies focused on awareness, diagnosis, and clinical management. It is imperative for nursing professionals to promote gender equity, develop nondiscriminatory and nonstigmatizing therapeutic approaches, and create health education tools for the community. Additionally, supporting differential diagnosis, empowering self-risk management, and reducing health vulnerabilities, especially among MSM affected by Mpox, are necessary. This requires a better understanding of the diverse care logics, particularly in interactions between healthcare professionals and patients, to enhance the understanding of illness and care choices for each individual.

5 | LIMITATIONS

Our study should be viewed in the context of several limitations for interpreting its results. Participants may not have provided completely authentic responses due to concerns about the social stigma associated with Mpox, which could affect the validity of the results. They might also have been reluctant to share sensitive information about their sexual practices or experiences related to the disease. Moreover, as the study involved recalling past experiences, participants might have faced difficulties in remembering past events or interpreting their experiences retrospectively, which could impact the accuracy of the information provided. Furthermore, our sample may not have adequately represented the ethnic, socioeconomic, age, and geographic diversity of the male population in Brazil, although we endeavored to implement various generalization strategies.

To truly understand how different men take care of themselves during a pandemic, future studies should attempt to use more diverse sampling methods to obtain perspectives from all subgroups and types of men—not just from a general group.

6 | CONCLUSION

Analyzing the self-care practices developed by MSM in the Brazilian context during the Mpox pandemic, it became evident that initial self-care actions, such as using masks, reducing human contact, and prioritizing consultations with infectious disease specialists, followed by condom use during sexual activity, were strongly influenced by experiences during COVID-19. However, these actions were riddled with numerous doubts and questions, underscoring the need to stimulate educational activities for health promotion and preventive actions. The role of nursing is crucial in promoting care and encouraging self-care practices to control the disease, both from individual and collective perspectives.

In relation to MSM, nursing professionals must develop actions to strengthen gender equity and implement nonstigmatizing and inclusive therapeutic approaches to establish a care plan aimed at controlling disease transmission, tracking, monitoring, and surveillance of cases. It is essential to empower the population to manage self-risk and reduce health vulnerabilities.

Furthermore, regarding masculinity and health, there are few studies that investigate this relationship. When considering MSM, it is crucial to highlight intersectional aspects such as sociocultural characteristics, income, race, and ethnicity. In this context, some men become marginalized when their sexuality is questioned by others due to experiencing social markers of difference through behaviors of inequality or discrimination. Thus, part of the LGBTQIAPN+ population is rendered invisible, and the formation processes of hegemonic masculinities become outdated, leading to marginalization in several dimensions, including care.

Moreover, the difficulty that men face in taking care of their health extends beyond the barriers of health services, as societal norms reinforce masculine behaviors related to risk and exposure to illness. This is compounded by the fear of being perceived as unproductive or incapacitated, causing many men to deny the illness process, reinforcing stigma and prejudice regarding masculinity.

Effective healthcare must be sensitive to the diversity of men's experiences and identities, promoting gender equity, nonstigmatization, and respect for individuals' self-care choices in all healthcare contexts.

AUTHOR CONTRIBUTIONS

Carolina da Silva Bulcão: Formal analysis: investigation: methodology: project administration; writing—original draft; writing—review and editing. **Pedro E. G. Prates**: Formal analysis: investigation: methodology: project administration; writing—original draft; writing—review and editing. **Iago M. B. Pedrosa**: Formal analysis: investigation: methodology: project administration; writing—original draft; writing—review and editing. **Guilherme R. de Santana Santos**: Data curation: investigation: methodology: project administration; writing—original draft; writing—review and editing. **Layze B. de Oliveira**: Data curation; investigation: project administration: writing—original draft; writing—review and editing. **Jhonata de Souza Joaquim**: Data curation: investigation: project administration; writing—original draft; writing—review and editing. **Lilian C. G. de Almeida**: Data curation: formal analysis: investigation: methodo: project administration logy; writing—original draft; writing—review and editing. **Caíque J. N. Ribeiro**: Data curation: formal analysis: investigation: methodology: project administration; writing—original draft; writing—review and editing. **Glauber W. dos Santos Silva**: Data curation: formal

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data sets generated during and/or analyzed during the current study are available from the corresponding author upon reasonable request.

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