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Voices from the frontline: the lived experiences of healthcare professionals in the workplace

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Voices from the frontline: the lived experiences of healthcare professionals in the workplace

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Editorial: Voices from the frontline: the lived experiences of healthcare professionals in the workplace

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Editorial on the Research Topic
Voices from the frontline: the lived experiences of healthcare professionals in the workplace

The COVID-19 pandemic has illustrated how critical it is to invest in healthcare systems and develop professionals as assets to our local and global public health resources. It also ensured more attention was paid to understanding the physical and mental health risks of working in the healthcare sector to ensure proper protections. Most existing research on the experiences of healthcare workers focused on frontline workers during the height of the pandemic (Søvold et al., 2021). Yet, even prior to the pandemic, impacts of: globalization of care, staff shortages, advanced technologies, epidemiological transitions and need for new skills and competencies for 21st century were understood (Pruitt and Epping-Jordan, 2005). Healthcare professionals also face a variety of stressors including increasing workloads, surveillance, patient violence and lack of political support. Those risks have only been exacerbated by a financial crisis, increasingly hostile workplace environments, and even warfare now targeting healthcare professionals (Ioannidis, 2024). Furthermore, differing types of discriminations and racism against healthcare staff, from both patients and colleagues, are prevalent in healthcare systems worldwide (Okeahialam et al., 2025).

This edited Research Topic highlights the lived experiences of healthcare professionals in the workplace. It comprises of nine articles examining workplace challenges in China, Jordan, Italy, Sweden, the United States, Canada and Saudi Arabia. The articles cover topics such as: the lack of investments in GPs and personal care attendants; deteriorating workplace conditions; violence and discriminations; risks of burnout in surgeons; and how to ensure interventions to help better prepare healthcare professionals to manage their emotions.

Genova and Lombardini's commentary picks up on the idea of public health investments in General Practitioners (GPs) or family doctors as cornerstone of primary care. They examine data from 21 European countries looking at whether the number of GPs per 100,000 inhabitants increased or decreased between 1995 and 2014. Most European healthcare systems increased the number of GPs coherently with WHO recommendations. They suggest that a country like Italy, which has not invested in family doctors and thus in the primary care sector in last two decades, would have been less equipped to manage pandemics.

The COVID-19 pandemic also illustrated the importance of personal care attendants for older adults and persons with disabilities, especially if primary care is no longer accessible. Wendel et al. described how critical personal care attendants were during the COVID-19 pandemic in the United States but how their services are not always given recognition. They found personal care attendants do not have equitable pay or professional recognition but they do see themselves as having intrinsic rewards in their work and social support. Yet, a lack of professionalism and investment will compromise future care and quality. Care services are increasingly moving from the clinic to the home. Ensuring greater professionalism of this caring workforce will become a necessity and while not explicit in their work, they point to new forms of discriminations, such as ableism and ageism in healthcare (Simmonds and Berghs, 2024), in careism, a discrimination which views embodied and other forms of care-giving as less important and as less entitled to professional status.

While training, recognition and renumeration are important, so are the conditions in which healthcare professionals work. Xiao et al.'s cross-sectional study investigated the impact of workplace violence against healthcare workers in China, finding that 58.2% of healthcare professionals reported experiencing at least one experience of workplace violence in the past year with emotional abuse being the most commonly reported. Alnaeem et al. also examined workplace violence against nurses in Jordan. They found that 59.6% of the nurses reported verbal abuse was common in their workplace. Both illustrate hierarchies in professions, gendered discriminations and that violence is becoming more commonplace globally.

To understand more about the abuse and racism that health care professionals experience, Ahlberg et al. found that ethnic minority staff in Sweden often have to engage in additional emotional labor. To be a professional means to deal with dilemmas such as discussing racism but also to ethically treat racist patients. They explain how staff had strategies to manage such dilemmas but this had a physical and emotional (traumatic) toll on the health and wellbeing of healthcare professionals. They note how a politics of fear now intersects with professional experiences of hostile environment to immigrants or people who they perceive as "other" countering ideas of necessity of global and diverse workforce.

Minorities and their experiences were also the focus of Bizzeth and Beagan's qualitative study in Canada. They explored heath care professionals' experiences with work-related microaggressions and heteronormativity. They coin the innovative idea of "heteroprofessionalism" and argue that the concept of professional carries encoded within it demands that the occupant of that category be—or present as—heterosexual, an unmarked status that can be readily desexualized. They point to a need to rethink what the boundaries are of professional and ethical behaviors in practice, in keeping with new forms of identities and discriminations experienced.

McNeill et al.'s study also examined professional boundaries in risks of burnout among surgeons in Canada. They found a complex picture of inequitable remuneration associated with education, administration, and leadership roles correlated to the Fee-For-Service model, as well as issues of gender inequity and the individualistic culture that develops as surgeons specialize. They noted how surgeons often had answers for these problems. They suggested to reform payment plans, hospital policies and ensure more social and practical support to combat loneliness and inequalities.

More research is now also concentrating on how to strengthen mental health and resilience through interventions. Alotaibi's study investigated the impact of perceived behavioral control, attitudes, subjective norms, and emotion-focused coping on willingness to treat viral-infected patients in Saudi Arabia. They argue for interventions such as training programs focused on infection control measures and patient management strategies, so healthcare professionals can feel more emotionally and practically prepared in future pandemics. Carminati's article too focuses on the role of emotions at work for healthcare professionals and how emotional management is part of the job but does not always lead to emotional intelligence. They argue that the integration of emotional management and emotional intelligence could bridge the gap between these two pivotal abilities and foster better behavioral and mental health.

All of the contributors point to the needs to invest in rethinking healthcare professionalism with novel competencies, such as: emotional and physical self-management; skills for resiliencies; and specialized training against violence, discriminations and racism. This will demand local and global investments in healthcare systems, as well as creation of new jobs and roles to ensure its sustainability.

Author contributions

MB: Writing – original draft, Writing – review & editing.

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PERSPECTIVE
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Emotions, Emotion Management and Emotional Intelligence in the Workplace: Healthcare Professionals' Experience in Emotionally-Charged Situations

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This perspective article is grounded in a cognitive and context-dependent view on emotions. By considering emotions as socially embedded and constructed, the different but related concepts of Emotion Management and Emotional Intelligence can be introduced. Yet, research juxtaposing and applying them within the healthcare sector to explain healthcare professionals' multifaceted emotional experiences at work is still scarce. Hence, this article contributes to the literature on emotions by offering an overarching perspective on how the juxtaposition of Emotion Management and Emotional Intelligence may help healthcare professionals to bridge the developmental transition between these two crucial abilities which, in turn, can help them overcome emotional difficulties in complex situations. Such integration would positively influence individuals' behavioral and mental health, as well as the overall quality of the healthcare system.

Keywords: emotions, emotional intelligence, emotion management, healthcare professionals, well-being

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I don't want to be at the mercy of my emotions.
I want to use them, to enjoy them, and to dominate them
— Oscar Wilde, The Picture of Dorian Gray.

INTRODUCTION

Over the last decades there has been an increased interest on the role of emotions in the multifaceted experience of work (Kluemper et al., 2013). Affective factors (e.g., emotions, feelings, mood etc.) have been recognized not only as pervasive in regulating and guiding human behavior (Von Scheve, 2012), but also directly related to individual and organizational well-being, performance and job satisfaction (Seo et al., 2010). This new tendency seems to clash with the quantification and monetarization principles promoted by the impact of neoliberalism within the public sector organizations (Connell et al., 2009) which, in turn, have devaluated many intangible values of human, social and organizational capital, such as equality, integrity, and attention to the quality of individual interactions (Diefenbach, 2009). And yet, perhaps as a natural reaction to this de-emphasis of emotions in modern society (Scheff, 2014) or to the negative psycho-sociological effects on the people delivering public services, ranging from stress and demoralization to turnover and demotivation (Schrecker, 2016), new attention to emotions has emerged.

This new attention moves away from a dated idea that depicted them as being physiological and primitive perturbations, to embrace a more cognitive and socially embedded view (Fenton-O'Creevy et al., 2011). By doing so, the pivotal notion of Emotion Management (EM), described as an alteration of individuals' emotional *status* to meet those criteria that are deemed most appropriate by the collectivity, can be introduced in the discourse on emotions (Langlotz and Locher, 2013).

EM is often studied in relation to Emotional Intelligence (EI), which is broadly defined as the ability to perceive, facilitate, understand and regulate one's and other's emotions. Despite the increasing importance of these two concepts, research has often neglected to examine how their juxtaposition can have a beneficial impact on individuals' behavioral and mental health in critical circumstances. Hence, through the exemplary, practice-based cases of healthcare professionals facing emotionally-charged situations, the present perspective article contributes to the literature on emotions by offering an overarching view of the importance of integrating EM and EI to positively affect individuals' experiences at work. More specifically, it is argued that the integration of EM and EI is a paramount condition that can bridge the developmental transition between these two crucial abilities, thus helping employees to confront, sustain and overcome extreme circumstances in many employment sectors, but especially in the sensitive and complex field of healthcare.

The article is divided into four main parts. After outlining a short *excursus* on the role of emotions, the key concepts of EM and EI are presented. Examples involving healthcare professionals are then introduced to elucidate the crucial importance of effectively developing EM and EI to tackle exceptionally difficult situations.

EMOTIONS

Both inner and outer human life produce emotions (Scheff, 2014). Emotions pervade human social affairs and can significantly determine people's experience in their workplaces, influencing their well-being, motivation, job satisfaction and performance (Seo et al., 2010). However, in a sort of Cartesian duality, emotions have been opposed to reason (Lindgren and Packendorff, 2014) due to their irrational, bodily nature[1] (Fenton-O'Creevy et al., 2011). Considered as instinctive, "internal states of physiological arousal or visceral experiences" (Rosemberg, 1990, p. 3), emotions have been for long relegated to a subordinate position to cognitions and neglected by organizational research. Modernization and Western societies have indeed focused their attention to individuals' rationality and emphasized the cognitive dimension of thoughts and behaviors over the relational, socio-emotional counterpart (Scheff, 2014).

Nonetheless, emotions have been recently seen as products of both organismic and reflexive processes (Fenton-O'Creevy et al., 2011). Functioning as a rationalization process, this reflexive agency interlaces emotions with cognitions, allowing the former to be "felt" *and* "thought" to offer a truthful representation of the experienced world (Rosemberg, 1990; Langlotz and Locher, 2013). Through such cognitive awareness of the self and the contextual others (Israelashvili et al., 2019), emotions become "feelings," which underline how emotions are socially constructed by means of social interactions, permeated by social influences and embedded in social situations (Langlotz and Locher, 2013).

EMOTION MANAGEMENT (EM)

Viewing emotions as socially constructed implies that individuals may consciously alter their emotional expressions to align them with the expectations of the surrounding context (Beal et al., 2013). This regulating effort is generally called EM but, if carried out within the work domain, then it can be associated to emotional labor[2] (Hochschild, 1979; Kluemper et al., 2013). Expanded on Goffman's idea that emotions are the results of impression management and thus of individuals' effort and energy to perform in a social situation to avoid embarrassment (Strauss, 1997), Hochschild defined emotional labor as "the act of evoking or shaping, as well as suppressing, feeling in on self" (Hochschild, 1979, p. 561). Emotional labor represents the expression in the workplace of those emotions deemed acceptable by the community to conform to organization expectations (Grandey, 2000; Thwaites, 2017). Indeed, in the work setting employees may be required and even forced to modify their emotional expressions as part of their professional role to enhance organization task, performance and efficiency (Joseph and Newman, 2010; van Dijk et al., 2017).

However, the emotion regulation processes may generate an uncomfortable emotional dissonance indicating a discrepancy between what employees feel and what they ought to feel (Gross, 1998; Thwaites, 2017). Through emotional labor, individuals put a certain degree of effort into adjusting their emotions to the expected ones by inhibiting inner feeling to level off the dissonance (Hochschild, 1979; Von Scheve, 2012). Such effort can be accomplished by two mechanisms: deep acting, a sincere and authentic attempt to shape inner feelings; and surface acting, in which a modification of the displays takes place without altering the inner feelings (Hochschild, 1979; Grandey, 2000).

OUTCOMES OF EMOTION REGULATION PROCESSES

These emotion regulation processes may lead to both positive and negative outcomes (Gross, 1998). Whilst at the organizational level these processes are likely to positively improve organizational productivity, performance and the quality of social interactions between parties (Fenton-O'Creevy et al., 2011), at the individual level they are more likely to lead to negative outcomes, given the lack of individuals' spontaneous manifestation of emotions (Von Scheve, 2012). Especially when

[1]From an etymological angle, the word "emotion" stems from the Latin word "*haemo*" (and the Greek word "*haima*") that means blood, together with the verb "*moveo*" which means "to move," "to act": hence, 'the action of the blood'.

[2]In this perspective article the terms are used interchangeably, with still a preference to use EM as dominant term.

engaging in surface acting, people dedicate their undivided cognitive attention to it (Grandey, 2000). By drawing from an already limited pool of resources, this conscious process can significantly hamper individuals' performance and be detrimental to their well-being (van Dijk et al., 2017), causing exhaustion and frustration, ego-depletion and stress, fatigue and burnout, as well as reducing self-identity in favor of a pseudo identity (Moon and Hur, 2011; Beal et al., 2013; Zaehringer et al., 2020).

Nonetheless, research has also shown that positive individual outcomes are also possible (Gross, 1998; Hayward and Tuckey, 2011). Indeed, through a gradual and constant learning experience in the workplace (Ybarra et al., 2014), employees may engage in, and develop, automatic responses with minimal participation of cognitive functioning and strain (Fenton-O'Creevy et al., 2011; Szczygiel and Mikolajczak, 2018). In this way, they can "work toward managing naturally emerging emotions to facilitate their emotional, cognitive and physical functioning" (Hayward and Tuckey, 2011, p. 1510). Research, for instance, has shown that automatic regulatory processes may help individuals to engage in EM effortlessly, minimizing the costs and energy involved to fulfill the expectations of their social role (Ybarra et al., 2014; Zaehringer et al., 2020). This ability to automatically understand and efficiently manage one's and others' emotions is called EI (Mayer et al., 2016).

EMOTIONAL INTELLIGENCE (EI)

A plethora of sometimes contrasting definitions exists to capture the essence of EI (Ybarra et al., 2014). Sometimes regarded as an ability, other times as a personality trait, or also as a combination of both (Mayer et al., 2016; MacCann et al., 2020), there is general agreement in stating that EI comprises four main hierarchically-arranged components: perceiving emotions in oneself and the others, using emotions to facilitate thoughts, understanding emotions and regulating emotions (Joseph and Newman, 2010; MacCann et al., 2020). Several studies have indicated that EI is positively correlated with individual well-being, job performance, productivity, personal integrity and interpersonal sensitivity (Abe, 2011; Mayer et al., 2016). Thus, EI may play a key role in employees' emotional experience of work, not only because it may facilitate effective workplace functioning and positive outcomes, but also because it may help individuals to enhance their self-identity by fulfilling the expectations intrinsically associated with it (Hayward and Tuckey, 2011).

EM AND EI INTO HEALTHCARE PRACTICES

Among the numerous and diversified situations and contexts in which the role of emotions, EM and EI have been explored, the healthcare service is certainly of a particular interest due to its very sensitive and delicate environment as well as the institutional and societal pressures around it (Bailey et al., 2011b). Specifically, the relationship between healthcare professionals and their patients provides a unique situation in which emotion regulation processes can be studied. Indeed, due to the lack of support in coping with stress, the low levels of reward and the frequent emotional interactions with the patients and their family, healthcare professionals constantly need to perform EM (Hayward and Tuckey, 2011; Martin et al., 2015; Szczygiel and Mikolajczak, 2018). Hence, emotion regulation processes are necessary to perform optimally and deliver high-standard quality of care (Kooker et al., 2007; Bailey et al., 2011b; Martin et al., 2015).

One of the primary duties of doctors and nurses is to establish a good relationship with their patients to develop trust and deliver the best possible care (Bailey et al., 2011a). However, especially in emotionally-charged situations, the relationship with patients is extremely delicate. Emotions such as anxiety, anger, helplessness and frustration need to be appropriately managed since the effort of altering emotional *status* would allow healthcare professionals to sustain an outward appearance in line with what they think is the most appropriate behavior to show (Martin et al., 2015; Szczygiel and Mikolajczak, 2018). If ill managed, not only the emotion regulation process may become exhausting (Zaehringer et al., 2020), but it may also stimulate distancing behavior as primary coping mechanism to avoid personal grief (Bailey et al., 2011b). This might explain why doctors and nurses may struggle to demonstrate empathy or a warm, genuine concern (Kooker et al., 2007). For example, Bailey et al. (2011a) noticed that nurses working in an emergency department tended to avoid building a relationship with the patient to protect themselves from potential upsets and deal with loss more easily. By depersonalizing the situation through a process of objectification –"we have some *thing* on the table"– that was removing the personhood of the patient, they could shield and safeguard themselves (Bailey et al., 2011a, p. 366). The authors thus concluded that emergency staff and practitioners, whose role is vital in such delicate moments, are still often unable to perform EM and need support from policymakers and institutions to be able to deliver excellent care in emotionally-charged situations.

Nonetheless, if EM is handled appropriately, healthcare professionals may be able to regulate their boundaries of distance and intimacy in a conscious and more effective way (Bailey et al., 2011b). Doctors and nurses' manipulation of their emotional boundaries can function as a filter through which interact with patients, so that they are physically and cognitively present, whilst controlling their emotional connections (Hayward and Tuckey, 2011, p. 1513). Consequently, prior to initiating an interaction, healthcare professionals would create distance to achieve emotional neutrality as a form of control as well as to evoke a sense of calm and acceptance in others (Israelashvili et al., 2019). From this neutral starting point, they could then strategically determine whether to keep the distance or to connect with patients. An emotional connection would allow doctors and nurses to refuel their energy reservoirs, enhance their personal and professional identity, as well as to experience closeness, empathy and compassion toward patients (Martin et al., 2015). Overall, this would boost excellence in practice (Bailey et al., 2011b).

Once these processes of emotion regulations are internalized, they can become automatic mechanisms that allow healthcare professionals to efficiently manage emotions in critical circumstances. When this is achieved, EI has been developed (Szczygiel and Mikolajczak, 2018). Since EI can generate and increase trustworthiness between healthcare professionals and patients (Kluemper et al., 2013), it represents a constituent element of the emotional fabric of clinical and medical practice. However, developing and appropriately managing EI does require time, patience and experience (Ybarra et al., 2014). Hence, the juxtaposition of EM and EI would allow to bridge the developmental gap between EM and EI, by smoothing the transition between these two crucial abilities. Thus, their integration would remarkably help healthcare professionals to solve problems, facilitate learning, take on risks and cope effectively with environmental demands, especially in emotionally-charged situations (Moon and Hur, 2011).

CONCLUSION

Through the exemplary, practice-based case of healthcare professionals facing emotionally-charged situations, this perspective article offered an overarching view of the importance of integrating EM and EI to reinforce each other and promote a beneficial influence on individuals' work experience, even within the restrictions imposed by the quantification and monetarization principles of neoliberalism. More specifically, this paper aimed to show how juxtaposing EM and EI could bridge the gap between these two pivotal abilities and foster individuals' behavioral and mental health. This perspective article therefore contributed to the literature on emotions by arguing that the integration of EM and EI is a paramount condition to help employees to face, sustain and overcome extremely emotionally-charged situations in their workplaces, especially in the sensitive and complex field of healthcare.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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"Just Throw It Behind You and Just Keep Going": Emotional Labor when Ethnic Minority Healthcare Staff Encounter Racism in Healthcare

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Encountering racism is burdensome and meeting it in a healthcare setting is no exception. This paper is part of a larger study that focused on understanding and addressing racism in healthcare in Sweden. In the paper, we draw on interviews with 12 ethnic minority healthcare staff who described how they managed emotional labor in their encounters with racism at their workplace. Data were analyzed using thematic analysis. The analysis revealed that experienced emotional labor arises from two main reasons. The first is the concern and fear that ethnic minority healthcare staff have of adverse consequences for their employment should they be seen engaged in discussing racism. The second concerns the ethical dilemmas when taking care of racist patients since healthcare staff are bound by a duty of providing equal care for all patients as expressed in healthcare institutional regulations. Strategies to manage emotional labor described by the staff include working harder to prove their competence and faking, blocking or hiding their emotions when they encounter racism. The emotional labor implied by these strategies could be intense or traumatizing as indicated by some staff members, and can therefore have negative effects on health. Given that discussions around racism are silenced, it is paramount to create space where racism can be safely discussed and to develop a safe healthcare environment for the benefit of staff and patients.

Keywords: racism, healthcare, ethnic minority, staff, emotional labor

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INTRODUCTION

This article is about the ways ethnic minority healthcare staff manage emotional labor when they encounter racism at their workplace in Sweden. Research has shown that ethnic minority healthcare staff in different parts of the Global north experience both overt and covert racism from patients and others (Criddle et al., 2017; Moceri, 2014; Wingfield & Chavez, 2020). Healthcare staff describe stress and emotional depletion due to racism from patients (Cottingham et al., 2018; Eddo-Lodge, 2018) as well as in various medical education settings and in their workplaces (Arday, 2018). While research on racism in health and elderly care show that ethnic minority healthcare staff experience racism, other studies show that discussions around racism are silenced and are absent from organizational discussions (Behtoui et al., 2017; Bradby et al., 2019). Instead, complaints about racism by ethnic

minority staff are trivialized and dismissed as there is lack of support from managers (Ngocha-Chaderopa & Boon, 2016). Ethnic majority nurses in the United States and New Zealand were, for example, punished for supporting ethnic minority nurses when the latter indicated they experienced racism in the workplace (Giddings, 2005). It appears that the experiences of racism by ethnic minority staff should just be tolerated (Moceri, 2014). This in turn has adverse effects which may include a loss of confidence in their medical abilities, feelings of isolation and exclusion from teamwork, and loss of job opportunities (Likupe & Archibong, 2013; Storm & Lowndes, 2021). Apart from studies focusing on ethnic minority staff's experiences of racism in healthcare, many other studies have focused on the experiences of ethnic minority patients, showing various racial disparities in health and access to healthcare across national contexts and health indicators (e.g. Karlsen & Nazroo, 2002; Ben et al., 2017; Sim et al., 2021). Williams & Mohammed (2009) for example, note that for most of the 15 leading causes of death in United States, African Americans have higher death rates than whites. Anekwe (2020) too observed that researchers at Oxford University found that between 2014 and 2016, rates of death in pregnancy was eight in 100,000 for white women, 15 in 100,000 for Asian women and 40 in 100,000 for black women in the United Kingdom. Although racism in healthcare is complex and operates in various dimensions affecting both ethnic minority healthcare users and healthcare staff, this paper focuses on experiences of healthcare staff.

In spite of racial disparities mentioned above, medical professional practice values solidarity, equality, and scientific rationality highly. The insistence that healthcare is a rational practice of solidarity with the patient at the center (Judge & Ceci, 2021) acts as a hindrance to discussing the occurrence of racism (Hamed et al., 2020), and staff who express experiences of racism tend to have their concerns dismissed. This trivializing of racism can be seen as part of what Bain (2018) refers to as the practice of ignorance that, in turn, silences experiences of racism. Milazzo (2017) adds that notions of white ignorance, invisibility, privilege and shame, as theorized in critical philosophy of race, are however limited in the way they minimize white people's active interest in reproducing the racist status quo. These practices of ignorance are moreover intertwined with practices of oppression and exclusion, which can, among those experiencing racism, translate into anxiety, fear, silence, and denial (Bain, 2018).

In this paper, we draw on interviews with 12 ethnic minority healthcare staff in Sweden in order to discuss how they said they manage their emotions when they encounter racism in their work. Before presenting our findings, we start with a short overview on racialized emotional labor, followed by a short description of the Swedish context and our methodology.

Intersections of "Race" With Emotional Labor: Racialized Emotional Labor

The study of emotions has become central in sociology over the past decades (Bericat, 2016). According to Wharton (2009) sociological literature on emotional labor can be roughly divided into studies that use emotional labor to understand the organization, structure, and social relations of service jobs. Furthermore, emotional labor has also been used to understand the efforts of individuals to express and regulate emotions but also the consequences of those efforts. This paper focuses on how employees manage their emotions at the workplace. But while a great deal of research has focused on how emotional labor is gendered, it is, as argued by Humphrey (2021) also "raced", although racialized emotional labor is an unseen burden among public-sector employees and this suggests a need to examine the intersection of race and emotional labor. It is from this perspective we use racialized emotional labor in this paper to reflect on how ethnic minority healthcare staff describe how they manage their emotions when they encounter racism at work.

Emotional labor according to Wharton (1999) is the process by which workers manage their feelings and emotions in relation to the organizational rules and guidelines. As conceptualized by (Hochschild, 2012), this emotional labor:

Requires one to induce or suppress feelings in order to sustain the outward countenance that produces the proper state of mind in others This kind of labor calls for a coordination of mind and feeling, and it sometimes draws on a source of self deep and integral to our individuality. (*p*:7)

It is also clear that emotional labor is understood differently by different analysts. Brook (2009) for example, has analyzed extensively how Sharon Bolton has criticized Hochschild's notion that workers undergoing a "transmutation of feelings" renders them "crippled actors" in the grip of management control. Others have emphasized the need to understand emotional labor in different contexts. Erickson and Grove (2008) for example have examined literature on emotional labor in part to demonstrate how research has contributed in understanding emotional labor processes especially in increasingly changing economic contexts. Mirchandani (2003) also notes the need to understand emotion work entailed in contexts of workers' heterogeneous social and economic environments, a point also emphasized by Chong (2009). While these are important ways of understanding emotional labor, this paper focuses, as already indicated, on racialized emotional labor where racial inequalities and racism are central.

In their study, Evans and Moore (2015) explored experiences of people of color in elite law schools and the commercial aviation industry in the United States, in part to understand the connection between white institutional spaces, emotional labor and resistance. They found that people of color in these institutions experience an unequal distribution of emotional labor as they negotiate both everyday racial micro-aggressions, but also dominant ideologies that deny the relevance of 'race' and racism. Consequently, professionals of color actively look for ways to promote counter narratives, in part to protect themselves from stigmatization and minimize the risk of severe consequences. In similar ways, black men in university settings develop strategies to dissociate themselves from racism that tends "to ignore, trivialize, and reinterpret everyday racism" (Wilkins, 2012: 58). Behtoui et al. (2017) observed in their study of employees in elder care in Sweden that employees from Africa, Asia and Latin America stayed silent rather than

exiting the workplace, even when dissatisfied. Understanding emotional labor in the context of this silence around and silencing of racism as we elaborate below, is the aim of this paper.

Silencing of experiences of racism has been conceptualized as part of an epistemology of ignorance, although Sullivan and Tuana (2007) ask how such diametrically opposed concepts can go together, given that epistemology is about how one knows and ignorance is a condition of not knowing, such that epistemology should have nothing to do with ignorance. In answer to their own question, they argue that the epistemology of ignorance is a complex phenomenon of ignorance aiming to identify different forms of ignorance, how they are produced and sustained as well as the role they play in knowledge practices. As articulated by Mueller (2017, 2020), epistemology of ignorance is a system of ignoring and misinterpreting that reinforces white domination by white interests evading and distorting racial reality and racial injustice. For instance (Martin, 2021), illuminates how critical race theorists and the law are applying the epistemology of ignorance to issues of race, racism and white privilege to explore how forms of ignorance operate to enable racial oppression and domination in the United States. Thus, in the case of racism, the epistemology of racism is an epistemic practice of active knowing designed to produce not knowing about white privilege and structural white supremacy; a denial or active ignorance of a history of domination and of injustices committed in the interests of white people. This 'willful ignorance' is maintained by the ignorance of perspectives that challenge the prevalence of ignorance. In the context of whiteness, willful ignorance, is the cultivation of a stance in which the white self is allowed to consider itself as morally pure and untainted (Proctor & Schiebinger, 2008; Trepagnier, 2010; Martín, 2021), a position embodied in European exceptionalism. Eddo-Lodge (2018) describes this ignorance as an emotional disconnect where a vast majority of white people refuse to accept the existence of structural racism and its symptoms. According to Charles W. Mills (2015), silencing practices and experiences of racism relate to what he referred to as the:

Epistemology of ignorance that is "meant to denote an ignorance among whites – an absence of belief, a false belief, a set of false beliefs, a pervasively deforming outlook – that [is] not contingent but causally linked to their whiteness (*p*:217).

As articulated by Kendi (2019), the epistemology of ignorance is the failure to identify racist inequalities and disparities created through history. Scheurich and Young (1997) use the term 'epistemological racism' to categorize four levels of racism including: individual (overt and covert), institutional, societal and civilizational racism; the last of which they argue is the deepest level arising from the modernist period when European colonial and territorial expansion was undertaken under the rationale of the supremacy of white civilization. In other words, white supremacy became interwoven into the fabric of modern western civilization from the outset. The production and reproduction of racism significantly relies on cognitive and epistemological processes that produce ignorance, that in turn promote various ways of ignoring both the histories and legacies of European imperialism, as well as the testimonies and scholarship of those who experience racism in their everyday lives (Mills, 1999). But as argued by Sullivan and Tuana (2007), ignorance is not just a tool of oppression by the powerful, since it can be used for the survival of the victimized and oppressed as was the case with black slaves' feigned ignorance of their masters' lives. It can also take the form of the oppressed combating their oppression by unlearning the oppressor's knowledge, whether it is passively absorbed or actively forced on them. This may explain some of the observations in our study where the staff manage their emotions on encountering racism, by just wanting to show how professional they are.

This silencing has effects on those experiencing racism, both material and emotional (Cottingham et al., 2018; Eddo-Lodge, 2018). The fear and anxiety which became apparent in our research and are described below, constitute an 'emotional response tied to existing lives, their topographies, histories and daily insecurities' (Pain, 2009: 478), and frames how social realities are understood, and, perhaps more significantly, how they are managed. It is in this context, we argue that anxieties expressed by ethnic minority healthcare staff, and more importantly how they coped with those anxieties, can be understood, as emotional labor. How racism plays out in healthcare settings may also have been further complicated by fear amplified through the current discourses around the 'war on terror' (Pain, 2009) which has augmented a politics of fear with direct implications for racialized minorities who are equated with being a threat to European society (Younis & Jadhav, 2019). This article examines the narratives of ethnic minority healthcare staff in relation to their emotional labor in response to encounters with silenced racism embedded in an epistemology of ignorance that exists in Swedish institutions, including healthcare (Alinia, 2020).

The Silencing of Racism in the Swedish Context

We present in this section, an overview of the Swedish context of our research to demonstrate how the particular setting contributes to the silencing of racism. An open discussion about racism in Sweden is difficult in most institutions, including healthcare (Alinia, 2020). This is partly due to Sweden's self-image as an equal, antiracist, human rights defender and a haven for refugees (Bäärnhielm et al., 2005). This self-image has its roots in the 17th century idea of the "hyperborea", a Nordic version of eurocentrism, which enabled Sweden to have a double moral advantage in relation to colonization. On the one hand, Swedes could claim superiority vis a vis colonized peoples and on the other, as impartial explorers "in service of science and culture" (Schough, 2008, 36–38, 52), they could distance themselves from other colonizers (Björkert & Farahani, 2019; McEachrane, 2018). This moral high ground has been reinforced through the social and political movements of the 1960s and 1970s, when Sweden emerged on the international scene as a model of solidarity and equality, where decolonizing and anti-apartheid movements were widely supported, in the context of a strong welfare state identity (Pred, 2001). Furthermore, Sweden has been among the most generous European countries towards refugees (Hübinette & Lundström,

TABLE 1 | Occupation, ethnicity and gender of the 58 healthcare staff that were interviewed (N = 58).

	N (%)
Occupation	—
Nurse	20 (34%)
Physician	11 (19%)
Dental professional	8 (14%)
Midwife	4 (7%)
Psychologist	3 (5%)
Other professions (Pharmacist, social worker, nurse aid, lab analyst and public health staff)	12 (21%)
Ethnic group	—
Ethnic minority	22 (38%)
Ethnic majority	36 (62%)
Gender	—
Female	46 (79%)
Male	12 (21%)

2014) at least prior to 2016, at which point a more restrictive refugee policy was put in place (Migrationsverket, 2016). On the other hand, Sweden's role in the production of racial biology during the 19th century for example, when Carl Von Linnaeus divided humans into four distinct races and Anders Retzius developed methods of measuring skull of "different races, is not widely discussed in Sweden (McEachrane, 2018). Nonetheless these ideas helped to cement the idea of racial biological differences around the western world. The term "race" itself, was however removed from the Swedish law when, in 1973, the Swedish government argued to the United Nations that it was unnecessary to have laws against racism as the majority of Swedish people were regarded as anti-racist (Hübinette & Lundström, 2014). Later, in 2014, the Integration Minister argued that the removal of "race" from the legal statutes would help Sweden steer away from xenophobia (Mulinari & Neergaard, 2017), which effectively permitted institutional racism to persist, unchallenged.

There is thus no statutory data concerning ethnicity or 'race' in Sweden (Bradby et al., 2019). Using critical race theory and white ignorance studies, Alinia (2020) has examined the Swedish government's policy document to reduce and prevent gender violence against women. Her analysis highlights how, by focusing on gender violence alone, the knowledge produced ignores and excludes racial and ethnic power structures or the ways they intersect, thus further producing, maintaining and normalizing racial otherness and specific forms of social exclusion. Yet racial discourses, according to Alinia (2020), are concealed in the way the concepts of culture and ethnicity are used for example, to excuse gender-based violence among migrant communities as driven by minority cultural beliefs and behaviors. In a similar way, Schömer (2016) has revealed the paradoxes in discriminatory structures in the Labor Court in Sweden by comparing the decisions made on cases of discrimination at the work place. Schömer found that the cases of racism against African workers, were dismissed while cases of gender discrimination were taken into consideration. African workers who reported being discriminated against experienced negative consequences in the workplace including being assigned a lower position and a salary reduction. Discussions around racism in Sweden are thus difficult and white ignorance has been able to develop and flourish, as processes of racialization are presumed irrelevant.

In healthcare, for the most part, despite being a discussion on discrimination, racism is absent as a category of discrimination. This further silences racism and renders it illegitimate and unspeakable. Research suggests that ethnic minority healthcare staff find it difficult to discuss their experiences of racist discrimination within the workplace (Salmonsson, 2014) and this affects how they respond to racism. A study of ethnic minority medical students shows that students suppress their everyday experiences of racism due to a lack of suitable space for discussing them (Kristoffersson et al., 2021). It is this climate of silence and the need to address this silence so as to undo the harms of racism that our research aimed to address. Sweden's universal public healthcare system was subject to a policy change in 2010 (The Primary Healthcare Choice), to open it up to private provision and to allow patients to choose their own doctor and clinic. This "patient choice" seems to have led to discrimination against medical healthcare professionals with foreign-sounding names, as was recently exposed in the Swedish daily newspaper Dagens Nyheter (DN) (Adrian Sadikovic, 2021). Journalists, posing as patients who had recently moved to a new neighborhood, called 120 healthcare clinics and requested that their new doctor be an ethnic Swede. A total of 51 clinics responded positively to the request, 40 refused and only a handful explicitly said the request was unacceptable. Choosing or preferring an ethnic majority Swedish healthcare provider by Swedish patients was evident in our study.

Research Methods

Participants and Recruitment

This article is based on the accounts of 12 of the 58 healthcare staff (N = 35 interviews) of diverse professional and ethnic backgrounds that we interviewed using a semi-structured interview guide between 2017 and 2020 and before the advent of the Covid-19 pandemic. These 12 were the staff who described having managed emotions when they encountered racism at work. Healthcare staff were recruited from various urban and rural areas in Sweden, both primary and tertiary care units, to investigate their views on racism as well as understand their experiences of racism. **Table 1** below includes some of the

characteristics of the 58 interviewed healthcare staff. The locations from which the healthcare staff were recruited will not be disclosed, to avoid the risk of identification, especially for those recruited from care units in small towns. Individual interviews (N = 30), focus group discussion (N = 3) and paired interviews (N = 2) were conducted. Most of the interviews were individually conducted in line with healthcare staff preferences, due to the sensitivity of the topics. Two interviews were conducted with a pair of people who already knew each other. In three cases healthcare staff were recruited from the same workplace and were willing to be interviewed together in a focus group discussion.

We had some challenges in recruiting research participants for this project. Consequently, we used various avenues including previous contacts within healthcare that project members had from previous research activities or from previous experience working as healthcare staff to facilitate recruitment of research participants. It was especially challenging to recruit ethnic minority healthcare staff. As seen in supplementary table 1, most of those interviewed healthcare staff belonged to the ethnic majority group (N = 36/58). The reason for this difficulty was not our inability to identify ethnic minority healthcare staff, but rather their unwillingness to share their experiences and views of racism with us. The major reason expressed for this unwillingness was the anxiety associated with discussing racism in Sweden. Moreover, ethnic minority healthcare staff were afraid that discussing racism with us would jeopardize their employment, even when we assured them of anonymity. Even when they agreed to be interviewed, some did not want to be interviewed at their workplace as they did not want to be seen with us, in case someone from their workplace would ask who we were.

Most of the interviews were in Swedish but some were in English and Arabic; two main languages spoken by the first and second authors who conducted most of the interviews and who are also of minority ethnic background. All the 12 interviews included in this analysis were conducted by the first and second author. From these 12 interviews all but two were audiotaped. The 12 healthcare staff interviewed included physicians (N = 4), nurse (N = 1), nursing aide (N = 1), midwives (N = 4) dentist (N = 1), dental hygienist (N = 1). All the 58 interviews were transcribed, stored and coded in AtlasTi8, a data analysis software.

Data Analysis Process

In this analysis process we used both deductive and inductive (Fereday & Muir-Cochrane, 2006) for the 58 qualitative interview data. A relatively simple coding scheme for the whole data set was derived, tested and modified by all the authors in collaboration, with all 58 interviews coded, using AtlasTi8 software for data analysis. For this analysis a further round of inductive coding was undertaken, with additional codes identified among ethnic minority staff who experienced racism in healthcare, then followed by further thematic analysis (Sandelowski, 2002), to explore the reasoning and experiences that staff described, during which emotional labor was identified as a feature across 12 of the interviews. Although all ethnic minority healthcare staff interviewed had experienced explicit and/or implicit racism from either healthcare users or staff or both, emotional labor was identified by 12 of the 22 ethnic minority healthcare staff interviewed. This paper thus examines the emotional labor that ethnic minority healthcare staff reflected on undertaking when they encounter racism in the course of their work.

Ethical Considerations

Ethical permission for the broader study was obtained from Uppsala Ethical Review Board (Dnr 2018/201). All the standard research routines were followed, to ensure informed participation. The study participants received verbal and written information about the study, their anonymity and confidentiality. Both verbal and written consent were obtained from participants, while prior to audio-recording permission was also obtained from the participants. All data are stored in accordance with the regulations of Uppsala University in password-protected files.

Findings

From the data analysis, two themes regarding why ethnic minority healthcare staff hide or constrain their emotions when they encounter racism were developed. The first concerns anxiety over consequences to their work position while the second concerns the ethical dilemmas encountered when caring for racist patients because, irrespective of the violations or abuse, healthcare staff still have the duty to provide care for all those in need, while the ideal of patient centered care implies attending to patients' own priorities. The ethical duty toward the patient was, moreover, strongly imparted during the education and training of staff. Ethnic minority healthcare staff indicated they had to work extra hard to prove that they were indeed competent. Except for a few cases, racist acts mostly consisted of micro-aggression and racial slurs, as described below.

Emotional Labor and Anxieties Over Work Position

This section describes the different ways ethnic minority healthcare staff interacted with ethnic majority Swedish colleagues and the anxieties this provoked with regard to experiences of racism. Any discussion of racism at work was said to invoke anxiety over being reported to the boss, which was also said to be highly stressful. Immense pressure to appear as a 'normal worker' which meant avoiding to talk about racism, was reported. A nurse-midwife explained that although she was not afraid of us interviewing her at her workplace, she nonetheless had to be careful as there were colleagues who might report her to the boss for discussing racism. She explained how certain colleagues would check whether she has made a mistake simply because she is an immigrant and black, and that she has learnt to resist this by showing she is good at what she does. The threat of being reported to the boss was according to her, stressful because of the need to be on guard all the time. The emotional labor that was implied in resisting the threat of being reported was explained as follows:

> But the thing is, as an immigrant, what I learnt early on is that you have to fight for yourself. You have to, if everybody is doing what you're doing, you have to prove even more that I am good at this. Someone may report . . . some people might feel every little thing that you do, that they feel like: 'Okay I'm going to tell the boss that this thing is happening.' And then you feel like you have to be extra careful everywhere. You have to be extra careful. You know, just to not try to take place, too much. Just try to do what you are paid to do, try to listen to others and sometimes, may be do not express yourself as much.

Another ethnic minority midwife similarly indicated how she blocks herself when she experiences racism from other midwives. The reason for blocking herself or her experiences of racism is the lack of space for discussing racism and the anxiety over the repercussions from colleagues and management. Blocking one's emotion when encountering racism is a clear case of emotional labor that can be especially stressful as racism may be an everyday experience. She said:

Anyway, for me as a person, I block myself. I stop listening to you. When you talk it goes in, but I, I just leave it. I don't take in anymore, you know.

General practitioners (GPs) and surgeons described the way colleagues, particularly those junior to them in the organizational hierarchy, may attempt to take over their duties or report them to the boss for any small mistake. In one case, a GP noted during an interview that took place at a café, that being watched and reported to the chief, especially by junior colleagues – nurses and nurse aides – is regular and is very stressful for him. This participant reported an incident where he mistakenly double-booked a patient. Instead of talking to him, the nurse just sent the patient straight to the clinical unit manager. He said at the end 'being watched is extremely stressful' especially because he also has to hide his emotions from his white colleagues.

In another case, a GP who was in charge of a clinic that includes the emergency and ambulance care sections, explained at great length how the nurses tried to take over his position in the following way:

When the ambulance came, the nurses started talking and explaining in a way that seemed to indicate that they wanted to take over my role. They did not want me to explain what needs to be done and this was not comfortable. This happened twice and it seemed like they did not want to have me there. It felt like they did not want me here. I was therefore forced to talk to the chief about what had happened. He asked me whether I wished to lodge a formal complaint, but I said no and added that he should talk to the nurses and hear their side of the story. The chief doctor then talked to the nurses, and in turn also informed the one above him. They then talked to the nurses and then we all talked together. Still one of the nurses said she thought I could not speak Swedish although to get to my position one has to have proper Swedish and it is indeed the main criteria to get such a job. The other nurse said she thought I had no experience.

On the question of whether he was satisfied with the intervention he said:

Yes, also because the chief had asked me whether I wanted to tell the nurses what I felt, which I did.

Although the case was taken seriously by the manager (referred to as the 'chief doctor'), it was handled as a one-off incident and did not generate any guidelines or protocols against racism in the workplace. Failing to institute clear guidelines on racism may further silence racism thereby making it even more invisible.

Another GP reflected on the lack of space to discuss racism encountered from both colleagues and patients and then noted how she behaves when she encounters racism:

You know, we face a lot of people like this every day. So, you should never take it personally. Just, throw it behind you and just keep going, because at the end of the day, if you are going to take everything personally, you are going to feel very bad about it.

She went on to explain how the lack of space for discussing, let alone reporting, racism can be traumatizing for ethnic minority healthcare staff:

> I think, there does not exist that kind of space. And I think a lot of people of color . . . or healthcare staff are traumatized by these situations. And they just keep going, because yeah . . . I mean, you can ask probably every person of color, who work with patients. I mean, it would be absolutely surprising for me, if any of them going through a racist situation that does not really affect them. But some of them. . .. they came to the conclusion that: "Okay, if no one cares, I will as well not care." And that makes the problem very normalized.

A midwife, who had presented herself during the interview as a strong personality, nonetheless elaborated the quandary and consequent emotional labor involved in her work. She described how she sometimes has to listen to her colleagues talking negatively about patients who are migrants from Africa and the Middle East. The midwife talked about how she is sometimes asked to interpret for patients from Somalia, as she is originally from Somalia herself. She described how what she hears in the room as an interpreter was upsetting because patients were not being treated properly:

> I have interpreted for Somali patients because I speak Somali. And many times, as an interpreter, I am not allowed to say anything, or I am not allowed to have an opinion. I just have to interpret what is said in the room. But many times . . . it eats me up as a person. I have stopped interpreting because I see how these people are treated in healthcare.

In this quote the midwife talks about how it eats her up to listen to other healthcare staff talk negatively about Somali patients and how she witnesses the inadequate treatment they get. When asked if she ever discusses these issues in her workplace she responded:

> No, you do not dare to talk about it in Sweden. Absolutely not. One must absolutely not mention the

> word racism or comment on something . . . you know, racist. You have to find other ways of talking about it.

The midwife stressed how she has to control her emotions by appearing professional for a whole day at work, and to appear strong and as though she is not affected by the racism she encounters or the racism that ethnic minority patients encounter. The emotional labor of maintaining her professional face as a competent midwife, despite witnessing racist practice was draining. As the issue of racism was silenced and not named as a category of discrimination, racialized healthcare staff are left to deal with racist experiences on their own, however painful and heavy.

Ethical Dilemmas in Taking Care of Racist Patients

This section focuses on the dilemmas of taking care of patients who may be overtly or covertly racist towards ethnic minority staff who, due to a professional duty of care, learned during their training, and expressed in organizational rules, cannot refuse to care for such patients. A major concern for the patients was whether the healthcare staff they were meeting were qualified, and therefore knew what they were doing. Patients meeting black staff or staff who spoke Swedish with a foreign accent could express a wish to be cared for, by what they described as 'proper' doctor or nurse.

An ethnic minority midwife talked about the ethical dilemmas arising from the duty of caring for patients who are hostile. She described an incident where a patient refused to be taken care of by her, so the senior midwife in charge swapped her for another midwife, while telling her not to take it personally. The midwife then explained the ethical dilemma of meeting patients who do not want to be cared for by her as follows:

> Yes, it has happened . . . I thought, as a midwife I have a duty . . . And I cannot say: 'No, I do not want these patients.' But I also felt when I came into the room, that these people will demand a lot of energy from me. So, I tried to prepare myself mentally, that the 8 hours I have in front of me will be tough, but I have to be professional. Because I noticed right away that I wasn't wanted in that room, but I thought, I have to be professional.

An ethnic minority GP who was at the time of interview also a doctoral student elaborated on how the education of healthcare staff imparts ethics for medical work, stressing that the patient comes first. The GP doctoral student reflected on this in the following way:

I think there is a lot of ignorance among many people who work with healthcare about racism and how they deal with it. Unfortunately, that even includes people of color, because we have like we have been brainwashed somehow Because every time, we are reminded during all the years of education that the patient comes first. And you have to be understanding and supporting, which is a part of being a doctor. And if something happens, and the patients say anything, you should never take it personally. You could just imagine they have a bad day. But it feels like a way to normalize a certain behavior of patients or actually stop paying attention to the problem of racism that happens on a daily basis.

She then described a case where a patient did not want to be cared for by her, but also how her supervisor reacted. The patient said:

> "I don't want a n****r to take my blood!" It was an old person, and in that situation, like my supervisor said "Okay that was not nice! But I will take care of him." So, I stepped aside. I was super sad and angry, because this is not. . .. if it happens outside my work, I will never shut up. . ..

She went on to elaborate on how the supervisor continued to persuade her not to take the abuse seriously since it is so very common:

> The patient came first. So, after they took blood and the patient left, the supervisor told me: 'You know, we face a lot of people like this every day. So, you should never take it personally. Just, put it behind you and just keep going, because at the end of the day if you are going to take everything personally, you are going to feel very bad about it.' But I was crying, because I, in a normal case, I would be very . . . like, I would be angry, and I would speak about it. And don't forget as well, being a student, means that you have a very low . . . you are at the bottom of this hierarchy. So, we don't have a lot of power within that. So, I have to accept it and swallow it, after my supervisor . . . which is not easy, and then afterwards, it's just like people continue.. . . it's very depressing actually, because when you go home, you are just totally damaged of this and angry.

According to this GP doctoral student, there is no space for discussing racism at the university or thereafter in medical practice, and this absence becomes a burden which she says can be traumatizing.

The GP presented earlier with the incident of nurses trying to take over his role, described his experiences after moving to a clinic where he said the majority of patients (80–90%) were ethnic majority Swedes. At this new job, he got a higher salary and was moreover near his home, which allowed him to spend more time taking care of his newborn baby. He nevertheless decided to move back to his previous clinic because as he said 'I felt like I was misplaced' because the patient profile was so different from what he was used to. He described two particular encounters with patients after which he decided to move back to his old clinic, although as he stressed, they needed doctors in the clinic he was abandoning. One patient who had signs of pneumonia was suspicious and asked whether the GP was sure of what he was doing, implying he could not be a proper doctor. The GP had said to the patient:

> You have pneumonia and we are going to take an x-ray . . . you are going to get antibiotics today. I am going to send you for an x-ray. When I get the results I will give you a call.

The GP explained the condition of the patient and why he made the x-ray decision in the following way:

> If he hadn't had blood in his sputum, I wouldn't send him for x-ray. Because he had high inflammation profiles, like the things we take blood tests for, and when one listens to the lungs there are typical sounds that tells. . .. the history. . .. of the disease.

The patient, according to the doctor, had recently come back from Thailand and had high fever, and was coughing. The doctor explained to the patient that the x-ray would be done the same day and when the results were out, the doctor would immediately call the patient. It was at that moment when the patient asked the doctor:

Are you sure about what you are doing? If you are not sure, can any of your colleagues check on me?

The patient then stood up and went to request another doctor at the clinic's reception, where he was directed to another doctor. The new doctor however told the patient he should do what the first doctor had said. Finally, the patient said he was going to visit a larger hospital instead. The GP noted that the patient seemed to want to consult any other doctor who was a majority ethnic Swede. The GP trivialized the patient's refusal to accept his medical authority by saying the patient was not clear in the head.

During the same time, the GP further explained that besides micro-aggression from patients questioning his competence, a final stroke was the meeting during a single day of two patients with Swastika symbols tattooed on their backs. He explained that this was something he had previously seen only on TV, and after this he decided to leave the clinic even though they needed doctors, it was near his home and he had better terms of service, including a higher salary. In spite of these advantages, he felt this was not his place, which he described in the following way:

> The funny thing . . . I have never seen I see on TV the swastika tattoos and In one day, there were two patients of mine with swastika tattoos. I have never seen this before. So, I gave my notice. 'This is not my place.' So I just left. But they need doctors, they need doctors.

In this case, the dilemma that seemed to weigh heavily on the doctor was his decision to leave the clinic despite knowing there was great need for doctors. This particular doctor seems to have feared for his own life in the face of patients tattooed with swastikas, given the symbol's relation to historical as well as the contemporary racist violence which can be understood within the context of the increased politics of fear of migrants.

In another case, a GP who was also a surgeon described his encounter with a patient who did not want to be treated by what he termed as 'svartskalle' (literally 'black head' – a derogatory term for a racialized other) in the following way:

Once I had one of my colleagues, a nurse, follow me to my office. She said to me: 'You have a patient waiting for you outside.' He is on my list, I have to see him. So, I went to the waiting room and I called out: 'Mr. X?' Nobody. 'Mr. X?' Nobody? Alright, there are a lot of people waiting. So, I went back to my office, but the nurse came again: 'Right, the patient is waiting for you.' So, I went with her: 'Mr. X?' He told her: 'I told you, I don't want this svartskalle!'

The GP then asked the nurse to ask his colleague, an ethnic majority Swedish doctor, to take care of the patient in exchange for one of his patients. The patient had a bleeding hemorrhoid. The nurse informed the other doctor, what had happened, and the doctor then told the patient:

> 'We have a good surgeon here, I want him to see you with me, if you are okay?' He (the patient) said: 'Okay.' No, but he doesn't know who this surgeon is. So, the doctor came to me and told me: 'Alright, this is that patient, we need to see him together just a consultation, that's it.' Alright, okay, but I felt he can do that, my colleague. He can do, but he wants to treat this patient, and I cannot say no, because we both are doctors and we want to treat the sick patient, mentally and. . .

The doctor who was rejected by the patient had to join the colleague in jointly treating the patient. The ethnic minority doctor was the more qualified for the condition the patient suffered from and, as he also argued, he could not refuse because, as a doctor he has a duty of care for the patient, no matter how offensive they are. Neither could he say 'no' to his colleague's request to co-treat the patients, as this might have had other consequences.

In yet another case, a dentist explained how a patient blamed immigrants for being in Sweden and illegitimately consuming social welfare in the following way:

You take all our money and use it on those asylum-seeking children who have come here!

The dentist then told of another incident where another patient screamed at a nurse for being of foreign background, spat on her and told her she will never learn the language. According to the dentist, this abuse affected the nurse mentally and he added:

When it happened, I did not really know what to say or do. It happened so fast and she was really hurt and sad and we later sought psychological help, both of us, so as to talk about how this patient behavior has affected us.

The burden of abuse according to the dentist, is heavier because one cannot refuse to care even when insulted and discriminated against, because when one works in health or dental care, one works to help people, as the dentist noted:

I do not want to deny people care, especially when they come with acute need. I cannot say I do not want to treat you, which one should do when one has been treated differently and offended. But as a caregiver you cannot do it. You still want to treat because the person has pain, but it is difficult.

In another interview, a dental hygienist described how his patient always tries to dismiss him and spoke negatively about migrants and refugees as being lazy and welfare exploiters. He reports:

I do not usually pay much attention to what she does or says, but I know that the best way with such people is to just concentrate on the work. I'm doing my job, but next time she's coming back to me.

Although the dental hygienist discussed how he tried to focus on his work, since one has to always take care of patients, he expressed how difficult it is for the same patient to come back to him and continue speaking negatively about refugees. Micro-aggression and racial slurs when directed at healthcare staff create, as discussed above, dilemmas since the staff have few choices except to adhere to the duty of care, which can be burdensome and demeaning, as the interview excerpts have indicated. A nurse-midwife similarly described how some patients directed their racial slurs. In one case an elderly patient said to her: 'go back to your country … and stop using taxpayers' money!' Other times when in the corridor, she can hear patients saying they are looking for a nurse, but they do not talk to her and sometimes they do not want her to treat them. In response to such acts, she said she only works professionally, to show them she is a proper nurse. In this way she tries to defend herself against possible abuse within a context where she cannot refuse to take care of racist patients.

In another case, a nurse aide described an encounter she had with an ethnic majority Swedish elderly patient. The elderly woman said: 'This is my first time to sit next to a n****r.' The nurse aide then excused this by saying that the woman had of course only seen Africans on television, where what is mostly presented is hunger and poverty in Africa. She then stressed that the woman had not seen the different shades of Africa as a large and varied continent. Then this nurse aide asked the researcher whether she could be expected to be angry with this woman, but even before the researcher could answer, she said: 'I cannot be angry with her, but I can be sad'.

DISCUSSION AND CONCLUSION

We have described the concerns articulated by ethnic minority healthcare staff in relation to their encounters with racism at work. Fear and anxiety over the consequences of being identified as a colleague who discusses racism inhibited the recruitment of participants for our research, because the ethnic minority healthcare staff were anxious about jeopardizing their employment and risking good relations at work. The experiences of ethnic minority healthcare staff in their interaction with colleagues at the workplace and their encounter with racism while caring for ethnic majority Swedish patients, was described as complex. Many remained on guard, working hard to demonstrate their professional competence, but also because their duty is to care for the sick however, offensive or abusive they may be. Healthcare staff felt caught in the need to do no harm, with the patient's right to care even when being abusive. The regularity with which GPs, dentists and surgeons were questioned as to whether they knew what they were doing reflects white ignorance (Alinia,2020; Sullivan and Tauna 2007; Trepagnier, 2010; Mueller, 2017; Eddo-Lodge, 2018;, 2020; Martin, 2021) which, in combination with Swedish exceptionalism has, over the years silenced racism as discussed earlier.

Patients' racial preferences, micro-aggression and racial slurs were said to be stressful for healthcare staff, and the resulting stress for example, led in the case of the dentist, to the need for psychological care, a point also articulated by Kimani Paul-Emile et al. (2016) in the following way:

For many minority healthcare workers, expressions of patients' racial preferences are painful and degrading indignities, which cumulatively contribute to moral distress and burnout (*p*: 710).

The complexity of reactions and the emotions for those individuals experiencing and witnessing racism at work can perhaps not be well understood, let alone changed, without understanding the Swedish context, where racism continues to be ignored and even erased from legal statutes. This has a number of implications. While ethnic minority healthcare staff may have little chance to report work-based racial discrimination from colleagues or patients, those referred to as "the chiefs" (or bosses) were also constrained in how they could deal with racist patients. Such organizational constraints have not been addressed by race and ethnicity scholarship in Sweden as elsewhere, which has largely neglected the role of organizations in the social construction of race (Mirchandani, 2003; Ray, 2019). Some staff excused racism on account of the advanced age of the racist patient and advised the abused staff member not to take the abuse seriously, especially because it is a common phenomenon. They thus normalized the racism and further silenced those experiencing the racism. It is around this complexity that understanding the role of the epistemology of ignorance or white ignorance we addressed earlier becomes critical for understanding the effects of patient racial slurs and micro-aggression and the anxieties this generates among ethnic minority healthcare staff. While racial slurs were common, our interviews also document occasional overt racism from patients, including the use of the n-word, spitting and reference to immigrants as illegitimate consumers of social welfare, sometimes referred to as 'welfarism' (Bradby et al., 2019).

Healthcare staff who expressed anxiety about jeopardizing their employment if seen to be engaged in discussing racism, also described various strategies including working harder to prove one's professionalism and competence, blocking or hiding feelings, that can be conceptualized as ways of resisting racial degradation and thereby protecting oneself emotionally from the damaging consequences of racism. The strategies represent an important aspect of racial resilience or resistance, enabling ethnic minority groups to participate in racially oppressive institutions while maintaining and valuing their human dignity (Evans and Moore 2015; Eddo-Lodge 2018). In the process, the strategies pursued by those encountering racism paradoxically further silence the discussion of racism and awareness of its effects. In this context and complexity, it seems that stringent methods of changing epistemological forms of racism are needed (Bhavnani, 2001). One way would be to initiate vigorous dialogues among scholars and other stakeholders at policy and managerial levels, but also create earnest integration in the education system including in healthcare. (This is an area our broader project has initiated and published in the form of interventions to strengthen

nursing education to recognize and deal with racism (Bradby et al., 2021). In two Universities in Sweden, we have constructed and implemented an educational package among nursing students, as a method of initiating a discussion on racism in healthcare.)

This article does not aim to repeat the long history of race, racialization, and racism. However, since we understand racism as a silent and silenced phenomenon in Swedish healthcare, we hope to find ways of un-doing that silence, which implies that understanding the role of history in constructing race, racialization and racism is crucial, not least as part of healthcare education programs. Only when we grasp the phenomenon of fear, silence and denial, as expressed in our study, can we engage policy makers and communities in a dialogue about how to change. If the current anti-racist movement asserting that "Black lives matter" is anything to go by, it is clear that active ignorance, often protecting white supremacy, is at large. Moreover, besides the micro-aggression and racial slurs that reflect the silencing and rendering of racism invisible, it is not clear how global fears (such as the war on terror) (Pain 2009) or what Altheide (2003) refers to as the politics of fear, affect healthcare. While there was not much articulation of this fear, the way patients asked health care providers to go back home, to stop using welfare and stop providing care to refugees who have come to the country, can be seen as part of a discourse of fear of migrants by ethnic majority Swedes. Moreover, the fear articulated by a GP facing patients' Swastika tattoos and his flight from the clinic, located in an area described as having 80–90% ethnic majority Swedish patients, can be understood as an illustration of how ethnic minority staff are affected by the politics of fear. The GP's abandonment of the clinic is similar to what is reported by Stafford, 2010) about a surgeon in Germany who refused to operate a male patient when he discovered Swastika symbol on him. How this politics of fear, which is contextual, material and relational, is experienced by ethnic minority healthcare staff and how it is linked to the welfarist claims against immigrants however, remains to be explored in detail. Another issue is the way that fear around discussing racism in professional settings may hinder research. Although it is not clear how the politics of fear affected the healthcare staff in this study, it is important to note that many ethnic minority healthcare staff in this study refused to be interviewed, but this constitutes a separate publication.

DATA AVAILABILITY STATEMENT

The raw and anonymised data on which this analysis is based may be made available on request.

ETHICS STATEMENT

The study was approved by the Uppsala Regional Ethical Review Board (Dnr 2018/201).

AUTHOR CONTRIBUTIONS

BMA, SH, HB, and STB planned the project, data collection analysis and writing of the manuscript while one author joined and helped in data collection and writing.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fsoc.2021.741202/full#supplementary-material

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"Ah, it's best not to mention that here:" Experiences of LGBTQ+ health professionals in (heteronormative) workplaces in Canada

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Introduction: Despite human rights protections for lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people, LGBTQ+ professionals may continue to experience discrimination working in heteronormative systems and spaces.

Methods: In this qualitative study 13 health professionals (nurses, occupational therapists, and physicians) from across Canada participated in in-depth qualitative interviews to explore their experiences with work-related microaggressions and heteronormativity.

Results: Heterosexist microaggressions from both patients/clients and colleagues were the norm, perpetuating and bolstered by heteronormative workplace and professional cultures. In turn, LGBTQ+ professionals navigated disclosure-decision-making, in power-laden contexts where all options carried potential negative consequences.

Discussion: Drawing on the notion of "heteroprofessionalism," we argue that the concept of professional carries encoded within it demands that the occupant of that category be—or present as—heterosexual, an unmarked status that can be readily desexualized. Acknowledging sex and sexuality disrupts "professionalism." We argue that such disruption, indeed dissention, is necessary to open (hetero)professional spaces to LGBTQ+ workers.

KEYWORDS

Canada, health professionals, heterosexism, LGBTQ+, minority group, queer

Introduction

> In general, discussions within the clinic occurred under the assumption that all persons in the clinic view heterosexuality as normal, acceptable, and worth celebrating through sharing… There was a certain ease that came from an expected appreciation and understanding of the topic (Jackson, 2000, p. 30).

Almost 25 years ago, Jeanne Jackson documented the experiences of lesbian occupational therapists, noting that subtle exclusion meant the health professionals in her study missed out on informal social connections through which much practice knowledge was articulated and solidified. Participants highlighted informal lunch table chit-chat as rife with

assumptions and expectations of heterosexuality, intermeshed with important information-sharing and patient/client problem-solving. Lesbian therapists were excluded or absented themselves due to discomfort; in either case they missed out on a critical component of workplace camaraderie, mutual support, and co-learning.

Jackson does not use the language of heteronormativity, which was still very new at that time, but that is precisely what her analysis describes. Based on the earlier concept of "compulsory heterosexuality" (Rich, 1980), heteronormativity is an ideological stance in which heterosexuality is both assumed—understood as normal, natural, inherent—and prescribed—understood as the only "right" way to be, the way people *should* be (van der Toorn et al., 2020). Heteronormativity renders non-heterosexual identities overlooked, dismissed and devalued as inferior or deviant. It is fortified and legitimated by heterosexism, the oppression of those who live, love and identify outside the bounds of heterosexual norms, ranging from dominance in social institutions like media, politics and education, to violence and the threat of violence. Heteronormativity intertwines with cisnormativity, the insistence that gender is binary, with gender identity and expression inextricably mapped onto (presumed binary) biological sex (Brady et al., 2022). Cisnormativity privileges those whose gender identity aligns with the gender they were assigned at birth (cisgender).

While the heteronormativity of health professional cultures may well have lessened in the quarter century since Jackson wrote, there is evidence suggesting this may not be the case, despite substantial improvements in human rights protections in most places (Eliason et al., 2018; Toman, 2019; Turban, 2019; Cleland and Razack, 2021). Despite changing attitudes and improved legal protections, lesbian, gay, bisexual, transgender and queer (LGBTQ+) people continue to confront the stranglehold of heteronormative workplace environments (Eliason et al., 2018; Resnick and Paz Galupo, 2019; van der Toorn et al., 2020; Worthen, 2021). LGBTQ+ workers endure routine messaging from managers, colleagues and workplace cultures that indicate less than full belonging (Nadal, 2019).

In this article we explore the experiences of 13 self-identified LGBTQ+ health professionals across Canada. Our main objective is to examine how heterosexist microaggressions and institutionalized heteronormativity shape their everyday work experiences, harming them and constraining their engagement in their professional work. We explore how available responses to microaggressions and heteronormativity prove not only insufficient, but also contribute to the continued heteronormativity of professional work contexts.

Heteronormativity and microaggressions in the professions

In the context of expanding human rights protections, one of the key ways heteronormativity is policed and enforced in workplaces and professional cultures is through microaggressions: disparaging comments, jokes, avoidant behaviors, being overlooked or discounted, being tokenised or exoticized. Microaggressions may be defined as the "brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative… slights and insults toward members of oppressed groups" (Nadal, 2008, p. 23). They can be interpersonal or environmental, built into institutional policies and practices. Microaggressions at work may lead to anxiety, suspicion and distrust, depression, withdrawal, ostracism and/or isolation, doubt about one's value in the workplace and other psychological and physiological distress (Eliason et al., 2018; Gabrani and Pal, 2019; Resnick and Paz Galupo, 2019; Vaccaro and Koob, 2019; Bullock et al., 2021). Heterosexist microaggressions regulate and control workers through fear—fear of interpersonal hostility or harm, fear of institutional punishment and fear of isolation (Mizzi, 2013). These are no less relevant in the professions than in other workplaces.

Within discourses of "professionalism," some ways of being and doing, some subjectivities and some bodies are deemed acceptable and appropriate while others are disavowed. It has been argued that professionalism is structured by a politics of respectability, which demands that members of socially marginalized groups regulate their bodies and self-presentations to adhere to normative standards, if they want acceptance and the privileges of membership (Davies and Neustifter, 2021; Beagan et al., 2022). LGBTQ+ embodiments have the potential to disrupt respectability, rendering them incommensurable with professionalism (Davies and Neustifter, 2021). LGBTQ+ workers, then, are expected to manage and control those aspects of their identities that are controversial, disruptive, those that "do not conform to dominant norms for professionalized self-presentation" (Davies and Neustifter, 2021, p. 6). Mizzi coined the term "heteroprofessionalism" to capture this "demand for a standardized professional identity void of same-sex desire" which in turn relegates LGBTQ+ identity to a "silenced aspect of the self" (Mizzi, 2013, p. 1,620–21). Sex and sexuality are considered outside the bounds of professionalism, desexualizing all workers, and pushing those whose social identities are defined through sexuality—LGBTQ+ workers—to the margins (Mizzi, 2013; Calvard et al., 2020). Even within workplaces that self-proclaim inclusion for LGBTQ+ people, heteroprofessionalism withholds full acceptance contingent upon approximating heteronormative expectations. Those who most resist normalizing forces, disrupting through their very existence, may find their professional recognition tenuous indeed.

Stereotypes of LGBTQ+ bodies and lives may limit professionals' control over the degree to which they reveal or conceal LGBTQ+ identities. They may be read as LGBTQ+ against their will, or they may be read as cis-heterosexual, despite identity disclosures (Einarsdóttir et al., 2016). The prevalence of narrow stereotypes means they may face negative consequences both for failing to embody and perform heterosexuality, and for failing to embody and perform queerness as it has been constructed by coworkers and others in their workplace hierarchies. In other words, they may be punished for being too queer, not queer enough, or not the right kind of queer (Einarsdóttir et al., 2016; Stenger and Roulet, 2018).

In the context of heteroprofessionalism, policed by microaggressions and regulated by fear of consequences, some LGBTQ+ professionals may choose to "pass" (Goffman, 1963), hiding sexual and gender identities from clients and/or colleagues to avoid stigma and to assimilate into existing power structures. Some may choose to "cover" (Goffman, 1963) queerness,

downplaying its significance to decrease stigma and potential harms. Yoshino (2006) suggests covering occurs on four axes: appearance (dress, grooming, and bodies), affiliation (alignment with LGBTQ+ cultures), activism (politicization), and association (social networks, partners, and identity-specific groups). Covering, or toning down queerness to make it less objectionable, can improve chances of infiltrating existing power structures. Thus, as Yoshino notes, covering may be an individually chosen identity-management strategy, but it may also be subtly coerced, with institutions and professional cultures offering inclusion at the price of (near) assimilation. Covering is both predicated on and simultaneously supports "respectability hierarchies," allowing those who can assimilate or approach outward conformity to achieve inclusion and social respectability at the expense of others (Branfman, 2015, p. 73). It is critical to remember that such respectability hierarchies are rooted in and operationalized through heteronormative workplace cultures.

Health professional contexts

Within the health professions, heteronormativity is entrenched, expressed and taught through formal and informal curricula, and through professional cultures of conformity (Jackson, 2000; Risdon et al., 2000; Eliason et al., 2011a,b, 2018; Röndahl, 2011; Robertson, 2017; Murphy, 2019; Turcotte and Holmes, 2021). "Professional behavior" is assessed and evaluated, with discourses of professionalism masking the demands that new entrants comply with expectations of bodies, comportment and behavior that are inherently white, Western, middle-to-upper-class, heterosexual and cis-masculine (Beagan, 2000, 2001; Martimianakis et al., 2009; Jenkins et al., 2021). Particular ways of being are deemed "correct," subject to both formal and informal surveillance (e.g., MacKenzie and Merritt, 2016), with "unprofessional" behaviors cause for "remedial" action. As Mizzi has argued, "Professionalism can be an instrument of inequity and injustice by victimizing and punishing victims of discrimination to a point that it establishes a culture of fear for individuals with non-normative identities" (Mizzi, 2013, p. 1,604). In these contexts, LGBTQ+ health professionals and trainees—faced with pervasive heteronormativity and microaggressions—may opt to mask, hide or diminish the significance of their LGBTQ+ identities (Ross et al., 2022). This is intensified by the clear power hierarchies within and across health professions, leaving trainees and workers subject to the evaluation of powerful others. As one participant said, in a study with transgender and gender expansive (e.g., non-binary, genderqueer, and agender) physicians,

> I found it very difficult to weigh my what I felt to be my duty to speak up against injustice with my desire to remain safe… there's a lot of power differential… I was very much afraid that not only would there be professional repercussions, but also there might be personal repercussions… (Westafer et al., 2022, p. 1).

Tracking change over time, Eliason et al. (2018) indicate that while experiences of overt harassment and ostracism may be declining over the past three decades, LGBTQ+ health professionals still routinely hear disparaging and stereotyping remarks about LGBTQ+ people, from both colleagues and patients/clients, and may witness ill-treatment of LGBTQ+ patients/clients and their family members, which simultaneously conveys contempt for their own identities. In a recent survey of medical graduate trainees (n = 730) LGBTQ+ respondents were significantly more likely to have experienced discrimination and microaggressions (Walker et al., 2022). Based on their qualitative research, Bullock et al. add that, "Patients, providers, peers, and the learning environment itself are all common sources of microaggressions" (Bullock et al., 2021, p. S71). LGBTQ+ healthcare workers experience microaggressions ranging from patients refusing to be seen by them (Eliason et al., 2018), to colleagues making inappropriate comments about their sexual/gender identities, ostensibly as jokes (Eliason et al., 2011a). It may be particularly hard to respond to microaggressions coming from patients/clients, given the demands of altruism and selfless sacrifice embedded in conceptualizations of professionalism (Gabrani and Pal, 2019; Turban, 2019; Sibbald and Beagan, 2022). LGBTQ+ health professionals in response must devote untold energy to navigating whether/when/how/to whom they disclose their identities.

In this critical interpretive qualitative study we explore the experiences of 13 self-identified LGBTQ+ healthcare workers from across three professions (medicine, nursing and occupational therapy) in Canada. We examine their day-to-day experiences in varied work environments with clients/patients and colleagues, their navigation of microaggressions and heteronormative professional climates, and their responses to heteronormativity, walking the disclosure/non-disclosure tightrope erected through heteroprofessionalism.

Research methods

After obtaining research ethics approval from three universities, participants were recruited from across Canada using snowball sampling, social media and recruitment posters. Inclusion criteria were self-identification as LGBTQ+ and 5+ years of professional practice. Those who expressed interest were emailed study details and consent forms; once eligibility was confirmed, interviews were scheduled. The sample for this analysis included six occupational therapists, five physicians, and two nurses. Participants were given a $100 e-gift card in appreciation for their time and expertise.

Individual, semi-structured interviews were conducted by phone or in person, after discussing consent. Interviews averaged 60–90 min, exploring experiences of belonging and marginality in professional contexts, both during education and in workplaces Interviews were recorded, transcribed, deidentified and checked for accuracy. ATLAS.ti qualitative data analysis software was used to facilitate coding and inductive analysis of transcripts by a team. Some codes drew from theory and literature, while others were identified through reading and rereading the transcripts. In a reflexive approach to thematic analysis (Braun and Clarke, 2019), we moved iteratively between coded data and full transcripts, between theory and data, and among transcripts. For readability,

quotations used in the manuscript were "cleaned" by removing false starts and filler words like "um" and "ah."

Weekly team meetings over many months focused on data interpretation; collectively we pondered how we were thinking about codes, whether we needed new codes and how codes might be altered for greater nuance or accuracy (Braun and Clarke, 2021). Gradually our discussions engaged more with theory and other literature. While our understanding of heteronormativity and heterosexism as forms of oppression predated this analysis, the specific framework of heterosexist microaggressions and cultures of heteroprofessionalism was identified through ongoing team analysis and discussions, proving a useful structure for this article.

The research team included LGBTQ+ and heterosexual team members; all identified as cisgender, though our gender presentations vary. In every aspect of the research we strived not to eliminate biases, but rather to mobilize our lived experiences, our socially located perceptions and perspectives to enrich analyses. We employed a form of "transpersonal reflexivity" (Dörfler and Stierand, 2021), with perceptions, experiences and beliefs becoming sources of interpretive insight through collectively thinking aloud about the data.

Results

Participants were mostly in their 30's, with some in their 40 and 50's. Most had been in practice 5–9 years, primarily in urban contexts. Of the 13 participants, four people explicitly identified as men, seven as women. Almost all were white and did not identify as disabled. In this article we analyze the experiences of participants under three main themes: Interpersonal microaggressions, heteronormativity in professional cultures, and responding to heteronormativity. In an effort to maintain confidentiality we do not identify quotations by ID#, or by demographics (e.g., age, practice area, specific gender or sexual identity, or other intersecting identities).

Interpersonal microaggressions

For many participants, heterosexist microaggressions in professional settings were seen as the norm, a routine part of encounters with both patients/clients and colleagues. They required participants to navigate decisions about identity disclosure, calculating when safety trumped living their LGBTQ+ identities openly.

Microaggressions from clients/patients

A few participants reported that blatant heterosexist aggressions from patients/clients were fairly routine, even normalized: "In my field we are used to patients sometimes making comments that are really quite unpleasant." Some described it in ways that (implicitly or explicitly) characterized the hostility as a symptom, or a consequence of the stress surrounding acute illness:

> I have had cases where families have made homophobic comments and things like that, or sometimes when working with really sick patients in the emerg who, you know they are acutely unwell or they have personality disorders, they might make really disparaging homophobic comments toward me.

More typical than such overt hostility were indirect and subtle experiences with clients/patients. For example, some participants described overhearing conversations clients had with others using derogatory heterosexist insults. They worried about the harmful impact of such verbal hostility on other people in the clinical setting who might overhear. Occasionally patients made generalized heterosexist comments directly to participants, not realizing the participants identified as LGBTQ+: "They'll just make some sort of comment, sort of making conversation with me, but not even realizing that it might, their opinion might actually be impacting me personally."

It was particularly challenging to figure out how to respond to heterosexist microaggressions from patients/clients, given the relative power position of the health care professional. A common strategy was to ignore it and continue the clinical encounter: "If it's with a patient interaction, I have to say I try not to take it personally and I just do what I think would be most helpful for the patient and what I think is clinically relevant." Responding "personally" tended to be characterized as "unprofessional." One participant went further to suggest that confronting heterosexist microaggressions might be riskier for a LGBTQ+ health professional than for a cisgender heterosexual colleague:

> I had been working with staff when I was a resident, and the patients would, you know, make some kind of derogatory comment or something and the staff really called them out on it and labeled it as inappropriate. And it made me wonder if maybe I let it go, vs. whereas maybe other people might have more of an issue with it and maybe call it out.

When not overtly disclosing LGBTQ+ identity, confronting heterosexist microaggressions risks eliciting "guilt by association," potentially incurring stigma. This participant commented later that while working for change is important, "if the people in power don't like that, then they can kind of um, maybe make you in a position where you are more likely to be ostracized."

Microaggressions from colleagues

In their professional workplaces, participants noted that colleagues also employed language, comments and behavior that constituted heterosexist microaggressions. For example, one participant described routinely fielding questions from coworkers that mobilized and bolstered stereotypes of LGBTQ+ relationships:

> In my first job, I'd say it was a different kind of homophobic, whatever. More ignorance… It was just, the questions that some of my coworkers would ask me, like, it felt

> like 1972. Like, "Which one of you in the relationship is the man?" I'm like, "I don't– Are you kidding me?!… How is it you're thinking that this is appropriate?"

One participant reported being bullied by a boss, which he perceived was due to his sexual identity. Another participant was highly uncomfortable when a manager mocked his voice and mannerisms, insinuating gay "flamboyance" was comedic.

At the same time, narrow stereotypes could be activated to demand particular forms of LGBTQ+ embodiment and performance. One gay man reported coworkers expected him to perform a specific version of "gayness" to fit their expectations: "How do I explain? I don't know. I'm definitely viewed as [Name] the Gay Guy. It's not actually said, but I think it's because… I fit the stereotypes in many ways… I find that's just expected now, almost." The prescribed identity display felt obligatory.

Some participants felt tokenized, reduced to their queerness, with workplace colleagues employing nicknames like "Team Rainbow" that focused on their sexual identities. This focus, or even unwanted "outing," could be uncomfortable, even when intended light-heartedly:

> In my medical school, I kind of tried to foster some people being more comfortable talking about these things so we had a little group of us that kind of hung out, like 5 or 6 of us, and we kind of got labeled as the "Gay's Anatomy" of the medical school class. Which is in some ways funny but also not funny.

Participants reported being called on to interpret or represent queerness, an aspect of tokenism that assumes particular aspects of identity hold primacy:

> In orientation week, cause I lived in a house with two medical students [and] we had offered to host an event where people go from house to house. And they decided to make us the "LGBTQ welcoming house" … It wasn't our idea. We had just signed up to host one of the houses in this welcoming event for the new med students and we kind of got labeled.

Such labeling makes sexual identity the key feature of someone's personhood—but only for LGBTQ+ people. Dominant sexual and gender identities remain unmarked.

In work contexts, participants found colleagues assumed all LGBTQ+ people knew or could readily identify each other.

> I can't count the number of times… I will have people come up to me, like other physicians… allied health staff, and they're like, "Oh hey, that new med student, that new nurse, do you think they're gay?" … And I just look back at them and say, "Does it matter?" "Cause that is one part of a person's life, I don't see how it's relevant."

The assumption that others can tell who is LGBTQ+ again mobilizes stereotypes of LGBTQ+ bodies and self-presentations, while simultaneously Othering LGBTQ+ co-workers (Einarsdóttir et al., 2016).

Heteronormativity in professional cultures

Microaggressions targeting LGBTQ+ workers are both a product of and serve to support heteronormativity and heterosexism. Participants described their professional cultures as infused with heteronormative assumptions that contributed to LGBTQ+ invisibility and marginalization. They spoke about routine assumptions made by colleagues and clients/patients, and the ways questions and casual conversations conveyed powerful messages of not-fully-belonging.

Repeatedly, participants described the ways everyday interactions that are part of building rapport with patients were infused with heterosexist assumptions that excluded them, or left them suddenly scrambling to avoid or disarm a potentially volatile situation.

> You're engaged in sort of chat, about whatever. And people would be asking me "Oh, are you married? Do you have kids?" And at the time, I wasn't married; I was single. "No, I don't have children." And the look on their face, like they couldn't believe that.
>
> It's always been just the same question: do you have a boyfriend; do you have a husband; do you have kids? Those three basic questions.

These are not ill-intended questions, conveying hostility, they simply assume—and by assuming impose as normative—heterosexuality.

> I guess it's the presumption that's out there, that my life would be like everyone else's. So, for example, clients or coworkers who maybe don't know, the comments like, "Well, do you have children?" … So yeah, that presumption, I find that that has been frustrating. And then how do you, do you respond in a disclosing kind of way, or do you just ignore, or do you sort of?

Participants felt pressured to make complex disclosure decisions in the face of such heteronormative questions and assumptions. Occasionally, when participants felt safe enough to always be "out" at work, they found this enhanced connection with LGBTQ+ patients, facilitating common ground and stronger rapport.

With colleagues, heterosexist assumptions left participants caught between invisibility and unwanted hyper-visibility. For example, one participant described feeling Othered when in casual conversations with professional colleagues, never fitting their expectations but fearing talking about her life would label her as deviant:

> You know, you go have a cup of tea or something with them, and it's like, you know, some of the questions: "Okay, well, where do you work? Where do you live? What's your family? Do you have a family? Do you have a husband?" Right? It's always that sort of, "Do you have a husband?" normative questions, always.

Some reported that when colleagues knew their LGBTQ+ identities, it seemed to stifle the usual co-worker chat that can lubricate workplace interactions: "We had a good working relationship, but they never asked me about my personal life, as they would the other colleagues… It's like, just missing out on some of those social conversations."

Participants suggested that heteronormativity pervaded even the core content taught in their professions. For example, cis-heterosexual nuclear families were often presented as normative and universal in health professional education:

> [In school] we were being taught to make assumptions about our patients... It was always "mom and dad." And even if someone was going to try to be inclusive, they would say, like, you know, "Now we have to be cognizant that there can be like, families of difference"… but then they would go right back into it. So, it would be like "mom and dad."

This participant, who had graduated within the previous 5 years, noted, "those assumptions rendered my existence invisible." Similarly, participants remarked on the absence of LGBTQ+ content in health professions curricula, and too often what was present reinforced stereotypes. Many people reported their professional education programs having had a day devoted to LGBTQ+ health, with excessive focus on sexually transmitted infections.

In their professions, and in work contexts, participants were often advised not to disclose LGBTQ+ identities. One participant said she was warned by an older LGBTQ+ colleague, "Be careful who you tell." Another was warned "to be more quiet about it": "just saying like you better not talk about that, so-and-so staff member is really uncomfortable with that and may treat you differently." This was echoed by another participant: "I actually had one of the preceptors [clinical educators] tell me—I said something about my partner and the preceptor actually said to me, 'Ah, it's best not to mention that here.'" A participant who had a teaching role said it was routine for LGBTQ+ students to be warned not to share "anything about their personal identity" yet noticed this was never raised with cis-heterosexual students. As one participant commented, "Personally I don't really care, but it's just an odd comment to have staff take me aside and suggest that I should be less openly gay."

Reflecting on heteronormativity in his profession, one participant questioned "if there's actually room for people that are more diverse." Within his professional culture, he observed that "diversity isn't valued or welcome and that there's a certain mold that they kind of want, and they want everyone to be almost the same as much as possible. So, it does feel a bit unwelcoming."

Responding to heteronormativity

Pressure toward heteronormative conformity—assimilation—contributes to a lack of LGBTQ+ visibility in the health professions. As one participant commented, "In my medical school, there was over 200 students, and there was probably a handful of us that did identify as gay, but it wasn't particularly visible." Others noted that even when there were other LGBTQ+ staff in their workplaces, those people rarely brought partners to workplace events, or talked about their personal lives: "They are pretty, um, pretty quiet about it." While this cautiousness, guardedness is a response to heteronormativity, it simultaneously contributes to it, reinforcing a "spiral of silence" (Pasek et al., 2017, p. 401). Participants noted a particular dearth of LGBTQ+ visibility in the upper echelons of professions and workplaces, in senior administrative or leadership positions.

Making LGBTQ+ identities evident is not a single event; it entails a continuum from complete disclosure to complete non-disclosure (Stenger and Roulet, 2018). Most of our participants engaged in selective disclosure. Some had been more "out" before entering their professions, then "chose to be more and more closeted" as they progressed in their fields. As one participant said, "Students that are not out don't tend to come out during their [professional education]. They're afraid of what might happen. So there's still an abiding fear within even the younger generations." Early years in practice were marked with considerable energy devoted to deciding whether, when and how to disclose at work, performing careful risk assessments: "A lot of thought in disclosure, and more so, I guess, at the beginning, less so now… In the beginning, it was, I did find it stressful."

There was a general sense that disclosing LGBTQ+ identity was inappropriate in professional contexts: "It was a professional environment in the sense that it just never came up. I don't know how to say it. It just never came up. Like, with my colleagues, it was always about work. None of my personal stuff." This was particularly strong regarding disclosing to clients; as one participant commented, "it's a professional boundary, right? I think for most people your first 'go to' is going to be not disclosing too much." Yet people had to actively decide how to respond to the heteronormative assumptions of coworkers and patients. As Stenger and Roulet found in their study of auditors, LGBTQ+ professionals engaged in "shamming, distance, and normification" (Stenger and Roulet, 2018, p. 267). In other words, passing (Goffman, 1963), distancing from others, and covering—striving to render queerness less objectionable to avoid stigma (Yoshino, 2006). Our participants did the same.

Passing can entail avoiding disclosure, but can also mean outright misdirection. As one participant said about responding to patient questions,

> There would be many times that I'd just say, "Oh, I'm not married" or that sort of thing. I wouldn't give away anything more than that. And sometimes, I wouldn't even say anything. I would just kind of smile and nod and deflect.

Sometimes—depending on their assessment of the situation, as well as their own energy to engage—people actively misrepresented their LGBTQ+ identities, as described by a gay man:

> [Patients] would say "Are you in a relationship?" and I would say "Yes," and they would then say, "Oh, what does your girlfriend do?" and I would just be like, "Oh, she's an engineer." Just to avoid the conversation, honestly, because in some instances… in a busy day, when I don't want to have an uncomfortable interaction, it felt easier to just lie.

One participant described his response as "declining to elaborate:" "I even sometimes find myself still kind of—not lying, but maybe

sometimes still hiding, or you know just declining to disclose or elaborate."

The process of selective disclosure relies on constantly assessing situations, calculating risk and benefit, plus the potential for disrupting normative expectations. As one lesbian health professional described, "Patients who are like, 'Oh, do you have a boyfriend?' sometimes I'll say 'No, I have a girlfriend,' and other times I don't, and it's a judgement that I make. Sometimes, you have to err on the side of caution." As one participant argued, it is important to avoid "potentially opening yourself up to a whole world of hurt."

One way of avoiding disclosures was detachment (Stenger and Roulet, 2018). One participant commented, "[I] found myself kind of avoiding talking about my personal life in a variety of situations," including with patients and coworkers. Another had ceased engaging with colleagues socially, growing tired of dodging questions and comments that assumed heterosexuality: "So, I tend to avoid social situations as best as I can." With clients, one participant stated that she always maintained a certain distance: "I definitely don't share much with my clients, just surface things."

Yet, some people were concerned that distancing to avoid disclosure or heterosexist microaggressions could also hinder their ability to build rapport with patients:

> You build a rapport with them over time. But, it's sort of like, I would always shut that door very, very quickly. And yeah, I feel like it doesn't allow for as natural an exchange as, say I had a husband… It seems almost easier to build rapport with clients when you're of that normative kind of status.

This participant "shut the door" on conversations about families and relationships, fearing for her safety if she disclosed LGBTQ+ identity; yet she worried keeping things superficial harmed her therapeutic work.

At the same time some participants found disclosing LGBTQ+ identities could also harm rapport, causing patients/clients to distance: "I've never had an experience where they were overtly homophobic. It's more people would stop opening up to me, or they would become suddenly very awkward and standoffish, and my rapport with them changed." As another participant described, disclosure often disrupted connection: "It's probably only when you experience these things is when you notice it, but the pause or the facial expression is different…" In heteronormative work contexts, casual chatter about LGBTQ+ lives could hinder connection, but so could avoiding casual conversations. This is a distinct challenge in the health professions, where "therapeutic use of self" is part of establishing rapport.

Beyond not discussing LGBTQ+ identity, people put effort into impression management, disclosing they were LGBTQ+, but attempting not to look "too butch" or too "flamboyant:" "I would not buy bright colors for clothing. I would make sure that I sat with my legs crossed in a more male-identified manner... I would never let my hand rest down so that my wrist would fold." This reflects what Yoshino calls "covering" and Stenger and Roulet (2018) call "normification:" "the strategy by which stigmatized individuals disclose some elements of their stigmatized identity while trying to present themselves as ordinary people" (Stenger and Roulet, 2018, p. 268). The prevalent deployment of heterosexist stereotypes meant participants could choose—to some extent—the degree to which they would embrace or counter expectations of LGBTQ+ embodiment and self-presentation (Einarsdóttir et al., 2016). The heteronormative assumption that sex, gender identity, gender expression, and sexual orientation fall neatly in line, gave participants some control over others' perceptions of them through managing their gender expression.

In the work context of the health professions, while some participants wished they had been less fearful of risk earlier in their careers, others reluctantly said heteronormative assimilation is an important strategy: "To kind of fit in with the way everyone else is." This was identified as particularly important for trainees and those early in their careers.

> I hate to say it because I don't think this is the best, but I think good advice might be to actually be more quiet… Sometimes being different can actually work quite against you… It's just not a culture that wants to promote diversity… If the people in power don't like that, then they can kind of um, maybe make you in a position where you are more likely to be ostracized.

Notably, within the health professions power hierarchies are multi-directional. LGBTQ+ health professionals may be constrained by the professional boundaries expected when providers are seen as inherently holding power relative to patients/clients, but also by workplace power structures intra-professionally and inter-professionally.

Discussion

In Canada LGBTQ+ people have made gains regarding human rights protections which prevent or penalize the most flagrant instances of heterosexism and discrimination. Yet, while overt hostility may be decreasing, within the health professions heterosexist microaggressions appear to remain common (Eliason et al., 2018; Walker et al., 2022). Such incidents are difficult to prove definitively, let alone challenge. Our participants faced microaggressions from patients/clients as well as colleagues and managers, conveying a sense of inhospitability within their professions.

Perhaps even more significant than experiences of individual microaggressions, a culture of pervasive heteronormativity constituted LGBTQ+ health professionals as outsiders, as Other. Heteronormativity is institutionalized, built into everyday "business as usual." As DePalma and Atkinson note, heteronormativity is supported in institutions "not only through what is said, but through silences, inferences and assumptions" (DePalma and Atkinson, 2010, p. 1,671). In our study, casual conversations with colleagues and with patients/clients—the everyday conversations through which workplace relationships and therapeutic rapport are built—were laden with potential pitfalls, sudden moments when health professionals needed to decide in an instant whether and how to disclose LGBTQ+ identity, while uncertain about the impact of disclosure. Consequently,

some participants chose to remain distant from both colleagues and patients/clients, keeping connections superficial—which has its own costs. Heteronormativity was institutionalized in curricula, in admonitions about staying "closeted," and in assumptions that professionalism is incompatible with open embodiment of LGBTQ+ social identities.

In the context of the health professions, rife with pervasive heteronormativity, both disclosure and non-disclosure of LGBTQ+ identities carry risk (Jackson, 2000; Risdon et al., 2000; Röndahl, 2011; Beagan et al., 2012; Robertson, 2017; Eliason et al., 2018; Gabrani and Pal, 2019; Murphy, 2019; Toman, 2019; Turban, 2019), resulting in what many participants described as pervasive invisibility of LGBTQ+ people, particularly higher in the power structures. Decisions about LGBTQ+ disclosure are affected by the extent of hierarchical power relations in a work setting (Vaccaro and Koob, 2019; Follmer et al., 2020). The health professions can be characterized as power-laden work contexts wherein trainees and junior professionals spend considerable time subject to high stakes assessments by powerful others (Martimianakis et al., 2009; Jenkins et al., 2021). As has been noted in other institutional contexts, even decisions not to disclose take untold energy and work, requiring "a carefully constructed system of strategic silences, half-truths and direct lies that … demand a great deal of attention and planning" (DePalma and Atkinson, 2010, p. 1,671).

Within health care workspaces, notions of professionalism may be mobilized against LGBTQ+ people to compel conformity with heteronormative expectations (see Mizzi, 2013). It is "unprofessional" to confront a patient/client who makes heterosexist comments or insults. Professionals are expected to be selfless, driven by altruism (Sibbald and Beagan, 2022). It is "unprofessional" to disclose LGBTQ+ identity because that disclosure is equated with talking about sex, which violates (hetero)professional boundaries (DePalma and Atkinson, 2010; Mizzi, 2013; Davies and Neustifter, 2021). When professionalism casts "proper" identities as devoid of sexuality, "sex and sexuality become too scandalous to mention within the rigid confines of a professional work circumstance," leaving LGBTQ+ professionals outside the bounds of (hetero)professionalism by their very existence (Mizzi, 2013, p. 1,608).

Not surprisingly, many of our participants opted not to disclose LGBTQ+ identities, particularly with patients/clients. While this may well be a strategic move in heteronormative environments (Stenger and Roulet, 2018), nonetheless it contributes to queer erasure, rendering LGBTQ+ health professionals invisible. Opting to pass or assimilate, particularly in more risky work environments, perpetuates a "spiral of silence" (Pasek et al., 2017, p. 401), wherein LGBTQ+ learners and novices entering the professions discern that it is unsafe to be fully themselves in the health professions (Murphy, 2019). At the same time, the circulation of narrow discursive constructions of queerness means that LGBTQ+ health professionals who do disclose, or who are unable to conceal their sexual/gender identities, may face insistence that they engage in command performances of queerness that fit viewers' perceptions of the "right kind of queer." The flip side of LGBTQ+ invisibility is hypervisibility, simultaneously casting the person as deviant, other, and reducing them to always/only ever their LGBTQ+ subjectivity (Einarsdóttir et al., 2016; Calvard et al., 2020; Davies and Neustifter, 2021).

Queering the health professions

To queer, as verb, is to challenge what is considered normative, troubling it, creating disruptions, opening up spaces of possibility (Richards et al., 2017). To quote the late Canadian songwriter Leonard Cohen, "There is a crack, a crack in everything, That's how the light gets in" (Cohen, 1992). There are now numerous approaches advocated for responding to microaggressions at work, both as the person targeted and as a bystander who wants to act as an ally (see Sue et al., 2019). Too often these position the target of a microaggression as responsible for finding ways to defuse the situation and if possible, educate the perpetrator (Bullock et al., 2021). They emphasize staying open and curious, focusing on specific observations and employing "I statements," avoiding judgement and expressing feelings, with an ultimate goal of "mutual understanding" (Torres et al., 2019, p. 870). For example, the "GRIT Framework for Addressing Microaggressions" asks those who experience microaggressions in health professional contexts to Gather themselves, Restate the comment, Inquire without judgement to gain clarification and Talk about the impact on self (Warner et al., 2020). Such frameworks put an exceptional burden on those who have just experienced something painful, threatening and/or diminishing to show "grit" and respond, well, professionally—without emotion.

From an extensive review of the literature, Derald Wing Sue (a key proponent of microaggression theory) and colleagues have identified four primary strategies in what they call microinterventions: make the aggression visible, disarm it, educate the offender and seek external support (Sue et al., 2019). They point out that while insufficient, responding to microaggressions can help shift workplace or professional cultures—though responses should take into account context, including power relations. In the medical education context, Bullock and colleagues place responsibility squarely on the shoulders of supervisors, suggesting they work closely with trainees facing microaggressions (Bullock et al., 2021). Anticipating microaggressions, supervisors should "pre-brief" with trainees, to identify preferred responses, then respond in the moment (always), followed by a debrief and possible formal action. Their model has promise. Others have suggested professionals might signal through imagery and language use that they are open to LGBTQ+ disclosures and willing to act as allies (Turban, 2019). Individual mentorship—and even more importantly, institutionally organized mentorship programs—for LGBTQ+ trainees and junior colleagues may also be helpful (Turban, 2019; Nair and Good, 2021; St John and Goulet, 2022; Westafer et al., 2022).

To return to Cohen's lyrics, how do we make "cracks" in heteroprofessionalism to "let the light in?" Our analysis suggests a need to counter the heteronormativity that pervades the health professions, through institutional, structural and cultural change such that heterosexism is no longer normative. This will require transformation in professional cultures and institutional environments—and perhaps most importantly in *status quo* notions of "professionalism." As Davies and Neufstifter have argued, "normative ideas of professionalism encourage [workers] to not bring gender and sexual diversity or their lived queer and trans experiences actively into their [work]" (Davies and Neustifter, 2021, p. 3).

Heteroprofessionalism (Mizzi, 2013) operates as a regulating force that needs disrupting.

The health professions have changed over decades, today reflecting much greater sociocultural diversity, yet concepts of professionalism have undermined that expansion, demanding conformity to monocultural norms and expectations. "Consensual discourses," like the discourse of (hetero)professionalism, "may obscure and silence the expression of dissenting voices" (Turcotte and Holmes, 2021, p. 16). Transformation requires making space for dissidence in professional cultures (Davies and Neustifter, 2021; Turcotte and Holmes, 2021). It takes courage to disrupt, to resist, yet "our collective task is to interrogate and challenge the political, managerial and professional processes that regulate" (Turcotte and Holmes, 2021, p. 3). Acting individually carries risk; transforming heteroprofessionalism requires "collective enactment of disobedience" (Turcotte and Holmes, 2021, p. 6), radically disrupting the *status quo*.

Limitations

This study was limited by conducting only single interviews with participants on a complex topic. This was a choice made to minimize participant burden, yet likely curtailed the depth of reflection possible. Secondly, including multiple professions in the sample allowed us to identify common patterns across fields, and particularly focus on professionalism as a regulating force, yet it also occluded attention to profession-specific details that may very well matter. A heterogenous sample may also hinder thematic saturation, the notion of "information redundancy," though we certainly began to hear common narratives as the interviews progressed. Arguably, saturation is never reached in critical interpretive research, as the analysis spirals ever deeper, delving into unanticipated layers of meaning and interpretation (Braun and Clarke, 2021). Finally, the fact that almost all of our participants identified as cis-gender means analysis of the distinct experiences of transgender and gender diverse professionals remains under-analyzed. Similarly, the fact that our participants were almost exclusively white and able-bodied hindered analysis of the ways LGBTQ+ identities intersect with other marginalized social identities to shape experiences of belonging and marginality in the health professions.

Conclusion

Despite advances in formal protections for LGBTQ+ people at work, health professionals may still face heteronormative environments that foster and are bolstered by heterosexist microaggressions. Those may be particularly challenging to address when they come from patients/clients, and particularly risky to address when they come from powerful professional others. Heteronormative assumptions convey subtle yet persistent messages of marginality, requiring LGBTQ+ health professionals to constantly navigate a tightrope between disclosure and non-disclosure, balancing personal safety against assimilation and LGBTQ+ invisibility. Often the ramifications of that navigation are uncertain, with any choice leading to possible harm. The precarity of this ongoing balancing act is predicated on heteroprofessionalism, the mobilization of "professional" as concept to undermine the credibility and validity of LGBTQ+ professionals, regulating their identity expressions and jeopardizing their ability to bring all of themselves to their work. While moves toward countering heterosexist microaggressions may help, particularly in the short-term, a more thoroughgoing transformation of heteroprofessionalism demands dissent and disruption to the very notion of professional.

Data availability statement

Research ethics approval stipulated that data confidentiality would be maintained by the research team. Requests to access the datasets should be directed to ethics@dal.ca.

Ethics statement

The studies involving human participants were reviewed and approved by Dalhousie University Health Sciences Research Ethics Board. Written informed consent was provided when interviews were conducted in person. When they were conducted by telephone, the written consent material was emailed to potential participants, then reviewed orally, with consent recorded before commencing the interview.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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Conflict of interest

The 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.

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Factors associated with workplace violence against Chinese healthcare workers: an online cross-sectional survey

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Objectives: Workplace violence (WPV) against healthcare workers (HCWs) has reached significant levels globally, impeding the quality and accessibility of healthcare systems. However, there is limited available knowledge regarding the determinants linked with WPV among HCWs and the discrepancies observed across various levels of hospitals in China. The objective of the present research was to investigate the factors linked to WPV and job satisfaction among HCWs in China.

Methods: A self-developed questionnaire based on WeChat was employed to collect data. The questionnaire consisted of demographic information as well as occupational factors. To measure WPV, the Chinese version of the Workplace Violence Scale was utilized. Career satisfaction was assessed through two questions regarding career choices. The collected data was analyzed using descriptive analyses, chi-square tests, and multivariate logistic regressions.

Results: A total of 3,781 valid questionnaires (1,029 doctors and 2,752 nurses) were collected. Among all participants, 2,201 (58.2%) reported experiencing at least one form of WPV in the past year, with emotional abuse being the most frequent occurrence (49.7%), followed by threats (27.9%). The multivariate logistic regression analysis revealed several risk factors associated with WPV, including male gender, shift work, senior professional title, bachelor's degree education, employment in secondary-level hospitals, and working over 50 h per week ($p < 0.05$). Career satisfaction among HCWs who experienced high levels of WPV was low, with only 11.2% remaining confident in their profession, and a mere 2.0% supporting their children pursuing careers in healthcare.

Conclusion: WPV poses a significant challenge within the Chinese healthcare system. Efforts should be made to address the identified risk factors and promote a safe and satisfying working environment for HCWs.

KEYWORDS

career satisfaction, China, healthcare system, healthcare workers, university hospital, occupational safety, workplace violence

1 Introduction

Workplace violence (WPV) is a serious issue that has been defined by the World Health Organization (WHO) as incidents where staff are subjected to abuse, threats, or assault in connection to their work, including during their commute to and from work, and that directly or indirectly challenge their health, safety, or well-being (1). WPV can be classified into distinct categories: physical assault (PA), which encompasses acts involving physical contact such as biting or beating; emotional abuse (EA), defined by mistreatment through the use of words, such as cursing; threats (T), which involve the use of written, verbal, or physical force to induce fear of negative consequences; verbal sexual harassment (VSH), characterized by unwelcome remarks of a sexual nature; and sexual abuse (SA), encompassing unwanted touching or any other form of unwelcome sexual behaviors.

Violence in the healthcare sector is a growing problem with significant implications for workplace safety (2). Healthcare workers (HCWs) are more vulnerable to violence compared to those in other professions (3, 4). Acts of violence against medical care providers have detrimental effects on their psychological well-being, productivity, and trust in management and colleagues (2, 5). A previous study (6) indicated that WPV was negatively correlated with job satisfaction ($r = -0.228$, $p < 0.01$). Once HCWs experience WPV, their negative emotions increase, job satisfaction decreases, and it may even lead to resignation (6). Furthermore, such violence can signal underlying tensions between HCWs and patients, which may compromise the accessibility and quality of healthcare services (7). Numerous investigations have been conducted to assess the extent of WPV against HCWs on a global scale (8, 9). For instance, a comprehensive analysis that uncovered a startling truth - every year, one out of every five HCWs across the globe encounters instances of physical violence inflicted by patients or their visitors (10). In the United States, healthcare settings account for 70–74% of workplace assaults (11). The 2019 UK National Health Service (NHS) staff survey reported that 15% of NHS members experienced at least one incident of physical violence from patients, relatives, or the general public within the previous year (12). In Germany, 23% of primary care physicians have encountered severe aggression or violence (13). In Iran, the occurrence rate of physical or verbal WPV against emergency medical services personnel stands at 36 and 73%, respectively (14). A study conducted among nurses in South Korea found that 74.3% of respondents had experienced verbal abuse in the past 3 months (15). The COVID-19 pandemic has exacerbated physical and verbal abuse toward HCWs, with patients and their families being identified as the main perpetrators (2, 9, 16).

In Chinese mainland, there were approximately 4.08 million doctors and 4.71 million nurses as per the 2021 national health yearbook (17). According to a meta-analysis study, the prevalence of WPV against HCWs in China was found to be 62.4%. The study further revealed rates of verbal abuse, psychological violence, physical violence, sexual harassment, and threatening behaviors at 61.2, 50.8, 13.7, 6.3, and 39.4%, respectively (18). Male HCWs faced elevated levels of WPV in comparison to their female counterparts, as documented in study (19). In addition, inexperienced nurses and those at the graduate level exhibited increased susceptibility to such incidents (20). Furthermore, healthcare employees who work in shifts were found to be at a higher risk of WPV when compared to those who work regular hours (21). Nevertheless, there has been a predominant emphasis in previous research on township or tertiary-level hospitals, as well as specific healthcare specialties (6, 21, 22). Few studies have compared the prevalence and related determinants of different forms of WPV among doctors and nurses across the three levels of hospitals in China (19). Therefore, the aim of this study was to examine the occurrence and distribution patterns of different types of WPV based on demographic and occupational characteristics. Additionally, we sought to identify factors associated with different types of WPV and assess the effect of WPV on professional satisfaction.

2 Methods

2.1 Participants and procedure

Our study aimed to examine the experiences and perceptions of HCWs in China through a cross-sectional, online e-survey conducted between 15 January 2023 and 20 February 2023. The snowball sampling method was employed to gather data from a diverse range of HCWs. To initiate the survey, a carefully designed and anonymous questionnaire was created on WeChat, a popular social media platform in China. Initially, a group of 30 nurses and 20 doctors from our university hospital, referred to as "original deliverers," were selected to participate in the study. These individuals were considered key informants who would help disseminate the survey among their networks.

The "original deliverers" received a link to the questionnaire via WeChat, along with a clear introduction about the study. They were given the option to either agree and proceed with the survey or decline and withdraw from participation. It should be noted that completing the survey questionnaire implied voluntary consent to be part of the study. Additionally, the online survey also extended its invitation to the peers and fellow students of the "original deliverers," encouraging them to actively participate and distribute the questionnaire among their connections, without receiving any kind of remuneration. The survey links were also shared among the respondents' acquaintances and within relevant WeChat communities. By adopting this methodology, the sample size was expanded, enabling a more comprehensive representation of China's frontline HCWs across various departments within medical institutions. Throughout the entire process, strict measures were taken to ensure the security and confidentiality of the participants' data. Anonymity was maintained to safeguard the privacy of the HCWs and encourage honest responses.

2.2 Measures

The survey encompassed a range of sociodemographic information, including age, gender, marital status, educational attainment, and occupational particulars like hospital care level, department of work, occupation, professional title, work schedule (shift or non-shift), years of experience, and weekly work hours. Additionally, respondents were given the opportunity to answer two questions regarding their career choice: "Knowing all the risks

Abbreviations: WPV, Workplace violence; HCWs, Healthcare workers; WHO, World Health Organization; PA, Physical assault; EA, Emotional abuse; T, Threat; VSH, Verbal sexual harassment; SA, Sexual abuse; NHS, National Health Service; WVS, Workplace Violence Scale.

involved, would you still have opted for a career in the medical field?" and "Do you desire for your child to pursue a career in the healthcare industry?" Similar questions assessing career satisfaction have been utilized in previous studies focusing on WPV (23). These questions have been found to be effective in capturing HCWs' perceptions and sentiments regarding their career choices, which are directly relevant to understanding WPV dynamics (24, 25).

To gage the frequency of WPV targeting HCWs in China over the preceding 12 months, the Chinese version of the Workplace Violence Scale (WVS) was employed. The WVS has been demonstrated to possess favorable validity and reliability among HCWs in China, with a Cronbach's coefficient of 0.75 (26). The scale encompasses five dimensions: EA, PA, VSH, T, and SA (26). The frequency of respondents' exposure to WPV within the past year is assessed by scoring each item on a scale of 0 to 3. The scores correspond to different levels of exposure: 0 indicates no exposure, 1 indicates exposure once, 2 indicates exposure two or three times, and 3 indicates exposure more than three times. The total score is derived by summing the grades from each item, resulting in a range from 0 to 15. Based on the grades, the level of violence experienced is categorized into four groups (none = 0, low = 1 ~ 5, intermediate = 6 ~ 10, high = 11 ~ 15). The survey presented precise definitions for every category of violence, with an aim to offer clarity and accuracy for understanding. Additional information on the survey instrument utilized in this research is available in Supplementary File 1.

2.3 Statistical analyses

In this study, the occurrence of any form of WPV among the respondents was analyzed using a binary response (yes/no) code. The demographic and occupational data were summarized using numbers and percentages, along with the rates of five different types of WPV. To identify significant predictors for each type of WPV, multivariate logistic regression analyses were conducted. Factors that showed a *p*-value of 0.1 or less in the chi-square test were included as independent variables in the models. Additionally, the association between the level of WPV and career choice was assessed using the chi-square test. A p-value <0.05 was regarded as statistically significant in this study. All statistical analyses were performed using Microsoft Excel 2019 and SPSS 22.0.

3 Results

3.1 Characteristics of the respondents

The questionnaire was responded to by a total of 3,812 HCWs from all provinces in mainland China in this investigation. Due to incomplete data, 31 participants were excluded. The final analysis included 3,781 respondents, with 72.8% being nurses and 27.2% being physicians. Among the participants, 64.2% were married while 35.8% were single. The majority of respondents (83.2%) were female. In terms of workplace, 71.0% of the participants worked in tertiary-level hospitals. Furthermore, 60.2% held a primary professional title, and 74.6% reported being shift workers. The age distribution of the participants spanned from 19 to 70 years, with a significant proportion (49.1%) falling under the age of 30. The mean age of the participants was 31.4 ± 8.1 years. The demographic and occupational characteristics distribution of the participants can be found in Tables 1, 2.

TABLE 1 The distribution of five types of WPV across various demographic characteristics.

Demographic variables	*n* = 3,781 N (%)	PA	EA	T	VSH	SA
		N (%)	N (%)	N (%)	N (%)	N (%)
Gender						
Male	635 (16.8)	145 (22.8)	374 (58.9)	237 (37.3)	134 (21.1)	91 (14.3)
Female	3,146 (83.2)	468 (14.9)	1,506 (47.9)	817 (26.0)	478 (15.2)	205 (6.5)
p value		**< 0.01**	**< 0.01**	**< 0.01**	**< 0.01**	**< 0.01**
Age (years)						
< 30	1858 (49.1)	318 (17.1)	938 (50.5)	425 (22.9)	271 (14.6)	130 (7.0)
30 ~ 39	1,322 (35.0)	198 (15.0)	660 (48.9)	426 (32.2)	215 (16.3)	118 (8.9)
≥ 40	601 (15.9)	97 (16.1)	282 (46.9)	203 (33.8)	126 (21.0)	48 (8.0)
P value		0.27	0.31	**< 0.01**	**< 0.01**	0.14
Education level						
Master's degree or above	473 (12.5)	51 (10.8)	191 (40.4)	132 (27.9)	76 (16.1)	22 (4.7)
Bachelor's degree	2,567 (67.9)	466 (18.2)	1,344 (52.4)	740 (28.8)	430 (16.8)	217 (8.5)
Associate's degree or below	741 (19.6)	96 (13.0)	345 (46.6)	182 (24.6)	106 (14.3)	57 (7.7)
P value		**< 0.01**	**< 0.01**	0.07	0.28	**0.02**
Marital status						
Married	2,427 (64.2)	378 (15.6)	1,180 (48.6)	750 (30.9)	392 (16.2)	185 (7.6)
Unmarried	1,354 (35.8)	235 (17.3)	700 (51.7)	304 (22.5)	220 (16.2)	111 (8.2)
P value		0.15	0.07	**< 0.01**	0.94	0.53

PA, physical assault; EA, emotional abuse; T, threat; VSH, verbal sexual harassment; SA, sexual abuse.

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TABLE 2 The distribution of five types of WPV across various occupational characteristics.

Occupational variables	*n* = 3,781 N (%)	PA	EA	T	VSH	SA
		N (%)	N (%)	N (%)	N (%)	N (%)
Level of hospital						
Primary hospital	69 (1.8)	4 (5.8)	22 (31.9)	7 (10.1)	7 (10.1)	3 (4.3)
Secondary hospital	1,028 (27.2)	208 (20.2)	577 (56.1)	314 (30.5)	171 (16.6)	92 (8.9)
Tertiary hospital	2,684 (71.0)	401 (14.9)	1,281 (47.7)	733 (27.3)	434 (16.2)	201 (7.5)
p value		**< 0.01**	**< 0.01**	**< 0.01**	0.37	0.18
Department						
Emergency department	445 (11.8)	217 (48.8)	287 (64.5)	201 (45.2)	139 (31.2)	92 (20.7)
Mental health	344 (9.1)	65 (18.9)	226 (65.7)	148 (43.0)	79 (23.0)	35 (10.2)
Pediatrics	236 (6.2)	69 (29.2)	105 (44.5)	59 (25.0)	23 (9.7)	18 (7.6)
Gynecology and obstetrics	232 (6.1)	20 (8.6)	98 (42.2)	51 (22.0)	27 (11.6)	10 (4.3)
Intensive care unit	159 (4.2)	15 (9.4)	89 (56.0)	51 (32.1)	26 (16.3)	4 (2.5)
Internal medicine	1,005 (26.6)	104 (10.3)	513 (51.0)	262 (26.1)	130 (12.9)	63 (6.3)
Surgical department	782 (20.7)	87 (11.1)	398 (50.9)	190 (24.3)	126 (16.1)	51 (6.5)
Operating room	125 (3.3)	5 (4.0)	21 (16.8)	17 (13.6)	12 (9.6)	4 (3.2)
General practice	140 (3.7)	12 (8.6)	40 (28.6)	21 (15.0)	9 (6.4)	4 (2.8)
Diagnosis and subsidiary	313 (8.3)	19 (6.1)	103 (32.9)	54 (17.3)	41 (13.1)	15 (4.8)
p value		**< 0.01**	**< 0.01**	**< 0.01**	**< 0.01**	**< 0.01**
Profession						
Doctor	1,029 (27.2)	165 (16.0)	524 (50.9)	334 (32.5)	198 (19.2)	69 (6.7)
Nurse	2,752 (72.8)	448 (16.3)	1,356 (49.3)	720 (26.2)	414 (15.0)	227 (8.2)
p value		0.86	0.37	**< 0.01**	**< 0.01**	0.10
Professional title						
Primary	2,276 (60.2)	368 (16.2)	1,130 (49.6)	547 (24.0)	328 (14.4)	184 (8.1)
Intermediate	1,062 (28.1)	168 (15.8)	523 (49.2)	347 (32.7)	170 (16.0)	76 (7.2)
Senior	443 (11.7)	77 (17.4)	227 (51.2)	160 (36.1)	114 (25.7)	36 (8.1)
p value		0.75	0.82	**< 0.01**	**< 0.01**	0.63
Years of experience						
< 5	1,448 (38.3)	244 (16.9)	706 (48.8)	311 (21.5)	205 (14.2)	120 (8.3)
6 ~ 10	1,070 (28.3)	151 (14.1)	543 (50.7)	309 (28.9)	149 (13.9)	75 (7.0)
11 ~ 20	805 (21.3)	141 (17.5)	422 (52.4)	282 (35.0)	165 (20.5)	73 (9.1)
> 20	458 (12.1)	77 (16.8)	209 (45.6)	152 (33.2)	93 (20.3)	28 (6.1)
p value		0.17	0.09	**< 0.01**	**< 0.01**	0.17
Work schedule						
Shift	2,820 (74.6)	507 (18.0)	1,508 (53.5)	814 (28.9)	480 (17.0)	248 (8.8)
Non-shift	961 (25.4)	106 (11.0)	372 (38.7)	240 (25.0)	132 (13.7)	48 (5.0)
p value		**< 0.01**	**< 0.01**	**0.02**	**0.02**	**< 0.01**
Weekly working hours						
> 50 h	574 (15.2)	103 (17.9)	352 (61.3)	183 (31.9)	127 (22.1)	48 (8.4)
40 ~ 50 h	2,238 (59.2)	338 (15.1)	1,108 (49.5)	604 (27.0)	329 (14.7)	168 (7.5)
< 40 h	969 (25.6)	172 (17.7)	420 (43.3)	267 (27.6)	154 (15.9)	80 (8.3)
p value		0.08	**< 0.01**	0.06	**< 0.01**	0.67

3.2 Incidence and characteristics of medical WPV

The prevalence of WPV among HCWs was found to be 58.2% (2,201/3781). When examining the different types of WPV, it was observed that EA had the highest prevalence rate of 49.7%, followed by T at 27.9%, PA at 16.2%, VSH at 16.2%, and SA at 7.8%. There were significant differences in the one-year prevalence of these different types of WPV based on demographic and occupational characteristics (refer to Tables 1, 2). Upon analyzing the data, it was found that male HCWs

exhibited a higher prevalence of PA (22.8% vs. 14.9%, $\chi^2 = 24.6$, $p < 0.01$), EA (58.9% vs. 47.9%, $\chi^2 = 25.7$, $p < 0.01$), T (37.3% vs. 26.0%, $\chi^2 = 33.9$, $p < 0.01$), VSH (21.1% vs. 15.2%, $\chi^2 = 13.6$, $p < 0.01$), and SA (14.3% vs. 6.5%, $\chi^2 = 44.7$, $p < 0.01$) compared to their female counterparts. Furthermore, HCWs with a Bachelor's degree exhibited the highest rate of PA (18.2%, $\chi^2 = 23.2$, $p < 0.01$), EA (52.4%, $\chi^2 = 26.6$, $p < 0.01$), and SA (8.5%, $\chi^2 = 8.0$, $p = 0.02$) when compared to individuals from other educational backgrounds. In terms of the level of hospital care, HCWs in secondary hospitals were more susceptible to all five types of WPV, with prevalence rates of EA, T, PA, VSH, and SA at 56.1, 30.5, 20.2, 16.6, and 8.9%, respectively. HCWs in emergency department were identified as the most vulnerable group, experiencing high prevalence rates of all five types of violence (EA, PA, T, VSH, and SA were 64.5, 48.8, 45.2, 31.2, and 20.7%, respectively). They were followed by HCWs in mental health departments, pediatric departments, obstetrics and gynecology departments, in terms of vulnerability to WPV. Shift workers demonstrated a higher vulnerability to PA (18.0% vs. 11.0%, $\chi^2 = 25.5$, $p < 0.01$), EA (53.5% vs. 38.7%, $\chi^2 = 62.5$, $p < 0.01$), T (28.9% vs. 25.0%, $\chi^2 = 5.4$, $p = 0.02$), VSH (17.0% vs. 13.7%, $\chi^2 = 5.7$, $p = 0.02$), and SA (8.8% vs. 5.0%, $\chi^2 = 14.3$, $p < 0.01$) compared to non-shift workers. Moreover, HCWs who were engaged in work for over 50 h per week exhibited a higher vulnerability to EA (61.3%, $\chi^2 = 46.7$, $p < 0.01$), and VSH (22.1%, $\chi 2 = 18.7$, $p < 0.01$).

3.3 Career choice and the level of WPV

The association between levels of WPV and career choice is presented in Table 3. Among the respondents, a total of 835 (22.1%) said that they would still engage in the medical industry even if they knew the potential risks. In contrast, an overwhelming majority of 91.7% (3,467/3781) expressed their opposition to the idea of their children pursuing a career in the healthcare industry. Notably, HCWs who had experienced higher levels of WPV demonstrated a significantly lower likelihood ($p < 0.01$) to answer affirmatively to the aforementioned questions. Specifically, out of the HCWs who had encountered high levels of WPV ($n = 98$) within the last year, only 11 individuals (11.2%) expressed their intentions to continue pursuing a career in the healthcare sector, whereas a mere 2 individuals (2.0%) would endorse their children pursuing a career in healthcare.

3.4 Factors associated with WPV

The results of the multivariate logistic regression analyses, which examined the factors related to the five categories of WPV, are displayed in Table 4. It was observed that both male gender and working in shifts were identified as significant factors associated with all five categories of medical WPV ($p < 0.01$). HCWs with a bachelor's degree education were found to be significantly associated with EA ($p < 0.01$), PA ($p < 0.01$), and SA ($p < 0.01$). Additionally, working in secondary hospitals was found to be the strongest correlate for EA ($p < 0.01$), PA ($p < 0.01$), and T ($p < 0.01$), with odds ratios of 2.64 (95% CI: 1.81–3.84), 3.70 (95% CI: 1.97–7.64), and 3.29 (95% CI: 1.95–5.63), respectively. Furthermore, HCWs holding a senior professional title were found to be significantly associated with VSH ($p < 0.01$) and T ($p < 0.01$). The analysis also revealed that engaging in work for more than 50 h per week displayed a significant correlation with the occurrence of EA [OR = 1.71 (95% CI: 1.37–2.12), $p < 0.01$].

4 Discussion

WPV remains a significant problem in medical settings (2–4, 27). The present study investigated the factors associated with WPV against Chinese HCWs, while also examining the relationship between WPV and job satisfaction. Among our study population, the prevalence of WPV against HCWs was found to be 58.2%, with the highest incidence observed for EA at 49.7%. However, it is important to note that reported incidences of exposure to WPV can differ across nations. Previous research has reported rates of 75, 54, 48, and 45% among HCWs in India, Turkey, Saudi Arabia, and Italy, respectively, (3, 28–30). In a recent comprehensive analysis consisting of 17 studies, it was found that the prevalence of WPV among HCWs was estimated to be 47% (27). It is evident that cultural and geographic factors, as well as differences in perceptions and definitions of WPV, work schedules, occupations, study locations, and methodological approaches may contribute to variations in reporting frequencies of WPV. Furthermore, it is worth noting that attacks on HCWs have significantly increased in certain countries, such as the United States, Pakistan, and India, during the COVID-19 pandemic (9, 31). The implementation of infection control measures, such as quarantine and isolation, aimed at managing and preventing the dissemination of SARS-CoV-2, has unfortunately heightened the potential for patients and their families to engage in threatening or violent conduct (32).

Our findings revealed a greater occurrence of WPV among male HCWs compared to their female counterparts. This observation aligns with previous studies conducted in this field (18, 33). Furthermore, our study also identified the impact of working hours, work schedule (shift or non-shift work), and professional title on the likelihood of encountering WPV incidents. These results align with the existing literature (34–36).

TABLE 3 Relationship between the level of WPV and career choice.

WPV level	(n = 3,781) N (%)	Would you still choose to work in the healthcare industry? (%)		Do you support children becoming healthcare professionals? (%)	
		Yes (22.1)	No (77.9)	Yes (8.3)	No (91.7)
High	98 (2.6)	11 (11.2)	87 (88.8)	2 (2.0)	96 (98.0)
Intermediate	351 (9.3)	49 (14.0)	302 (86.0)	17 (4.8)	334 (95.2)
Low	1781 (47.1)	316 (17.7)	1,465 (82.3)	106 (6.0)	1,675 (94.0)
None	1,551 (41.0)	460 (29.7)	1,091 (70.3)	190 (12.3)	1,361 (87.7)
p value		**< 0.01**		**< 0.01**	

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TABLE 4 Multivariate logistic regression for the correlation between demographic and occupational factors and five distinct types of WPV.

Risk factors	PA	EA	T	VSH	SA
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Male	1.76(1.24–2.33)[a]	1.52(1.17–1.84)[a]	1.67(1.43–2.02)[a]	1.71(1.36–2.15)[a]	2.13(1.61–3.04)[a]
Shift work	1.62(1.31–2.06)[a]	1.66(1.44–1.98)[a]	1.40(1.19–1.73)[a]	1.43(1.12–1.81)[a]	1.95(1.58–2.67)[a]
Education level					
Master's degree and above	Ref				
Associate's degree and below	1.17(0.83–1.62)[b]	1.12(0.86–1.37)[b]	-	-	1.54(1.12–2.29)[a]
Bachelor's degree	1.81(1.20–2.54)[a]	1.25(1.08–1.51)[a]	-	-	1.90(1.25–2.76)[a]
Level of hospital					
Primary	Ref				
Tertiary	2.97(1.85–5.82)[a]	2.23(1.44–3.27)[a]	2.81(1.77–4.82)[a]	-	-
Secondary	3.70(1.97–7.64)[a]	2.64(1.81–3.84)[a]	3.29(1.95–5.63)[a]	-	-
Professional title					
Primary	Ref				
Intermediate	-	-	1.16(0.91–1.38)[b]	1.21(0.95–1.46)[b]	-
Senior	-	-	1.37(1.02–2.03)[a]	2.28(1.66–2.95)[a]	-
Weekly working hours					
< 40 h	Ref				
40 ~ 50 h	-	1.18(1.04–1.41)[b]	-	-	-
> 50 h	-	1.71(1.37–2.12)[a]	-	-	-

PA, physical assault; EA, emotional abuse; T, threat; VSH, verbal sexual harassment; SA, sexual abuse.
"Ref" refers to the reference category.
[a] $p < 0.01$.
[b] $p < 0.05$. "-" indicates $p > 0.05$.

The influence of shift work on the occurrence of different forms of WPV can be explained by multiple factors such as understaffing during night shifts, staff fatigue, and subsequent impact on patient satisfaction (2, 37). In our study, HCWs holding senior professional titles reported a higher incidence of VSH and T compared to those with primary titles. In China's healthcare system, the 3-tier responsibility framework for medical practitioners and nurses involves allocating greater responsibilities and a more demanding workload to those holding senior professional titles (18, 38). Patients often seek medical attention from higher-level professionals even for minor, self-limiting conditions. Consequently, the surge in patient load increases work pressure on physicians, leading to chronic overwork which may result in haste, indifference, and disrespectful behaviors toward patients (39). This phenomenon significantly contributes to doctor-patient tension (40). Furthermore, research has indicated that patients often hold elevated expectations toward doctors with senior professional titles (38). The inability to meet these expectations is a major contributor to incidents of assault (19). Our study also revealed that HCWs who work over 50 h per week had a 1.71-fold higher likelihood of experiencing EA in comparison to those working less than 40 h per week. This can be attributed to elevated levels of work-related stress and fatigue associated with longer working hours (41). These factors increase the risk of conflicts and violent behaviors during interactions with patients and their families (2). Moreover, extended working hours deprive HCWs of adequate rest and relaxation time, negatively impacting their mental and emotional well-being (42). This, in turn, affects their ability to deliver high-quality care.

In our study, we found that HCWs employed in secondary- and tertiary-level medical facilities encounter an elevated susceptibility to all five categories of WPV when contrasted with their counterparts in primary-level hospitals. This observation raises two potential explanations for this trend. Firstly, secondary- and tertiary-level hospitals often deal with patients who have more severe illnesses, which may increase the likelihood of encountering violent incidents (19). A previous study conducted in Thailand indicated that the severity of a patient's illness plays a significant role in instigating physical violence initiated by the patient (43). Moreover, it has been highlighted in a Chinese study that unreasonable patient expectations can also lead to aggressive behavior from patients (44). Therefore, besides adequately explaining medical conditions to patients, addressing unrealistic expectations should also be considered to effectively reduce WPV in higher-level healthcare facilities. Secondly, top tier hospitals often concentrate highly educated healthcare professionals and have advanced medical equipment (39). As a result, primary care facilities, which are relatively underutilized and less competitive, may struggle to gain patient trust (45). Many patients even seek treatment for minor ailments at the outpatient services of secondary and tertiary hospitals (46). This leads to shorter consultation times per patient, potentially compromising the quality of care provided and decreasing patient

satisfaction (47). To address the underlying factors contributing to WPV, it is crucial to improve the quality and utilization of primary care services as a long-term strategy within the healthcare system (19, 48).

One strength of our study is the identification of factors associated with different types of WPV. As mentioned earlier, common factors across all types of WPV include male gender, shift work, and employment at secondary and tertiary hospitals. EA is correlated with working over 50 h per week, while T and VSH are associated with holding senior professional titles. It is worth noting that educational attainment is correlated with PA, EA, and SA. HCWs with a bachelor's or associate's degree have a higher risk of experiencing PA, EA, and SA compared to those with a master's degree or above. This disparity can be attributed to multiple factors (21, 32). First, HCWs with higher education qualifications, such as a master's degree, are more likely to hold positions that involve less direct patient care or interaction. Those with a bachelor's degree may be more frequently engaged in frontline work, where they face a higher risk of violence and abuse (21). Second, higher education qualifications are often associated with increased training in communication skills, conflict resolution, and coping strategies under stressful situations (20). HCWs with a master's degree may possess better skills in managing conflicts and handling volatile situations, thereby reducing their susceptibility to WPV.

Our results revealed that as the level of violence increased, HCWs displayed a decreased inclination to remain in the healthcare industry and showed reluctance to encourage their children to pursue careers as healthcare professionals. Previous studies have also confirmed that experiencing high levels of WPV can have a negative impact on HCWs' perceptions of their profession (3, 6). The increased exposure to violence not only affects their physical safety but also influences their emotional well-being and job satisfaction (6). The fear and stress generated by WPV may lead HCWs to question their career choices and discourage them from recommending the profession to their children due to concerns about safety and the potential negative impact on their personal and family lives (49). The absence of public condemnation toward the perpetrators in the wake of the news about doctors being killed due to WPV has exacerbated this situation (5). These phenomena highlight the pressing need for effective measures to prevent and address WPV in order to preserve the motivation, satisfaction, and retention of healthcare professionals, as well as to attract future generations to join the healthcare workforce (50, 51).

Efforts to reduce the escalating violence against HCWs necessitate a comprehensive approach (2). Merely advocating for harsher penalties, as endorsed by HCWs globally, is unlikely to suffice (4, 10). Instead, the following strategies can be implemented effectively to address this issue. First, addressing the persistent problem of staff shortages in public hospitals across China is paramount (39, 50). Allocating additional funding for the recruitment of more doctors and nurses will help alleviate the strain. This, in turn, will allow for longer patient consultations, particularly in overstretched public hospitals, enabling doctors to establish meaningful connections with their patients (39). Second, healthcare organizations should fully support HCWs who report incidents of verbal or physical violence (1, 50). This proactive approach will combat the issue of underreporting WPV, fostering a safer work environment. Third, organizing training programs for HCWs to recognize early signs of potential violence, manage hazardous situations, and ensure self-protection is essential (5). Equipping HCWs with these skills will bolster their ability to respond effectively to violent incidents. Fourth, timely communication with patients and their families regarding service delays, especially when certain conditions require prioritization, is vital (50). Finally, the media should responsibly promote trust and understanding between the general public and HCWs (2). Biased reporting and sensationalizing negative occurrences could escalate tensions and erode public trust. Media outlets should verify information before dissemination, considering the repercussions on HCWs' reputation and the overall healthcare system.

5 Limitations

This study has several limitations. First, it is crucial to emphasize that the data utilized in this research were gathered retrospectively. Hence, there exists a dependence on the participants' capacity to precisely recollect occurrences that took place within the preceding 12-month period. This introduces the possibility of recall bias and may impact the validity of the findings. Second, the study's cross-sectional design hinders our ability to establish a definitive cause-and-effect relationship between variables. Third, it is worth noting that the e-survey tool utilized in this research aimed at engaging HCWs across diverse sectors and a variety of healthcare settings. However, due to the inability to control the distribution of the survey, there may be unequal representation across different sectors. Consequently, there is a possibility that the collected sample may not provide a comprehensive representation of the present situation of WPV among HCWs in China, limiting the generalizability of the prevalence measures reported in this study. Furthermore, it is important to consider the potential bias introduced by participants who provided responses to the online survey. These individuals may already be experiencing heightened stress levels due to their vulnerability to WPV, potentially influencing their responses. Despite these limitations, this study has identified crucial risk factors for WPV that have the potential to alleviate the occurrence of WPV among HCWs in China. In future research, it would be beneficial to delve deeper into the long-term effects of WPV on the mental and physical health of HCWs in China. Additionally, conducting longitudinal studies to examine the trends of WPV over time and assess the effectiveness of implemented interventions would provide further insights into addressing this critical issue.

6 Conclusion

The high prevalence of WPV against HCWs in China continues to be a cause for serious concern. Our study identified several independent factors associated with WPV, including male gender, engaging in shift work, possessing a bachelor's degree, having a senior professional position, and working over 50 h per week. Additionally, we found that HCWs stationed at higher level care facilities, specifically secondary hospitals, confront a notably elevated probability of encountering WPV. This finding underscores the urgent need for increased focus on addressing and mitigating WPV occurrences within secondary hospitals. Furthermore, our findings demonstrated a strong association between increased levels of WPV and the heightened dissatisfaction experienced by HCWs in their chosen profession. In conclusion, our study underscores the importance of evaluating violence against HCWs as a key step in the development of effective measures to combat WPV and mitigate its adverse consequences.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving humans were approved by the Ethics Committee of the Fourth People's Hospital of Chengdu. The studies were conducted in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required from the participants or the participants' legal guardians/next of kin in accordance with the national legislation and institutional requirements.

Author contributions

XY: Data curation, Investigation, Writing – original draft. T-tC: Investigation, Writing – original draft. S-yZ: Writing – review & editing. C-yL: Investigation, Writing – review & editing. LZ: Data curation, Writing – review & editing.

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Conflict of interest

The 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.

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Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpubh.2024.1295975/full#supplementary-material

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"I don't know if I can keep doing this": a qualitative investigation of surgeon burnout and opportunities for organization-level improvement

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Introduction: Burnout is a pressing issue within surgical environments, bearing considerable consequences for both patients and surgeons alike. Given its prevalence and the unique contextual factors within academic surgical departments, it is critical that efforts are dedicated to understanding this issue. Moreover, active involvement of surgeons in these investigations is critical to ensure viability and uptake of potential strategies in their local setting. Thus, the purpose of this study was to explore surgeons' experiences with burnout and identify strategies to mitigate its drivers at the level of the organization.

Methods: A qualitative case study was conducted by recruiting surgeons for participation in a cross-sectional survey and semi-structured interviews. Data collected were analyzed using reflexive thematic analysis, which was informed by the Areas of Worklife Model.

Results: Overall, 28 unique surgeons participated in this study; 11 surgeons participated in interviews and 22 provided responses through the survey. Significant contributors to burnout identified included difficulties providing adequate care to patients due to limited resources and time available in academic medical centers and the moral injury associated with these challenges. The inequitable remuneration associated with education, administration, and leadership roles as a result of the Fee-For-Service model, as well as issues of gender inequity and the individualistic culture prevalent in surgical specialties were also described as contributing factors. Participants suggested increasing engagement between hospital leadership and staff to ensure surgeons are able to access resources to care for their patients, reforming payment plans and workplace polities to address issues of inequity, and improving workplace social dynamics as strategies for addressing burnout.

Discussion: The high prevalence and negative sequalae of burnout in surgery necessitates the formation of targeted interventions to address this issue. A collaborative approach to developing interventions to improve burnout among surgeons may lead to feasible and sustainable solutions.

KEYWORDS

burnout, surgery, academic medicine, qualitative methods, payment structure, gender inequity, organizational psychology

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1 Introduction

1.1 Background

Burnout – a psychological syndrome characterized by emotional exhaustion, depersonalization, and a sense of low personal accomplishment– is a significant concern for physicians in North America (1, 2). While prevalence estimates vary, some studies have reported that over 50% of physicians suffer from severe burnout symptoms (3, 4).

Burnout is causing a crisis in healthcare organizations as physicians are experiencing substance misuse, depression, and suicidality at alarming rates (3, 5). Those experiencing burnout report reduced quality of patient care, lower productivity, and are more likely to leave medicine entirely, resulting in significant economic costs (6). Surgeons are at a particularly high risk for burnout due to the high demands associated with their specialty, and have even reported major medical errors in relation to this syndrome (7–9).

Although burnout has been recognized as a consequence of system-level problems, research addressing this issue has primarily focused on individual-focused investigations which have been met with limited success (1, 2, 10). It is critical that we focus our efforts on developing interventions targeted at the source of burnout, which entails examining issues grounded in the workplace. Further, in order to create effective and sustainable interventions, involving stakeholders in the formation of such strategies is critical to ensure feasibility and uptake (11). Leaders in this field of research postulate that examining burnout is more meaningful if it is assessed at the department or unit level as this phenomenon is grounded in the relationships that healthcare workers have within their respective teams (1).

Given the high prevalence of burnout in surgery, it is critical to develop organizational interventions and strategies tailored to surgical departments to promote sustained and meaningful change at the institutional level (1). Our investigations should be targeted accordingly and center techniques which are able to give voice to those most impacted by burnout (11). Qualitative methods present as an ideal way to explore characteristics of work environments contributing to burnout due to their ability to capture the nuance and complexity of different phenomena that cannot be explained using traditional quantitative methods. Moreover, the strength of qualitative research lies in its ability to center participant experiences and translate their perspectives into tangible change.

The majority of burnout research that has been conducted to investigate drivers of burnout in surgical settings has been quantitative in nature and situated across different subspecialties, departments, and institutions (8). These studies tend to be focused on producing generalizable findings applicable to healthcare professions and burnout as a whole or center their analyses on individual-level risk factors (8, 12). While this research has formed the foundation for what we know about who is impacted by burnout in surgery, these methods neglect the value of examining context-specific social dynamics and the role of the organization in the emergence of this syndrome. Furthermore, the voices of surgeons are not fully represented by the quantitative metrics and outcome measures typically employed in these studies. We propose that qualitative methods embedded within an organizational lens are more appropriate for generating insights and interventions tailored to surgeons' experiences within specific settings.

Thus, the aim of this current research was to employ a qualitative case study methodology to identify the drivers of burnout among surgeons at a single academic medical center using an established framework for organizational evaluation, the Areas of Worklife (AoW) Model (13, 14). This model was developed to point to contributors to burnout that can be translated into organizational strategies for change and identifies six key areas which contribute to burnout. Ultimately, this framework was used to investigate the following question:

How do surgeons at McMaster University describe their experiences with burnout and what strategies do they suggest might mitigate the emergence of burnout in this context?

The Department of Surgery at McMaster University is an academic training center affiliated with the Hamilton Health Sciences and St. Joseph's Healthcare Hamilton hospital networks. Both networks operate within the context of the publicly funded, privately operated Ontario healthcare system, meaning the hospital networks receive funds from the Ontario Ministry of Health, but are independently managed by hospital executives (15). There are 194 surgeons in the department divided among 11 divisions. The staff in the department provide care in various locations, including a major trauma center at Hamilton General Hospital and community hospitals outside of the academic training centers.

All affiliated surgeons are expected to contribute to teaching, research, or program administration in a capacity of their choosing. Most surgeons within the department are compensated through the fee-for-service model, which is the most common compensation plan for physicians in Ontario (16). Under this payment plan, surgeons perform a service for their patients, and subsequently bill the Ontario Ministry of Health for that service. They are then reimbursed a predetermined amount based on the billing code of the service, such as a consultation, procedure, or follow-up visit. In this way, surgeons are paid a discrete amount per service they provide. Alternatives to the fee-for-service model include salary-based compensation, in which institutions receive lump sum payments from the Ministry of Health that are then allocated to physicians according to their contracts (17). Capitation models involve billing the Ministry of Health based on the number of patients under a physician's care rather than the services provided and are most common in family medicine (18). Salary and capitation payment models are examples of alternative funding plans (AFPs). AFPs made up approximately 27.4% of the total clinical payments to Canadian physicians in 2018, with fee-for-service payments making up the remaining 72.6% of payments (19). These models are not mutually exclusive, and many physicians will be reimbursed through some combination of the two (19).

Compared to the rest of Canada, Ontario has the lowest per-capita healthcare spending rate (20, 21). The province is also facing a nursing shortage, with approximately 23,000 nurses fewer than the national *per capita* average and many considering leaving the profession entirely (22–24). These factors, among others, have contributed to the health care crisis in Ontario that has ultimately resulted in over 1,200 vital service closures at public hospitals in 2023 (25, 26).

In response to the COVID-19 pandemic, the Ontario Ministry of Health (along with public health agencies across Canada) placed restrictions on non-essential surgeries in an attempt to conserve hospital resources and limit the transmission of the virus (27). During the first two and a half years of the pandemic, approximately 13% fewer surgeries were performed in Canada, increasing the already long

TABLE 1 An overview of the areas of worklife model.

Area of Worklife	Description
Workload	Lack of fit: A chronic workload that exceeds individuals' capacity to meet their professional demands without an opportunity to recover from strenuous tasks/periods of time. Fit: A sustainable workload that provides professional opportunities to use and grow skills while providing opportunities for rest.
Control	Lack of fit: Insufficient opportunity to make decisions around the nature of one's work, including shaping the environment to meet the demands of the job. This includes conflicting or ambiguous requirements in the workplace. Fit: Being able to exercise professional autonomy, including the capacity to influence decisions that impact one's work (such as gaining access to resources necessary for the job).
Reward	Lack of fit: A deficiency of monetary, social, and intrinsic reward that is incongruent with the expectations one has, leading to the devaluation of the work and the worker themselves. Fit: Feeling consistently and adequately rewarded/recognized for the contributions made in the workplace.
Community	Lack of fit: Ongoing working relationships characterized by unresolved conflict and a lack of support. Fit: A community of workers exists that fosters a sense of inclusion and mutual support/respect.
Fairness	Lack of fit: Decisions at work are perceived as being unfair or inequitable, including promotional, compensation, or procedural-based decisions. Fit: Evaluations, resource distribution, and compensation are perceived as fair and equitable. Leadership as a whole is seen as valuing fairness.
Values	Lack of fit: A gap between the organization and individual values, including a discrepancy between stated organizational values and actual practices or personal morals. Fit: The work people perform in their organization is congruent with their values and ideals, with the individual's original attraction to the job.

Leiter and Maslach (13, 14).

surgical wait lists across the country, with wait times often exceeding what specialists consider to be clinically "reasonable" (28, 29). Amid this crisis, various calls to action have highlighted the importance of addressing physician burnout to ensure that there are sufficient human resources available to address the system-level issues exacerbated by the pandemic, including the backlog of surgical procedures, and build a more sustainable healthcare system (30).

1.2 Philosophical and theoretical foundations

This study was approached from a critical realist lens, which is conceptualized as being ontologically realist and epistemologically relativist. The critical realist position postulates that while an independent reality exists (ontological realism), our representations and thoughts regarding reality are influenced and mediated by cultural and social contexts (epistemological relativism) (31). Essentially, while a reality exists external to the human mind, different methods of study will produce different representations of such reality. For the purposes of this research, it was assumed that there are common drivers of burnout among surgeons within the department, and the responses obtained from the interviews and survey data reflect the unique experiences and understandings of surgeons with these drivers. Moreover, the themes constructed from this data are also reflective of the researchers' interpretation of the data and the experiences, knowledge, and understanding they bring to the analysis.

Central to the interpretation of this data was the AoW model. The AoW model was created by Maslach and Leiter as a way to identify the key stressors that exist within organizations and develop strategies to improve the job environment (13, 14, 32). This model conceptualizes burnout as being a result of a lack of "fit" or "match" between six different areas pertaining to the workplace: workload, control, reward, community, fairness, and values (Table 1). The greater the incongruence between the person and the environment within each domain, the greater the likelihood the worker is experiencing burnout. In contrast, when high levels of fit are achieved, workers are more likely to be resilient to conditions of stress and engaged with their work (11). Identifying areas from this model in which conditions can be improved (i.e., low levels of fit) can lead to the development of strategies targeting issues at their source and effectively ameliorate burnout (10). To ensure congruence between data collection and the theoretical foundations of this study, the questions posed to participants were framed around the six Areas of Worklife to identify specific problem areas within each domain (Supplementary material).

2 Materials and methods

2.1 Design and data collection

An intrinsic case study design was chosen for this study as this methodology is ideal for examining issues that are context-dependent, and allows the researcher to focus on the phenomenon of interest while being situated in a particular social and physical context (33, 34). The "case" or unit of analysis under study for this research was the Department of Surgery at McMaster University. Data collection was limited to surgeons within the department, and the analysis focused on elucidating issues specific to this group of physicians.

The qualitative data collected for this study was obtained through a cross-sectional survey and one-on-one interviews that were approximately one hour in length. Surgeons were recruited to participate in the study through a mixture of direct emails and advertisements distributed by the department newsletter. Within the emails and newsletter contained a link to the survey, which collected demographic information, open-ended response questions, and an option to indicate whether the participant was interested in completing a one-on-one interview over video conferencing. Burnout scores were also obtained within the survey using the Maslach Burnout Inventory (MBI), specifically the Human Services Survey for

Medical Personnel version (15). This scale produces a score for each of the defined symptoms for medical personnel, being emotional exhaustion, depersonalization, and personal accomplishment using items such as, "I feel emotionally drained from my work," "I have accomplished many worthwhile things in this job," and "I do not really care what happens to some patients." The symptoms can emerge in varying degrees in response to different stressors, with burnout being considered a complex, continuous construct rather than a dichotomous variable. However, cut-offs have been proposed to distinguish severe burnout symptoms (high emotional exhaustion (≥27) with either high depersonalization (≥13) or low personal accomplishment (≤33) (16)), which were used to characterize our sample for descriptive purposes only.

Prior to the formal implementation of the survey and interviews, the data collection form and interview guide were piloted with three surgical faculty members to ensure coherence and clarity (Supplementary Material). Qualitative questions were provided within the survey to facilitate the collection of data from a very time-restricted population in an accessible manner. This method would allow surgeons to provide information without the burden of scheduling a dedicated interview time, and afford participants control over when, where, and how they answered our questions (35). While depth of data is often lost in qualitative surveys, we felt as though the sensitive nature of this topic might have inhibited participants from sharing certain workplace experiences in traditional "face-to-face" data collection; the level of anonymity provided by this survey would potentially facilitate disclosure and ameliorate concerns regarding identification.

Being mindful of participant time restraints and the potential for disengagement, we decided to limit the qualitative portion of the survey to four broad questions. With the additional demographic information collected in the survey, our piloting indicated that the questions would take approximately 15 min to complete (as opposed to an hour-long interview) – a survey length which has maximized participant engagement in past studies conducted within this population. Moreover, for qualitative surveys which focus on lived experience and seek detailed responses, past research has indicated that a small number of questions is ideal (35).

In contrast, the interview guide was constructed with the intent of gathering detailed information pertaining to surgeons' lived experienced within the scope of the AoW model, and consisted of questions targeting each domain. Field notes were maintained throughout the interviews to capture contextual details and insights during the data collection process. Specifically, information was captured about the location in which the interview was taking place for the participants, their emotional state, and reactions the interviewer had to the information gathered. All interviews were audio recorded and transcribed verbatim.

Interviews were limited to a virtual medium given the COVID-19 related restrictions in place for in-person research. However, this medium also allowed surgeons to choose a convenient time and location in which they completed the interview, and access to a geographically dispersed demographic. Virtual interviews have demonstrated significant emulation of natural conversation, and the ability to elicit data with substantial richness, similar to that of in-person methods (36, 37). While this method offered various advantages, the virtual "context" does limit researchers' impressions of the physical environment in which the interview is conducted (37, 38). Moreover, the digital medium introduces new contextual factors such as internet connectivity, device preferences, and familiarity with the online platform employed. It should also be noted that online interviews allow participants to curate the appearance of their environment, which may have influenced researchers' perceptions of surgeons' contexts (38). Nonetheless, virtual interviews offer access to spaces that may not be readily accessible in traditional face-to-face interviews, and the opportunity to observe unintended disruptions. These considerations were taken into account during the data collection process.

Recruitment was evaluated on an ongoing basis and was informed by the concept of information power, whereby the sample's adequacy was judged based on the relevancy of the data collected, specificity of participant experiences, quality of dialog obtained, the theoretical background of this study, and the exploratory analytical strategy (39). Data collection ceased when researchers determined that a comprehensive interpretive analysis was achieved and allowed for credible conclusions that were consistent with the research question.

2.2 Ethical considerations

This study was granted ethics approval by Hamilton integrated Research Ethics Board (Study #13561). Consent was obtained through standard implied consent language within the survey's preamble, and verbal consent was again obtained over video conferencing for interviews. Given the established issue of work-related burden and burnout in surgical environments, we endeavored to limit the burden of our data collection on participants by restricting the number of questions in our survey and limiting interviews to being an hour in length. During the interviews, participants were also monitored for behavioral signs of emotional distress and were offered breaks and opportunities to pause or cease the interview if these were noted by the interviewer. Participants were also provided a list of resources and services that they would be able to access in the case of distress, both before and after the interview as well as the survey questions.

To ensure privacy and anonymity, participants were encouraged to take the virtual interviews in place where they would be most comfortable talking about workplace-related issues. We did not impose any restrictions on where this might be, and maintained flexible schedules to accommodate surgeons' working hours so they were able to take these meetings in a private location, including private hospital, university, and home offices. The option to exclusively provide survey responses was included in case participants did not feel comfortable disclosing their identities to investigators. In terms of monitoring the potential distress of those collecting the data, the interviewers maintained dedicated debriefing times with one another to discuss any potential concerns they had about their own wellbeing, or participant distress. The lead interviewer (KM) also held regular check-in meetings with the co-PIs (RS & IY) to debrief interview experiences and concerns regarding data collection.

2.3 Analysis

Braun and Clark's (31, 40) approach to reflexive thematic analysis was used to analyze the data collected in both the survey and interviews. This approach was also chosen since it is a theoretically

flexible technique to theme development, and suits questions exploring people's experiences, perceptions, and representations of a given phenomenon. Thus, reflexive thematic analysis was an appropriate method to explore surgeons' experiences with burnout using the AoW model. Specifically, an experiential approach to data analysis was employed, during which the meanings and experiences provided by participants were centered during coding. This analytical method's flexibility also meant that our analysis could focus on constructing codes which encompassed both semantic (explicit) and latent (implied) meaning in the data and involve inductive (data-driven) as well as deductive (theory-informed) theme development (31). Essentially, while the analysis was centered on developing codes around surgeons' experiences and interpretations of burnout based on the AoW model, coding also captured issues related to the burnout experience outside of the AoW model. Codes were generated relative to our conceptual framework based on researchers' theoretically informed interpretation of the data in conjunction with inductive codes that were reflective of researchers' understanding of participants' experiences (that may have been unrelated to the AoW model).

Three researchers (KM, SV, SC) followed the six iterative steps of (1) data familiarization, (2) generating initial codes, (3) generating themes, (4) reviewing potential themes, (5) defining and naming themes, and (6) producing the thematic report. It should be noted that this process was iterative and recursive, with coders moving back and forth through the phases as necessary. Within this approach, it is expected that new insights may arise during theme development which may require further iterations of earlier phases and new interpretations of the data (41). The coders held weekly meetings to discuss insights generated throughout the analytical process, collaboratively construct meaning from the data, and promote reflexivity through conversations around the researchers' assumptions, beliefs, and backgrounds as they related to this study. Interviews were coded in Microsoft Word using the comment function to tag the data with code labels. The software R was then used to extract the comments along with the tagged data excerpts and place them into an excel spreadsheet along with the coded survey data. The codes were refined by collapsing those that shared similar underlying concepts, and eventually formed into themes and subthemes representative of the overarching relationships between codes. After an initial round of themes were developed, these themes were reviewed in relation to the broader dataset, finalized codes, and research question to ensure the interpretations and information provided addressed the original intent of the study. Themes were then defined, named, and reported collaboratively to produce a coherent narrative of the data. Quotes are provided alongside the relevant theme, with details regarding the quote's origin (S=Survey, I=Interview), the participants gender (M = Man, W=Woman), and whether they hold a leadership position in the department concerning research, education, or administration (L = Leadership). Participants' characteristics were summarized using descriptive statistics, with means, standard deviations (SD), and frequencies being presented where appropriate.

3 Results

3.1 Participant characteristics

A total of 28 unique surgeons from the department participated in this study-22 surgeons provided qualitative comments throughout the survey, while 11 participated in one-on-one interviews. In terms of burnout, 18 (64.3%) participants were classified as suffering from severe symptoms, with the average emotional exhaustion, depersonalization, and personal accomplishment scores being 30.4 (SD: 10.8), 10.3 (SD: 10.3), and 37.5 (SD: 6.9), respectively. Of those that provided qualitative survey comments, 9 (40.9%) held leadership positions in the department, and 8 (36.4%) were women while the remaining 14 (63.6%) were men. The average time on faculty for these participants was 15.5 years (SD: 11.0 years). The surgeons that participated in the interviews were composed of 6 (54.5%) men and 5 (45.5%) women; the majority ($n = 7$, 63.6%) held leadership roles in the department, and the average time on faculty was 20.7 years (SD: 11.0 years). On average, participants indicated that just over 65% of their time is dedicated to clinical activities, with their remaining time being distributed across education (mean: 13.1%), research (mean: 9.4%), and administrative work (mean 12.4%). An overview of these characteristics is available in Table 2.

3.2 Themes

3.2.1 The Red Queen's Race: moral injury and chronic overwhelm in the face of high patient volume

While surgeons discussed the impact of a highly demanding schedule on their wellbeing, the main concerns expressed were not related to the nature of clinical work itself, but rather the moral injury associated with being unable to treat patients in the thorough and timely manner that surgeons value and patients require. Surgeons asserted that it is not the number of patients they are treating that threatens to overwhelm them, but rather the number of patients that they *cannot* treat; it was stated that surgeons want more time in the operating room, and struggle immensely with being unable to provide timely care for their patients. The long wait times encountered by patients and the blame surgeons receive (from others and themselves) for these wait times are major sources of stress for physicians. One participant shared the toll that turning patients away has on them by saying,

> *"Hundreds and hundreds of patients out there in that catchment area get a letter saying that there's no doctor to see you. That just feels terrible. [...] I do not have the resources to take care of them," [004-I-W-L].*

The seemingly infinite flow of patients prevents surgeons from feeling the satisfaction associated with completing a case as there are hundreds more waiting next in line, with many such patients waiting beyond ideal timelines. When asked what aspects of their work contributed to burnout, one participant replied,

> *"Sometimes it's just the never-ending-ness of it. You know, you think if you see these people, you get these emergency referrals and everything else and you see them, and then, you know, there are still more the next week and the next week and the week after that, so it's as if you are never going to get anywhere," [006-I-M-L].*

Participants conveyed that it is difficult to feel accomplished in their work when they lack the resources to adequately look after patients on their waitlists. The stress and guilt are worsened by the

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TABLE 2 Participant demographic characteristics.

	Total participants (*n* = 28)*	Survey participants (*n* = 22)	Interview participants (*n* = 11)
Gender, *n* (%)			
Men	18 (64.3%)	14 (63.6%)	6 (54.5%)
Women	10 (35.7%)	8 (36.4%)	5 (45.5%)
Years in independent practice, mean (SD)	17.4 (10.3)	16.4 (10.2)	21.5 (9.4)
Years on faculty, mean (SD)	15.5 (11.0)	15.5 (11.0)	20.7 (11.0)
Leadership position, *n* (%)	15 (53.6%)	9 (40.9%)	7 (63.6%)
Pay structure, *n* (%)			
Fee-for-service	23 (82.1%)	20 (90.9%)	7 (63.6%)
Alternative payment plan	5 (17.9%)	2 (9.1%)	4 (36.4%)
% Time breakdown, mean (SD)			
Clinical	65.2 (17.9)	70.9 (12.6)	55.9 (19.7)
Research	9.4 (11.6)	8.9 (9.1)	8.8 (13.9)
Administration	12.4 (15.1)	9.0 (6.7)	18.8 (22.0)
Education	13.1 (9.4)	11.2 (6.6)	16.5 (11.0)
Burnout			
Severe symptoms, *n* (%)	18 (64.3%)	16 (72.7%)	6 (54.5%)
Emotional exhaustion, mean (SD)	30.4 (10.8)	31.0 (10.6)	29.5 (11.2)
Depersonalization, mean (SD)	10.3 (6.0)	11.1 (5.7)	9.1 (5.4)
Personal accomplishment, mean (SD)	37.5 (6.9)	35.7 (6.4)	41.1 (5.6)

*A total of 28 unique surgeons participated in this study. Three surgeons provided survey responses and opted to complete a virtual interview.

need to make critical decisions regarding which patients need to be seen first. The surgeons interviewed expressed the concern that longer wait times may exacerbate patients' conditions and described extreme pressure to triage patients effectively. Participants shared that they live with the constant fear of being sued for inaccurately assessing a patient's need for care and indirectly contributing to poor outcomes. While legal concerns were indicated explicitly, struggles with moral injury were revealed implicitly. For surgeons in this context, moral injury was outlined in reference to surgeons' inability to provide timely care to their patients and the subsequent feelings of guilt associated with these delays. Surgeons shared that they entered the field because of their desire to help people, and the constraints placed by time, resources, and politics contribute to major feelings of guilt, inadequacy, and insecurity- prominent emotions associated with moral injury.

One surgeon described the department of surgery as "*A very resource restricted environment*" as a result of "*ongoing cutbacks, especially with the ward and O.R. [operating room] resources, combined with a lot of disparity and inequity in utilization,*" *[009-I-M]*. Surgery was described as a specialty that is heavily reliant on nursing and allied health professionals, other hospital staff, and anesthesiologists, meaning that issues outside of the surgical department can have major ramifications for surgeons. It was provided that staff shortages prevent surgeons from doing their jobs, and this lack of control creates frustration. One participant expressed this concern by saying, "*There are still certain resources, like the procedure room in particular, that [are] very unpredictable,*" *[010-I-W-L]*. This unpredictability creates stress in surgeons' professional and personal lives as last-minute accommodations and schedule changes can strain relationships with patients as well as with a surgeons' family and friends.

Many of the surgeons interviewed feel the burden of the failures of the healthcare system falling onto their shoulders, leading to cynicism and exhaustion that are characteristic of burnout. These system-level issues are largely out of a surgeon's control, yet they impact surgeons' ability to work in a way that aligns with their values. One surgeon expressed this difficulty in saying,

> "*It feels so discouraging because, you know, so much of whether or not they are [patients] going to get better is outside of my control,*" *[010-I-W-L]*.

Ultimately, high patient volumes contribute to burnout in surgeons due to a relative lack of resources available for surgeons to care for those patients. Barriers to O.R. access deprive surgeons of fulfillment in their job and create anxiety that delays in patient care may compromise care. Many surgeons gravitate toward the profession because of the sense of agency it offers in directly making a difference in their patients' lives. Consequently, keeping patients out of arms' reach creates guilt and frustration that inevitability intensifies burnout.

3.2.2 No good deed goes unpunished: the role of recognition and remuneration

Reward was identified as another AoW that is relevant to surgeons' burnout, specifically in relation to compensation models and the downstream impacts on surgeons' motivation to complete certain responsibilities. Surgeons expressed concern regarding the structure of the fee-for-service compensation model, as well as frustration with

a lack of support and recognition for service in leadership and administrative roles.

At academic centers such as McMaster University, surgeons may receive stipends for involvement in research, education, and leadership in addition to compensation for their billed procedures, but participants in the present study highlighted that the reimbursement per hour for these activities is far less than the income that would be made via clinical work. Participants expressed that this payment plan rewards individuals who complete the most procedures, and indirectly disadvantages individuals who take on more time-consuming cases, have greater involvement in research, education or leadership, and complete services that have been determined to be of lower value by the Ministry of Health.

Participants highlighted that because of this model, surgeons are often not directly compensated for the administrative work that they complete. Surgeons described patient care as the most fulfilling aspect of their practice, while administrative tasks such as charting, the clerical burden imposed by electronic health records, and responding to referrals were described as less enjoyable. Administrative aspects of education-based work, such as completing forms related to entrustable professional activities as part of competency based medical education and scheduling meetings for various service-based positions were also provided as sources of this burden. This discrepancy in compensation for the time dedicated to certain tasks results in a large conflict from the perspective of the AoW model, as surgeons are not receiving equitable intrinsic or extrinsic reward (such as fulfillment and compensation, respectively) for completing this labor. This conflict threatens to cause frustration and exhaustion among surgeons, as administrative work becomes a barrier to the sense of fulfillment that patient care provides and is often not directly or appropriately compensated financially.

Other roles within the department, such as leadership, education, and research positions, also tend to not be compensated to the same extent as clinical work. Participants stated that when surgeons choose to take on these roles, they are forced to reduce the time they dedicate to clinical tasks and decrease overall earnings, or else complete their non-clinical commitments in their time off, contributing to the negative impact of overwork that was explored in the previous theme. Participants indicated that as a result, they feel as though they are punished for looking out for the good of the department. One participant described this financial tension between clinical and non-clinical work in saying,

> "*The fee schedule is set up that if you spend an hour doing research or education… if you'd spent that hour doing clinical work, the financial reward would be 10 fold or 20 fold, or even more, so one of the problems is that education and research and admin, they do not have the ability to recompense any physician, surgeons especially, the same way that clinical work does" [006-I-M-L].*

The discrepancy between compensation and workload in leadership roles identified by participants is a concern that relates to both the reward and fairness domains under the AoW model. Participants indicated that surgeons who are invested in the success of the department take on leadership or service roles only to receive more work in return. While certain positions may come with a small stipend, the increased income is not equivalent to the money lost from the necessary reduction in clinical tasks. It was conveyed that surgeons who put effort into improving the department are financially worse off than surgeons who are self-interested and focus primarily on clinical work. Participants expressed frustration that those who neglect the educational or administrative duties inherent to academic surgery are rewarded rather than facing repercussions for prioritizing their needs over the collective good of the department. Furthermore, this leaves surgeons who are dedicated to education and leadership responsible for "picking up the slack" of those who disregard these expectations, thereby further increasing their workload and feelings of resentment toward other staff. Another surgeon, when asked if they were adequately rewarded for their service roles, stated,

> *"Adequately? No, not adequately, no way. I mean, there are really good people that you kind of work with along the way, that's a nice dynamic, but there is no way that they can ever adequately compensate you for your time or effort [...] The trouble is, again, with our system, there's very few carrots to entice people into nonclinical work and there's absolutely no stick, right, so it's very hard to [...] distribute that work, especially if you do not feel a whole lot of guilt or responsibility to do it," [009-I-M-L].*

It was also provided that the lack of reward for leadership positions contributions also insinuates that the efforts of current leaders are unappreciated. One participant described the negative relationship with their leadership roles by saying,

> *"I'm stupid enough to take on additional jobs, research students and stuff like that [...] I'm also the director of [leadership position]; I have a big role with that. I also just took on [other leadership position] — really dumb. But, you know, again, [I have] a big role with that as well, and all of those things are problematic, especially for some of us that are still on fee-for-service" [003-I-M-L].*

Participants asserted that receiving verbal recognition or praise for their work would not alleviate their burnout because the exhaustion associated with their daily tasks would remain. However, it was suggested that an alternative funding plan may provide incentive for more surgeons to be involved in administrative and leadership roles, potentially resulting in a more equitable distribution of work and greater sense of solidarity within the department.

One surgeon shared their thoughts on the impact that an alternative funding plan, such as one that included a base salary, would have on the workload and wellbeing of surgeons:

> "*I think that [an alternative funding plan] would certainly help a lot because then it frees up more time to be able to look after patients better, to be able to do more administrative stuff, academic stuff, research stuff that a lot of people want to do [...]. I think that also helps with the volume stuff, so if all of a sudden you are making a good salary, you know, you may say, 'Well, [if] we pull somebody else on board, you know, I'm not going to lose a whole lot of money now, so why do not we just hire somebody else and they can do some of these patients for us too?'" [003-I-M-L].*

Participants shared the belief that moving away from a fee-for-service payment plan would reduce the pressure surgeons feel to work extremely demanding hours. Interestingly, some surgeons shared that they prefer the fee-for-service model, as it allows them to have more

flexibility in the hours that they work. One participant expressed this in saying,

> "*The one thing that's really nice about fee-for-service is that it gives me the control, right? So if I want to take a morning off to drop my kids off at school or if I want to take an afternoon off because I'm just feeling really burnt out… right now, I take that financial hit and I deal with the repercussions," [010-I-W-L].*

This perspective inadvertently illustrates another consequence of a pure fee-for-service model: surgeons do not have access to paid time off. While it can be argued that the fee-for-service model treats surgeons as self-employed and therefore responsible for managing their time off, the situation is complicated by the facts that surgeons are accountable for their patients whose issues may arise at unpredictable times, they do not have control over the income they receive per billable service, and there are additional non-clinical responsibilities associated with academic surgery. A lack of incentive — or, more accurately, a cost — to take time off effectively discourages surgeons from maintaining a healthy work schedule and obtaining adequate rest.

It is clear that a lack of reward for nonclinical tasks is impacting surgeons' morale and contributing to dimensions of burnout. It can be argued that the most transparent way in which an institution communicates its values is through remuneration. The majority of the current payment plans within the department indicate that research, administrative work, and teaching are underappreciated. The consequences of these payment plans impact all of the AoW domains, and are therefore a critical avenue through which impactful change can be made. Responses from participants strongly suggest that reassessing the department's values and ensuring that actions that align with those values are rewarded and adequately compensated will promote a healthier and more productive culture.

3.2.3 Trenches and ivory towers: the divide between problems, solutions, leadership, and the frontline

Surgeons described a disconnect between leadership and the "front line," a mismatch between chronic sources of stress and the proposed solutions, as well as tension between staff members themselves as being contributing factors to their ongoing feelings of frustration and burnout. This theme lies at the intersection of values, control, fairness, and community; while conflict between leadership and care providers raises the issue of competing values and control over one's practice, issues between surgeons themselves and the individualistic culture prevalent in surgical departments prevent surgeons from forming a cohesive community with their colleagues and those in leadership positions.

The dissonance outlined by participants with respect to the conflict they experience with leaders lies at the division between surgeons holding the scalpel and administrators making the decisions around when and for what purpose the scalpel can be used. Many participants indicated that administrators often enforce policies that do not align with the needs and values of those at the frontline of surgical care, such as prioritizing the allocation of resources based on financial motivations over health system needs. When concerns over this disconnect are raised, they are often met with ambivalent attitudes or remain unacknowledged. One surgeon commented,

> *"As I see it, the organization is quite fixed… they have their own viewpoints or set points and they enact or enforce change that does not resonate with us at the front line.. it's always with the undertone of saving the capital budget"* [002-I-W].

Enforcement of policies which are misaligned with the views of the frontline also contributes to the lack of control surgeons described in theme 1. Participants stressed that the lack of action and ambivalent attitudes that are present when concerns are raised lead surgeons to feel disenfranchised, and fosters feelings of resentment, cynicism, and a loss of trust in those in administrative positions. Another surgeon commented:

> "*I think having some elements of leadership that actually can see these issues [is important] and to be honest, I think a lot of the time they do see issues, the question is why are these things not acted on?" [001-I-W-L].*

Moreover, despite the widespread acknowledgement among participants that the causes of burnout are primarily systemic in nature, surgeons indicated that the solutions and remedies suggested to staff members are predominantly individual-based modalities such as mindfulness interventions and stress management techniques. Not only do these proposed "solutions" ignore precipitating factors of burnout for surgeons and contribute to feelings of self-blame, but this disconnect also reinforces cynical attitudes that sustained change is beyond reach, thereby further driving a wedge between administration and staff. Participants emphasized that surgeons do not require more skills to cope with their ongoing demands; rather, there needs to be ongoing evaluation of the resources required to support clinicians in providing quality patient care, and proactive strategies developed to address these issues at their root cause. The superficial and reactive "support" strategies that are currently in place are not only ineffective, but also foster discontent among staff which is counterproductive and further contributes to feelings of burnout. One surgeon commented,

> "*In my humble opinion, if you do not change the environmental conditions that lead to burnout… there is no support that can handle that" [13-S-M-L].*

Participants also reported that this disconnect is prevalent among staff members themselves. Participants speculated that the individualistic culture present in surgical specialties leads many of their colleagues to characterize poor surgical outcomes and feelings of burnout (as well as mental health concerns more generally) as an indication of personal deficiencies rather than broader health system issues. This cultural perception of burnout as a moral failing has led to many of the participants being reluctant to share their concerns and seek support from colleagues and leadership regarding patient care and complications out of fear of reprisal and judgment. One participant shared,

> *"Not infrequently such events [surgical complications] may become the subject of a hospital complaint, a CPSO [College of Physicians and Surgeons Ontario] complaint, or a medicolegal case and we are discouraged from discussing such matters outside of the investigation or process. There is also the reservation of sharing personal or*

> *professional matters with colleagues for fear of being identified as weak or unfit for practice in any way." [012-S-M].*

Participants indicated that many of their colleagues glorify overwork and see those who seek support or share their challenges with others as not being cut out for the specialty. These attitudes prevent staff members from leaning on each other when complications arise and reinforce the individualistic culture and divide between staff members outlined in theme 2.

Ultimately, surgeons emphasized that a key component to tackling burnout is to establish robust communication avenues between staff and leadership at various levels of the university and department. Those at the front line of patient care require engaged and supportive leadership who acknowledge and respond to issues when they arise. Open communication and a willingness to understand the responsibilities and pressures surgeons face on a day-to-day basis are critical to addressing the issues at the source, and preventing feelings of resentment toward leadership that foster conditions of burnout. Moreover, it is crucial that individual-focused interventions not be the sole remediation strategy offered to those experiencing burnout. Not only are these interventions not supported as primary prevention efforts in the literature, but they also further feelings of cynicism and a "victim-blaming" mentality among staff members who locate the root cause of burnout within the individual. Efforts to reduce the stigma associated with this syndrome should also come with education regarding the role of environmental stressors in the emergence of burnout, as well as the importance of having a supportive community in the workplace that is free from judgment and incivility toward others.

3.2.4 Exacerbating factors

While the previous themes outline conditions that participants described as precipitating factors for burnout, there were two notable circumstances that were identified as exacerbating conditions for the pre-existing issues contributing to burnout: (1) gendered expectations and gender inequity, and (2) the COVID-19 pandemic.

3.2.4.1 Gendered expectations and gender inequity

Women interviewed in this study indicated that they are disproportionately impacted by burnout as they are often burdened by tasks and behavior that are known risk factors for this syndrome. They described being expected to be more flexible and understanding of being treated in ways that are inconsiderate of their time as well as being expected to perform tasks that men in the department are typically not expected to complete. These expectations contribute to feelings of cynicism and exhaustion congruent with burnout, and intersect with the workload, fairness, reward, and control domains of the AoW model.

Women in this study described experiencing an increased workload due to being expected to perform secretarial or administrative tasks, as well as being given more "emotional" patients from colleagues who require consolation and additional time for consultation. Not only do these tasks take away women's time from their primary role as surgeons, but it also reinforces the gendered stereotype that secretarial and emotional labor should be performed by women instead of men even within the same profession. Additionally, the migration of these tasks inevitably contribute to women spending less of their time on billable procedures and more time on kinds of work that have been established as risk factors for burnout. One surgeon commented:

> "*I think it's a kind of— a little bit taboo to discuss… I know that the work that I do is often reimbursed at a lesser amount than the work that some of my colleagues are doing. And that can make you feel like your work or your contributions are not valued [...] I find it really frustrating that people say things like, 'Well, it's fee for service, so there is no gender pay gap — you are getting paid for what you are doing so does not that mean we are all being paid fairly?' And I would try to explain the different patient expectations, the different expectations for colleagues, the different types of patients that are being sent to women, like referral bias. You know, the fact that procedures done by women are often reimbursed at a lower rate because most of the committees that determine reimbursement are stacked by men." [010-I-W-L].*

In instances where women do not accommodate the additional workload associated with these tasks, they are perceived as being inflexible; thus, many choose to oblige these requests or learn to "say no nicely." However, times in which women "choose" to accommodate such a workload are not necessarily reflective of a choice, but rather the pressures that women in this profession experience around not being seen as lesser than their counterparts who are men. Some women expressed that they are hesitant to discuss issues of gender equity due to the perceptions that it is not a serious issue by some of their colleagues, and to be seen as a "whiner" or in need of additional support would have negative implications for their careers. One participant stated:

> *"…the fact that I'm a female and I can be pushed more to do everything with less [contributes to burnout]… the more that you complain [the more] people find you annoying and whiny and difficult…that's kind of not fair because I'm pretty sure that a male in my position would not stand for this…" [001-I-W-L].*

The balance between professional and personal responsibilities was also discussed as a challenge that disproportionately impacts women in academic surgery. The expectations for surgeons who are mothers tend to be different from what their colleagues who are men experience due to social norms around parenting. Mothers are expected to be ever-present and the primary caretakers for their children, even in family situations in which their partners are responsible for such tasks. One participant described this frustration in saying:

> *"I mean… It's just different. It's mothers who are expected, who get called, when the kid's sick at school. It's not my husband. We're the [expected] primary caretakers. I'm not actually, my husband is." [004-I-W-L].*

Those who participated in this study advocated for the department to promote an increased awareness and understanding of the pressures and biases women face in this career, and ensuring women are involved in decision making around workplace policies and departmental organization through leadership positions. These surgeons emphasized that they do not want to be "treated differently

than the men," but rather, seen as equally competent and deserving of respect for their time and skill as surgeons.

3.2.4.2 The COVID-19 pandemic

Since its emergence, the COVID-19 pandemic has placed unprecedented stress on our healthcare system and availability of health resources. For surgeons, especially those whose cases are mainly elective procedures, the pandemic further limited operating time, thereby adding to the already seemingly never-ending waitlists of patients and increased feelings of guilt around not being able to provide the care that people require in a timely manner. The additional restrictions on operating time that were put in place due to surges in COVID-19 cases also introduced novel conditions of financial stress for those on fee for service payment plans. The extreme reduction in cases meant surgeons were unable to bill for their services, thereby dropping their incomes drastically. For some surgeons, the salary of their administrative staff and other overhead costs was equivalent to or greater than the income they were making from their reduced caseload, meaning they were losing money for substantial periods of time during the pandemic. Moreover, when public health mandates relaxed and the OR became more accessible, the time allotted to elective procedures remained significantly reduced, preventing surgeons from returning to their pre-pandemic caseloads. This shift in OR resources and time reduced payments by tens of thousands of dollars per month for some surgeons. One participant commented:

> *"So I think generally, all around there's more work being expected of the staff surgeons, and then if we get a look at [the pandemic] following that… the issue with COVID-19 is that the ORs [operating rooms] have been shut down. We've had three or four ramp downs now when the OR67s were completely closed, except for urgent or emergent work. And as fee-for-service physicians, that means you do not get any money." [006-I-M-L].*

While the pandemic was framed as a contributing factor to burnout, surgeons also emphasized that the patient-related pressures being experienced from COVID-19 were largely a result of pre-existing issues in the healthcare system being exacerbated. The increasing expectations of patients and referring physicians were noted as contributors to the pressures faced by surgeons in their careers. One participant stated:

> *"So it [patient-care related pressures] definitely existed pre-pandemic, but everything has been worsened because wait times are so much worse than they used to be. I also think that expectations of patients and of referring doctors has changed and become much more demanding." [009-I-M].*

Increased wait-times due to the pandemic response also exacerbated burnout for surgeons by reducing the control they have over when they are able to treat patients, an issue explored in theme 1. This was described as being especially problematic for surgeons who primarily complete elective, quality-of-life based procedures which were deprioritized during the pandemic in favor of emergent cases. Additionally, surgeons acknowledged that the pandemic prevented individuals from seeking and accessing medical care, which exacerbated conditions of moral injury, both due to guilt regarding not being able to reach patients in need, and also in anticipation of poor outcomes that could have been prevented if treatment had been delivered earlier. One surgeon poignantly expressed this fear in saying,

> *"They [patients] are going to be presenting with more advanced disease, and so we know that, you know, had we seen them six months, a year ago, we could've of cured them, now we cannot. So there's going to be the potential for some moral injury there as well; for surgeons, for physicians, for the health care teams as they see people that they know, you know, without COVID, they probably could have been cured and now they cannot be cured." [006-I-M-L].*

Ultimately, the COVID-19 pandemic was identified as a contributor to burnout, mainly through the exacerbation of pre-existing issues in the healthcare system. The pandemic introduced extreme, unexpected financial stress on surgeons paid through fee-for-service, magnifying the limitations of this model. It also contributed to moral injury surgeons were already experiencing due to a lack of control in their provision of patient care. While the pandemic is, of course, outside of an individual institution's control, it is critical that a surgical department analyzes the concerns that have been exacerbated and uses the lessons the pandemic provides to improve surgeons' wellbeing, both in times of crisis and normalcy.

4 Discussion

This study explored the experiences of surgeons with burnout at an academic medical center using an organizational lens to identify target areas and potential strategies for change. Ultimately, participants described the extreme pressures they face while attempting to manage high patient volumes with limited resources, and the consequential guilt and unfulfillment they experience when they are unable to provide the quality of care to which they aspire. The theme "The Red Queen's Race" is a reference to Lewis Carroll's, "Through the Looking Glass" (1872), in which the Red Queen tells Alice that in the new land she finds herself in, she must run as fast as she can just to stay in the same place (42). Since the book's original publication, this term has been used to describe concepts in various subjects including biology and economics. Here it is used to describe the futility surgeons feel in response to their demanding clinical workload: while they work as much and as hard as they can, they can never seem to keep up with the unceasing influx of patients requiring care. This finding is consistent with previous research that has identified that one of the primary stressors impacting physician wellbeing is an inability to provide quality healthcare, one of the most fulfilling aspects of a surgeons' work day (43, 44). Moreover, there have been links made between burnout in healthcare workers and moral injury, a phenomenon which refers to the adverse psychological response that occurs following events that conflict with one's values and moral beliefs (45, 46). It should also be noted that burnout itself may create conditions in which moral injury is more likely to occur. Burnout has been linked to a risk of major medical errors and lower quality patient care due to the cognitive and emotional deficits that accompany this syndrome (47), potentially creating a reciprocal and iterative spiral in which surgeons experience more opportunities for moral injury, and subsequently burnout, to manifest.

It was also expressed that conflict between decisions made by hospital leadership and surgeon needs, as well as emphasis on

individualistic rather than systemic solutions to burnout, has created an environment that is incompatible with facilitating a healthy, supportive work community. Participants reported that this uncollaborative and individualistic culture drives a sense of hopelessness and futility surrounding the possibility of improvements in wellbeing across the department. This finding highlights the incongruence between our theoretical understanding of burnout as a response to chronic workplace stressors and the individualized interventions offered to address this issue (11, 48); the interventions presented to surgeons (and those in healthcare more broadly) largely focus on solutions that focus on stress management and building individual resiliency to burnout (2, 49, 50). While these approaches have demonstrated short-term merit in some settings, the participants in this study indicated that the presentation of individualized interventions to systemic issues reinforces feelings of frustration and actually contributes to issues of self-blame, and a culture in which the individual is blamed for system-level issues. This finding is consistent with research focused on such interventions, and in alignment with research that has indicated medial professions in particular tend to promote inappropriate self-care by misplacing system-level failings on the individual (1, 2, 51, 52). When examining the issues that participants indicate are causing burnout, it becomes clear that individualized solutions are not enough to prevent the issues encountered by surgeons.

The presentation of individualized solutions may also be reinforcing counterproductive behaviors learned throughout medical training, as well as deeply ingrained professional identity characteristics that prevent physicians from prioritizing their own wellbeing (53). The professional identities of physicians and surgeons are shaped by cultural norms within medical institutions that emphasize ideals of invincibility, stoicism, and perfectionism (54, 55). The perceptions of medicine as a virtuous and noble calling further perpetuates the notion that extreme personal sacrifices are inherent to the profession, and that enduring adverse working conditions is necessary to fulfill the role of a physician (53). Acknowledging vulnerability is often perceived as a sign of weakness or incompetence, and adhering to these standards creates tension between being a human being and being a physician (56). These professional norms and the stigma associated with violating them both impedes worklife balance and prevents physicians from speaking about problems that cause suffering, making it even more critical that approaches to mitigating burnout focus on broader cultural and institutional influences.

The exacerbating factor of gender inequity impacted burnout through the AoWs of fairness and workload, as women in surgery described being expected to complete more administrative and emotion work than their colleagues who are men. The balance between parental responsibilities and a demanding career was also outlined as a particularly challenging aspect of being a woman in surgery; even in parental situations in which the surgeon's partner is responsible for childcare, the assumption remains that women are the primary caretakers. The culmination of difficulties that women face in academic surgery has aptly been referred to as the "double-edged scalpel" (57). Surgery as a specialty has historically been dominated by men, and gender disparities continue to be prevalent in this field (58–60). Many of the challenges that these women encounter are difficult to characterize through traditional quantitative methods (57, 61); however, the biases described by women in this study, specifically those regarding pay inequities, parental norms and policies, increased administrative work, and referral biases, have received empirical support (43, 62–65). The hesitation that women in this study described to address issues of gender equity for fear of judgment has also been captured in relation to other issues regarding gender discrimination, such as instances of sexual harassment and assault (66). Despite these challenges, women in surgery have surgical outcomes that are equivalent or superior to those of their colleagues who are men (67, 68). However, this should not come as a justification for allowing such instances of injustice to persist; there is robust evidence linking issues of gender-equity to burnout, and adverse impacts on women's careers and wellbeing. It is critical that these inequities be addressed through policy reform at both a national and institutional level to affect widespread change.

A clear foundational issue that underlies the generated themes is the current fee-for-service pay structure that is prevalent across surgical specialties. The fee-for-service model contributes to incongruencies in fairness, workload, reward, values, and control, making it an obvious target of interventions to reduce burnout. As non-clinical work is compensated far less than clinical cases, surgeons in this study who are involved in service roles described feeling as though their work is unappreciated and these roles are ultimately not worth the effort they require. This payment plan also contributes to a culture in which time off is not prioritized or accessible, thereby exacerbating the effect of high workloads on surgeon wellbeing. While the fee-for-service model in direct relation to burnout has not been explored thoroughly, its connection to increased documentation and workload, as well as a loss of autonomy and has been established (69–71). For example, physicians and health system leaders have shared that receiving compensation for "desktop medicine" such as responding to messages and charting would improve their wellbeing, with progression to value-based, salaried payment plans being presented as a solution to burnout (71). It has also been argued that remuneration is the way institutions communicate their values to staff, and therefore, payment plans must be informed by the values and goals of the institution (72). Within this framework, the present study would suggest that research, education, administrative work, and physician well-being are not currently being communicated as valuable. Interestingly, many of the surgeons interviewed shared that they continue to be involved in non-clinical roles despite the lack of compensation. This suggests that surgeons receive intrinsic reward from their involvement in these positions, and presents the possibility that increasing the extrinsic reward (specifically, tangible compensation) associated with these roles could improve the sense of fulfillment and worth surgeons feel as a result of their non-clinical work.

Unique to this research was the use of a qualitative case study grounded in a framework designed specifically to evaluate organization risk factors for burnout. To our knowledge, this is the first qualitative study to employ the AoW model as a theoretical tool to identify potential issues leading to burnout in academic surgery. This study demonstrates how this model can be applied in a rigorous manner to identify "unit-level" issues that are critical in the formation of interventions for addressing burnout. Furthermore, our methodological choices highlight the promise of qualitative methods in gaining insight into the issues underlying the emergence of burnout and as a mechanism for soliciting direct feedback from those impacted by this issue. While some of our findings may apply more to our local

department than to others, we do not view this as an inherent limitation, but rather as an intentional methodological and theoretical choice. However, these results should be interpreted within the scope of the local context and in consideration of the unique characteristics of these surgeons; these results are reflective of the pressures faced by surgeons at a single academic medical center within the Ontario healthcare system. Future work will explore these potential contributors in more detail and strategies to address burnout within this institution.

Data availability statement

Datasets presented in this article are not readily available due to the highly identifiable nature of the content, and participants' requests to keep their data and experiences confidential. Questions about these datasets should be directed to KM, mcneillk@mcmaster.ca.

Ethics statement

The studies involving humans were approved by Hamilton Integrated Research Ethics Board. The studies were conducted in accordance with the local legislation and institutional requirements. The ethics committee/institutional review board waived the requirement of written informed consent for participation from the participants or the participants' legal guardians/next of kin because of COVID-19 restrictions for in-person research. Obtaining written consent was not feasible for the research team or participants. Instead, implied and verbal consent was obtained for the virtual survey and interviews, respectively.

Author contributions

KM: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Writing – original draft, Writing – review & editing. SV: Data curation, Formal analysis, Writing – original draft, Writing – review & editing. SC: Data curation, Formal analysis, Writing - review and editing. IY: Conceptualization, Funding acquisition, Supervision, Writing – original draft, Writing – review & editing. RS: Conceptualization, Funding acquisition, Supervision, Writing – original draft, Writing – review & editing.

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Conflict of interest

The 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.

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Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpubh.2024.1379280/full#supplementary-material

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General practitioners in front of COVID-19: Italy in European comparative perspective

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COVID-19 has highlighted strengths and weaknesses in healthcare systems all over the word. Despite the differences in primary care models in Europe, this study investigates the state-of-the-art of general practitioners (GPs) before the COVID-19 pandemic spread as a result of the reform process of the previous two decades. The GPs numbers over 100,000 inhabitants has been considered as a proxy of public health investment in GPs. Is the number of GPs increased or decreased in the last 20 years of reform processes in European countries? The main hypothesis is that European healthcare systems would have increased the number of GPs coherently with WHO recommendations. Comparative data on the number of GPs per 100,000 inhabitants in 21 European countries are investigated between 1995 and 2014 (the last available data). Data show that the number of family doctors over 100,000 inhabitants in European countries has increased over the last 20 years, except for Italy, where it has strongly reduced. Primary care has had a crucial role in managing the pandemic. Results of this study suggest that a country such as Italy, which has not invested in family doctors in the last two decades, would have been less equipped to manage the COVID-19 pandemic.

KEYWORDS

primary care, health care systems, death rate, health care performance, aging population, pandemic, mortality

Introduction

The COVID-19 pandemic spread throughout European countries at the beginning of 2020, and among them, Italy had some of the highest incidence of COVID-19 deaths (Statista, 2020). The pandemic has spread differently among European countries, even if comparative analysis presents limited data (ECDC, European Centre for Disease Prevention and Control An agency of the European Union, 2020). Healthcare service workers at all levels—primary care, hospital and community care, and highly specialized treatment facilities—have been protagonists in managing the pandemic within the wide coronophobia spread (Arora et al., 2020; Asmundson and Taylor, 2020; Lee et al., 2020). COVID-19 has been an enormous challenge for all healthcare systems, bringing to light several national healthcare system strengths and weaknesses (Legido-Quigley et al., 2020).

Primary care services (Greenhalgh et al., 2020) have played a key part in managing the pandemic at national and local levels (Ares-Blanco et al., 2023; Khalil-Khan and Khan, 2023), with general practitioners (GPs) being a frontline emergency profession (Adams and Walls, 2020), playing a key role of public leadership (Suar et al., 2023). Despite the differences in their role and function in Europe (Grielen et al., 2000; Glonti et al., 2015; Erlend et al., 2017;

Groenewegen et al., 2020), GP offer and organization are crucial aspects of healthcare systems in the context of the World Health Organization's (WHO's) policy frame (Gulliford, 2002; Rico et al., 2003).

The key role of primary care in healthcare systems, and therefore also of GPs, is even more crucial in the context of the aging population (Liotta, 2020). Moreover, GPs have been a paramount point of analysis for healthcare policy systems during the COVID-19 pandemic emergency, as confirmed by the message of the WONCA Executive Committee on World Family Doctor Day on 19 May 2020 (WONCA, 2020; OECD, 2021).

The importance of GPs in healthcare system organization is well-known (Gulliford, 2002). As patients' first and main point of entry into the healthcare system, GPs play a strategic role in assessing health needs, as well as in coordinating with other health services (Kringos et al., 2010). They also affect healthcare efficiency, which is a key profession in primary care (Starfield et al., 2005; Haggerty et al., 2013): "Strong primary care is associated with better population health and lower rate of unnecessary hospitalizations" (Kringos et al., 2013), considering the key role of GPs as gatekeeper to the rest of healthcare services (Glonti et al., 2015). Assessing primary care organization and performance has been the focus of a recent study presenting a literature review synthesis and the proposal of a theoretical and practical framework (Senn et al., 2021). Structural aspects, such as the number of GPs, nurses, social workers, and pharmacists, are fundamental aspects of such a framework because they are likely to have a significant impact on the performance of the healthcare systems (Hogg et al., 2008).

This study is not going to investigate the performance of healthcare systems in Europe, but it is focusing just on a preliminary analysis of structural data on GPs in a European comparative perspective, with specific attention to the Italian case study. The GPs numbers over 100,000 inhabitants (considered together to the degree of an aging population) has been considered as a proxy of public health investment in family doctors. Is the number of GP family doctors per 100.000 in. increased or decreased in the last 20 years of reform processes in European countries? The main hypothesis is that European healthcare systems would have increased their investments in GPs, increasing their number, coherently with WHO recommendations.

In recent years, several studies have highlighted the critical flaws and weaknesses of the Italian healthcare system (Ferré et al., 2014; Petmesidou et al., 2020; Giarelli, 2021; Neri, 2021). Specific analyses have also investigated and discussed personnel healthcare policy (Vicarelli and Pavolini, 2015; Pavolini et al., 2018). Although several analyses have addressed the effect of the reform process on the Italian national healthcare system, just a few have specifically dealt with the GPs sector's reform in Italy (Cipolla et al., 2006; Clemente et al., 2021; Genova et al., 2021).

GPs are the main protagonists of primary care in Italy due to the limited role of other health and social professionals, such as community nurses, pharmacists, and social workers, as highlighted in the recent primary care reforms passed in 2022 (Ingrosso, 2023; Mauro and Giancotti, 2023). Community/family nurses, in fact, have not yet been fully implemented in Italy (Del Vecchio et al., 2017), as well as specific healthcare services to manage the pandemic at the local level (USCA) (Corte dei Conti, 2020).

Due to the key role of GPs' activities in the Italian context (Ferré et al., 2014), this study intends to fill this gap by investigating GPs' structural data before the arrival of the pandemic in Italy from a European comparative perspective. Therefore, this study investigates the availability of GP services, in Italy, in terms of the number of GPs in the population, as the result of policy-reform processes in the last decades, in a European comparative perspective.

Methods

Data from a comparative perspective

This study provides a European comparative perspective of GP data by looking at the Health for All (HFA, European Health Information Gateway, 2022) database. The HFA database provides a dataset of GPs per 100,000 inhabitants for a large number of countries. The time series considered starts in 1995 and ends in 2014; unfortunately, the database did not gather data after this year. The limitations of this study are highly linked to the limitation of MMGs data; it is difficult to know why the HFA database has not been updated for 10 years. However, the comparison is made with several countries (22) and shows us the general trend in Europe and also the outlier countries that experienced an opposite trend of growth.[1] Moreover, we compensate the HFA holes, deepening the particular case of Italy, using MMGs data provided by ISTAT, which are updated until 2021. After showing the GPs number of these European countries, the study compares it to the COVID-19 mortality rate among the same countries, looking at the Worldometers database (the cutoff is set at 12/31/2021). Finally, this study compares the Italian number of GPs to the European average.

Results

Italian GPs from a comparative European perspective

The main piece of data of this study from the European comparative perspective is the number of GPs per 100,000 inhabitants for the 21 available European countries in 1995, 2005, and 2014 (Table 1). Despite the different roles that GPs might have in different healthcare systems (Groenewegen et al., 2014), analysis shows an increasing number of GPs in almost all European countries. A great variation among countries reflects differences in health systems (Wendt et al., 2009). The lowest values were found for Greece and Poland, with around the same relative number in 2005 (approximately 14 general practitioners per 100,000 inhabitants); for France and Belgium, the highest values were far more than 100 general practitioners per 100,000 inhabitants. The standard deviation is 33.99 in 2005 and 29.15 in 2015. This means that the number of general practitioners among countries may vary between +/−30 around the mean. This is a huge value considering that the mean of general practitioners per 100,000 inhabitants among European countries was 68.48 in 2005 and 74.64 in 2015. These data are also

1 There is no sufficient GP data about Croatia, Romania, Hungary, Slovakia, Latvia, Denmark, Finland, and Norway.

TABLE 1 GPs per 100,000 people.

Country	1995	2005	2014	% variation GP	% variation people over 65 years
Albania	60.11	52.9	55.86	−7.07	99.33
Austria	66.57	76.18	77.66	16.66	21.62
Belgium	–	118.38	111.88	−5.49	13.25
Bulgaria	–	67.6	62.84	−7.04	31.75
Croatia	–	–	57	–	36.05
Czech Rep.	69.45	72.53	–	–	33.16
Estonia		68.87	71.8	4.25	37.24
France	166.36	169.96	159.83	−3.93	21.45
Germany	66.38	66.61	66.87	0.74	35.44
Greece	–	14.31	39.15	173.58	32.73
Ireland	45.87	51.52	76.68	67.17	11.11
Italy	82.96	81.12	75.16	−9.4	29.31
Lithuania	38.47	67.24	89.14	131.71	50.58
Luxembourg	-	78.25	87.86	12.28	0.88
Netherlands	46.56	66.15	79.84	71.48	32.68
Poland	-	14.27	21.85	53.12	34.06
Portugal	40.21	46.48	58.99	46.7	34.52
Romania	–	–	–	–	39.65
Slovenia	–	38.18	51.5	34.89	43.54
Spain	–	71.92	75.4	4.84	20.94
Sweden	48.2	59.42	–	–	11.75
United Kingdom	–	72.31	80.02	10.66	14.34

Source: HFA.

associated (the last column of Table 1) with the percentage variation of people over 65 years to capture the evolution of the population structure over time.

The majority of European countries have increased the amount of GPs employed over the last 20 years. In France and Belgium, on the opposite, numbers slightly fell, but France remains the country with the highest rate of GPs employed (double in spite of the other countries). Among the other countries, the Netherlands exhibits the highest increment. Germany remained constant, and Greece had the lowest rate in Europe, but it constantly improved. Portugal exhibited a more constant trend of growth. Only Spain seems to be constant, but the gaps in the time series do not let us know its past trend.

Overall, the rate of GP growth relative to population has grown in the eastern countries over the last 20 years. A lot of them showed a period of stability close to a value of 70 between 2002 and 2010, then continued to increase. Among the others, Lithuania's trend stands out, becoming one of the highest values in Europe and the highest absolute value for the eastern countries. The lowest one is Poland, both for 1995 and 2014, even if its value has improved (tripled).

Ireland experienced slight growth until 2010. Then, GP reached the level of 75 in just 5 years. A more stable growth trend was observed for Sweden. The United Kingdom improved its value, then remained constant.

The GPs over 100,000 in. rate could have affected the final outcome of the Public Health systems in Europe during the stress test represented by the COVID-19 pandemic. A suggestion of this hypothesis comes from a scatter plot that compares the percentage variation in GPs over 100,000 in. to the number of people dead of/with COVID-19 in 2020 over population. In Figure 1 we observe that there is a negative correlation (well approximated by an exponential function with negative exponent) between these two variables. Countries which have increased, in the past decades, their GPs number, have meanwhile experienced a lower COVID-19 mortality rate, and vice versa.

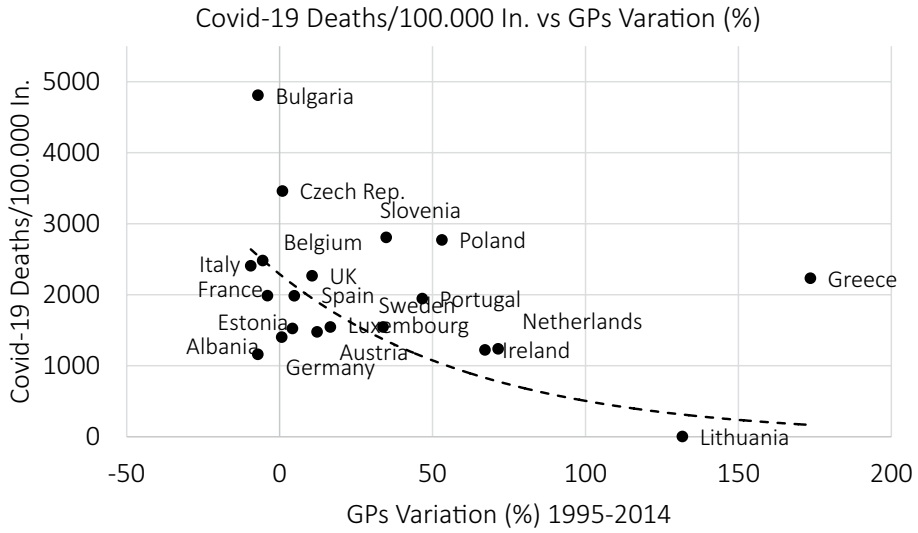

FIGURE 1
The percentage variation GPs per 100.000 in. vs. COVID-19 deaths. Source: HFA and Worldometers Database, authors' elaborations.

In contrast with the European trend, in Italy, we found a decreasing process (Figure 2): the number of GPs dropped from the second to the ninth in absolute value in Europe. The Italian case represents the worst one in Europe, in terms of growth trend. The loss of GPs has hit Italy stronger than in the other countries. Observations reveal a long-term trend of uninterrupted fall. This drop strongly contrasts with the European context. While nearly all 21 European countries observed have seen a growth in the number of GPs per 100,000 people over the last 20 years with only 2 exceptions, Italy has exhibited a permanent trend of worsening. This trend is even more relevant in the context of the aging population: the European average variation in the over-65 population is 27.9%, and in Italy, it is even higher (29.3%).

Moreover, ISTAT provides data about the number of MMG until 2021. The trend from 2014 up to 2021 is constantly decreasing: in 2014, there were 74.9 MMG over 100.000 in.; in 2021, the data were 68.1, passing from 45,203 doctors to 40,250.

Discussion

The COVID-19 pandemic has tested the healthcare systems in their capacity to face such relevant shock impacts, focusing on their resilience (Legido-Quigley et al., 2020). GPs have played the frontline of health leaders during the crisis period (Rebnord et al., 2023; Suar et al., 2023; Ares-Blanco et al., 2024), showing GPs services strengths and weaknesses (Greenhalgh et al., 2020; Burau et al., 2024).

This study has analyzed Italian GP policy results from a comparative European perspective in the last two decades using GP number as a proxy of the healthcare policy reform process in primary care. Considering the key role of GPs in healthcare systems (Starfield, 1994; Gulliford, 2002; Starfield et al., 2005; Kringos et al., 2010; Haggerty et al., 2013; Kringos et al., 2013), and despite differences in European healthcare systems (Wendt et al., 2009; Groenewegen et al., 2014), Italy has decreased its number of GPs by almost 10% during the last two decades. This has been an opposite trend compared with most European countries (increasing 6% in the EU average). These reversing healthcare reform trends must also be considered in the context of an increasingly aging population, which is higher in Italy (29.3%) than in the rest of the European countries (27.9%).

Italy had some of the highest incidence of COVID-19 deaths (Statista, 2020). This study suggests that Italy has weakened GP services in Italy from a European comparative perspective and that this might have affected its capacity to manage the pandemic emergency. Nevertheless, further studies will be necessary to investigate the impact of structural data, such as GP numbers, on healthcare system performance (Hogg et al., 2008; Kringos et al., 2013).

This study does not suggest a cause–effect relationship between GP availability and COVID-19 mortality; nonetheless, it proposes that in the European comparative perspective, Italy's lower investment in GP and primary care in the last decades might have reduced the Italian public healthcare system's capacity to respond to the COVID-19 pandemic, confirming that in Italy the pandemic has highlighted the unpreparedness of the health system to face the situation; because the reforms adopted over the last 30 years had reduced the public health system capacity (Mauro and Giancotti, 2021). Decades of tight fiscal policy have left the Italian healthcare system more vulnerable in coping with COVID-19 care: the GP policy reform process has left the Italian national healthcare system less equipped than the other EU countries to face the pandemic (Prante et al., 2020; Vicarelli and Giarelli, 2021).

In terms of policy recommendations for Italy, the reform process of the last two decades needs to be put at the center of political debate toward a reform process to increase the role of primary care in Italy as it has been at the moment put on the policy agenda (Vicarelli and Giarelli, 2021). The results of this analysis show the need to reconsider the reform process in Italy and the need to put GPs at the center of health policy reforms even more to manage any

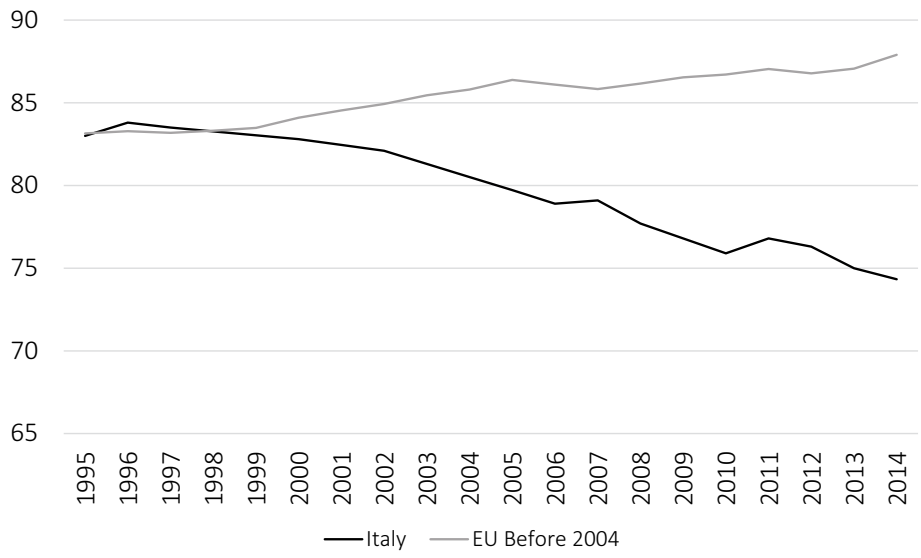

FIGURE 2
Trend in GP per 100,000 inhabitants in Italy and EU member state (before 2004) average. Source: HFA database, our elaboration (Permission required).

health emergency. The recent reforms highlight radical changes in the healthcare policy in Italy toward the introduction of new primary care services offered within the new "Community House" (in Italian: *Casa della Comunità*); nevertheless, its implementation path is presenting several challenges (Genova et al., 2023; Giarelli, 2023; Ingrosso, 2023; Mauro and Giancotti, 2023). The new "Community Houses" are going to be the space in which an innovative vision of primary care and GP roles are supposed to be redefined. This outlines a space of conflict within the GP community and GP unions, as well as in the relationships between GPs and other professionals such as community nurses and social workers. Preparedness for new sanitary dramatic events, such as a new pandemic, would need more in-depth analysis and meta reflexion on the process that has so radically reduced GP in Italy and on the potentiality and weakness in the implementation process of the "Communities Houses" (Genova et al., 2023). Nonetheless, GPs play a crucial role in the frontline of health leaders during the crisis period: GP recruitment and recognition of their key function must be put as a priority in policy agenda all over the world (Suar et al., 2023).

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

AG: Conceptualization, Writing – original draft, Writing – review & editing. SL: Data curation, Methodology, Writing – original draft, Writing – review & editing.

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Conflict of interest

The 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.

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Prevalence, consequences, and contributing factors beyond verbal and physical workplace violence against nurses in peripheral hospitals

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Background: Globally, nearly one-third of workplace violence (WPV) occurs in the health sector. Exposure to WPV among Jordanian nurses has been widely speculated to be underreported. Understanding of the factors contributing to WPV among nurses and their consequences is limited.

Objectives: This study aimed to examine the consequences and contributing factors of WPV and explore suggestions for reducing WPV among nurses working in peripheral hospitals.

Methods: This descriptive, cross-sectional study included 431 Jordanian nurses. Data were collected using a self-report instrument between December 2022 and June 2023. A modified version of the ILO/ICN/WHO/PSI Workplace Violence in the Health Sector Country Case Study Questionnaire developed and validated in 2003 was used.

Results: The ages of the participants ranged from 20 to 49 years. A total of 349 nurses (81%) had experienced verbal violence, while 110 (25.5%) had experienced physical violence. Of the 110 nurses who were physically attacked, 44 (40 %) reported that an investigation was conducted to determine the cause of the incident. Approximately 38.2% of incidents involving physical violence in the last 12 months involved the use of weapons. The current study revealed that 59.6% of the nurses reported that verbal incidents were common in their workplace. The highest level of agreement among all participants was leniency in applying penalties to perpetrators of violence inside hospitals. The majority of participants (95.8%) agreed that improving staff-patient communication skills would effectively reduce violence.

Conclusion: Creating awareness among healthcare professionals, patients, and the general public regarding the impact of WPV and the importance of respect and professionalism is crucial.

KEYWORDS

workplace, violence, nurses, incident, emergency room

Introduction

Workplace violence (WPV) is defined as "violent acts, including physical assaults and threats of assaults, directed toward persons at work or on duty" (1, 2). Violence can be divided into physical, sexual, psychological, and verbal categories based on the type of activity. It can also be separated based on the sources of violence: internal, which is carried out by the same organization's managers and workers, or external, which is carried out by others, such as clients and criminals (3, 4).

WPV in healthcare settings includes any statement or behavior that gives a worker a reasonable cause to believe they are threatened (3, 5). Nurses are three times more likely to be exposed to violence (6, 7). WPV prevalence among nurses was previously reported to be 43% in the United States (8), 44% in Japan (9), and 67% in Italy (10). The high rate of WPV could make the workplace unsafe and make nurses afraid of experiencing WPV in the future (11, 12). WPV against nurses is a significant global issue that has recently received more attention (13). Over 50% of registered nurses reported experiencing verbal abuse or bullying, while about 25% of them reported that a patient or family member had physically abused them (7, 14–18). In healthcare settings, violence often occurs in complex care environments such as intensive care units and emergency departments. These settings involve urgent and complex care, which can lead to conflicts and misunderstandings between healthcare teams and patients or their families (5, 19, 20). Conflicts may arise from differing views on medical decisions, creating tense emotional states and diverging expectations (14, 19, 21, 22).

According to several studies, violence in Jordanian hospitals negatively impacts healthcare services and personnel stability (23–25). The outcomes demonstrated a high prevalence of physical and verbal aggression toward healthcare providers in Amman's public sector hospitals (16, 26–28). The prevalence of WPV committed against nurses in hospital emergency departments revealed that 76% had experienced some form of violence, with verbal violence being approximately five times more common than physical violence (63.9% vs. 11.9%) (26). Patients committed 7.2% of the violations and visitors committed 3.1% (29, 30). In addition, most studies have discovered that workers who have experienced WPV have significant levels of anxiety, sadness, generalized fear, frustration, insomnia, and emotional issues, which can lead to more serious conditions such as post-traumatic stress disorder or burnout (9, 24, 31). Furthermore, WPV may lead to avoidance behavior, delay in effective communication, impaired peer relations, poor concentration at work, preventing patients from delivering safe and effective nursing care, failure to raise safety concerns, and seeking assistance/delayed care (6, 32–34). Furthermore, job dissatisfaction, increased staff turnover rates, and treatment or medications (35). Many studies have reported that physical WPV can have immediate negative effects including bites, bruises, lacerations, and hair loss (36). The consequences of violence on health organizations are also significant when considering absences due to work injuries or absenteeism, burnout, and decreased job satisfaction, all of which have a significant impact on work quality, budget, and costs (17, 37).

Previous literature has highlighted the worrisome rates of WPV and aggressiveness faced by nurses working in central hospitals compared to peripheral hospitals located outside the capital of Jordan. Peripheral hospitals in rural areas have certain socioeconomic, geographic, and infrastructural characteristics that differ from those in urban areas. They are characterized by lower population densities, agricultural economies, and less developed infrastructure than bustling, urbanized areas (38). While WPV has received significant attention in large central hospitals, the severity and consequences of violence in peripheral (rural) hospitals are frequently neglected or underestimated (39, 40).

Previous research has reported the relationship between WPV and healthcare workers' gender, occupation, practice environments, and work schedules (37, 41, 42). Factors contributing to violence include long wait times for patients, overcrowding in the emergency department, patient and family expectations of medical staff, lack of resources, lack of staff experience, lack of staff attitude, poor management/admission procedures, lack of rules and penalties, public ignorance, and the influence of drugs or alcohol are all possible factors (7, 8, 43–45).

Violence against nurses is still underreported (8, 15, 39, 44). The most common reasons for not reporting WPV were nurses' lack of knowledge about how and what types of violence to report, hospitals' preference for patients over nursing staff, and a lack of supervisory support after reporting (7, 25, 44, 46). A lack of a hospital reporting system could also be a contributing factor (6, 16, 47, 48). This study aimed to examine the consequences and contributing factors of WPV and explore suggestions for reducing WPV among nurses working in peripheral hospitals. Further, this study addresses the following research questions:

1. What are the consequences of WPV against nurses who work in peripheral hospitals?
2. What are the contributing factors beyond WPV among nurses who work in peripheral hospitals?
3. What are the suggestions for reducing WPV among nurses working in peripheral hospitals?

Methods

Design

Descriptive cross-sectional design. The study followed the EQUATOR Research Reporting Checklist and the STROBE Checklist for cross-sectional research.

Settings and sample

This study was conducted at six government hospitals in the peripheral regions of Jordan. A convenience sample of nurses was recruited. The inclusion criteria were nurses working in the emergency department/intensive care units/medical-surgical floors. Nurses in outpatient departments and those with administrative roles were excluded. A total of 700 questionnaires were distributed and 490 were returned (response rate = 70%). Fifty-nine questionnaires were excluded from the analysis because

they were incomplete as ≥50% of items were unfinished. The final sample consisted of 431 nurses.

Data collection procedure

Data were collected using a self-report instrument (from December 2022 to June 2023). The researcher interviewed the head of nursing department in the selected hospitals to know the estimated number of nurses in each hospital. While potential participants were on duty at the selected hospitals, the first researcher invited them after explaining the study, its aims, and its benefits. Interested participants were asked to sign a consent form and complete three questionnaires. The average time required to complete the questionnaires was 15 min. However, owing to the urgent nature and large workload in some departments, each potential participant was given 2 h to return the completed questionnaires. To visually represent how data were collected, processed, and analyzed in our study, a data management flow chart was included (Figure 1).

Outcome measure

A modified version of the questionnaire developed and validated by the ILO/ICN/WHO/PSI Workplace Violence in the Health Sector Country Case Study Questionnaire in 2003 was used to measure the participants' prevalence of WPV and its' contributing factors (49). Permission to administer the survey questionnaire was obtained from the ILO Publications Bureau. The original questionnaire was written in English and included five sections focusing on personal experiences, physical and psychological aspects, and participants' opinions. This study focused on verbal and physical WPV; thus, bullying/mobbing, harassment, and racial harassment were excluded from the questionnaire. Based on the purpose of the study and after necessary adjustments were made, the questionnaire consisted of three main sections: (1) Personal and workplace data (16 items), (2) Consequences of WPV (9 items), and (3) Opinions on WPV (contributing factors and suggestions to reduce WPV that the author originated from the items based on the literature review) (13 items). A pilot study was conducted with 10% of the sample size, involving participants selected from the nursing staff. However, these participants were later excluded from the final study. The pilot aimed to evaluate the clarity, suitability, and comprehensibility of the questionnaire. The questionnaire's reliability was assessed by measuring internal consistency, which revealed a high reliability coefficient with a Cronbach's alpha of 0.82.

Data analysis

SPSS version 28 was used to analyze the data (IBM, 2021). Data entered into SPSS after handling the missed data in six questionnaires (some items had missing data which were missing at random). Replacing the missing data occurred through imputation with a series mean ($n = 6$). Descriptive statistics were used to analyze the WPV and contributing factor results. For categorical variables, the number and percentage distributions by category were calculated.

Results

Demographic and work characteristics

The ages of the participants ranged from 20 to 49 years. More than half of the participants were females ($n = 237$) aged 20–29 years, married ($n = 236$), and had a bachelor's degree ($n = 301$), as shown in Table 1. Most participants (93.5%, $n = 403$) were staff members in their respective departments. Approximately 58.5% of the participants had <5 years of clinical experience ($n = 252$). Additionally, 361 participants (83.3 %) reported working with male or female patients in their respective units or departments. Furthermore, 57.3% dealt with patients in the adolescent-to-older adult age group. The highest percentage of participants ($n = 101$, 23.5%) worked in the emergency departments. Most nurses (84%) mentioned that the number of staff members in their units was between 1–5 at any given time.

Prevalence of verbal and physical WPV

A high percentage (81%) of the nurses reported experiencing verbal violence, while 25.5% reported experiencing physical violence. More than half of the nurses reported feeling worried about being attacked in the workplace (44.5%). Factors such as patient condition (23.1%) and the severity of the incident (19%) were the two most common factors affecting nurses' willingness to report a violent incident, assault, or threatening behavior. Additionally, most nurses declared the absence of a preventive program in their units or work areas (75.9%) (Table 1).

Consequences of WPV incidents in the last 12 months

Of the 110 physically attacked nurses, 44 (40 %) reported that an investigation was conducted to determine the cause of the incident. Most of the attacked workers did not sustain any injury (70.9%), whereas the rest suffered injuries (29.1%). Twenty-nine of the injured participants took time off work after being attacked (26.4%), and the majority of sick leaves after an attack lasted for less than a week (62.1%) (Table 2).

Approximately 38.2% of incidents involving physical violence in the last 12 months involved the use of weapons. The most commonly reported consequences for attackers were prosecution and verbal warnings (31% and 23.7%, respectively), while discontinuing care was the least common consequence. Many nurses did not report physical incidents to others because they felt it would not lead to any change (36.2%). Lack of importance and time were the least common reasons for not reporting physical violence (13% and 11.4%, respectively). Of those who had been physically attacked, 55.5% said that these incidents were routine occurrences in the workplace. Although 33.6% of physically attacked workers

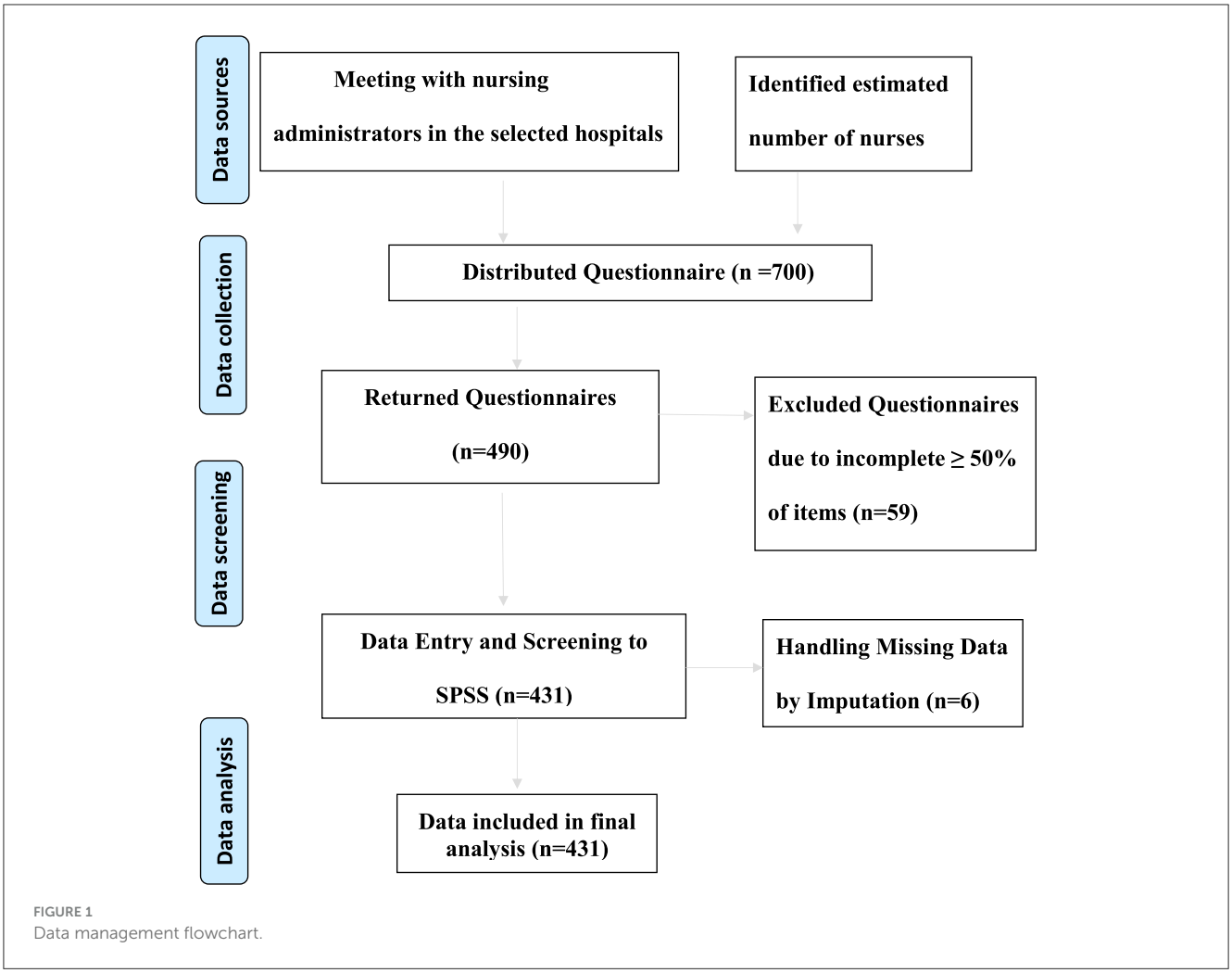

FIGURE 1
Data management flowchart.

were satisfied with how the incident was handled, 45.5% expressed dissatisfaction with the overall handling of the situation (Table 2).

The current study revealed that 59.6% of the nurses reported that verbal incidents were common in their workplace. The most common consequence for attackers after causing verbal violence was prosecution, with 37.7% of the incidents reported resulting in this action. Verbal warnings and reporting to the police were the next most common consequences, accounting for 24.7% of incidents. Discontinuing care is the least common consequence of these attacks (Table 2).

Approximately 50.4% of the participants stated that no action was taken to investigate the cause of verbal incidents or that they were unaware of any action being taken. More than half of those who were verbally attacked (53.8%) reported dissatisfaction with how the incident was handled (n = 188), whereas only 19.8% reported satisfaction. For a detailed overview of the consequences of verbal WPV (see Table 3).

Contributing factors beyond WPV

Table 4 shows the frequency of participants' responses regarding factors contributing to WPV. The highest level of agreement among all participants was leniency in applying penalties for violence perpetrators inside hospitals (n = 382, 88.6%). The second highest item was the failure to apply regulations and rules fairly in hospitals, with 84.5% of the participants agreeing (n = 364). Additionally, the majority of participants (83.8%) agreed that poor oversight and security in hospitals, as well as poor communication between healthcare providers and patients/families (82.6%), were contributing factors to WPV (n = 356). On the other hand, only 39.4% of the participants agreed that poor quality of care from staff toward patients was a contributing factor to violence in their hospitals. Furthermore, 68.2% of the participants agreed that tribal nepotism and tribal cultural control were contributing factors to WPV (Table 4).

Suggestions and strategies to reduce WPV

Table 5 displays the frequency of responses to suggestions and strategies for reducing WPV. The majority of participants (95.8%) agreed that improving staff-patient communication skills would effectively reduce violence, and 89.6% stated that enhancing their competence in diagnosing and treating patients while reducing wait

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TABLE 1 Demographical and work characteristics of the sample ($N = 431$).

Characteristic	*N* (%)
Gender	
Male	194 (45%)
Female	237 (55%)
Age group	
20–29 years	241 (55.9%)
30–39 years	154 (35.7%)
40–49 years	36 (8.4%)
Marital status	
Single	187 (43.4%)
Married	236 (54.8%)
Separate/Divorce	8 (1.9%)
Education level	
Diploma	96 (22.3%)
Bachelor	301 (69.8%)
Master	34 (7.9%)
Work experience	
<5 years	252 (58.5%)
5–10 years	99 (23%)
More than 10 years	80 (18.6%)
Number of staff in same unit	
Alone	36 (8.4%)
1–5 staffs	362 (84%)
More than 5 staffs	33 (7.6%)
Sex of patients in the unit	
Male or female	70 (16.2%)
Male and female	361 (83.3%)
Patients' age group in working area[a]	
Infant	210 (12%)
Newborn	210 (12%)
Child	326 (18.7%)
Adolescent	321 (18.4%)
Adult	352 (20.2%)
Older adult	324 (18.6%)
Professions	
Physicians	94 (21.8%)
Nurses & midwifes	247 (57.3%)
Professions allied to medicine	34 (7.9%)
Technical & administration staffs	56 (13%)
Current position	
Head of department	8 (1.9%)
Specialist & resident physicians	20 (4.6%)
Staffs member of department	403 (93.5%)
Working department	
Medical & surgical units	79 (18.3%)
Critical care units	40 (9.3%)
Emergency department	101 (23.5%)
Obstetrics& gynecology units	78 (18.1%)
Orthopedics, dialysis & operation units	38 (8.8%)
Pharmacy, dietitian, radiology& laboratory	95 (22%)
Working in different shifts	
Yes	392 (91%)
No	39 (9%)
Factors impact whether or not to report a violent incident, assault, or threatening behavior at work[a]	
The severity of the incident	129 (19%)
Which supervisor is on shift	96 (14.1%)
Whether or not co-workers are supportive	61 (9%)
The condition of the patient	157 (23.1%)
The reporting procedure is unclear	70 (10.3%)
The purpose of reporting is unclear	39 (5.7%)
Fear of retaliation	34 (5%)
Other	94 (13.8%)
Worrying level about violence in current workplace	
No worries	192 (44.5%)
Low - Moderate worries	72 (16.7%)
High - Extremely worries	167 (38.7%)
Does employer have successful program to prevent workplace violence?	
Yes	34 (7.9%)
No	327 (75.9%)
Not sure	70 (16.2%)
Physical violence experienced in the last 12 months	
Yes	110 (25.5%)
No	321 (74.5%)
Verbal violence experienced in the last 12 months	
Yes	349 (81%)
No	82 (19%)

times would also help minimize violence. Moreover, applying strict laws and regulations to prevent family members and relatives of patients from entering areas where staff care and diagnosis are taking place could also decrease the incidence of violence. However, only 15.1% believed that assigning clear roles and responsibilities to medical workers according to their job descriptions would

TABLE 2 Consequences of physical WPV incidents in the last 12 months ($N = 431$).

Consequences of physical violence	*N* (%)
Action taken to investigate the causes of the incident	
Yes	44 (40%)
No	37 (33.6%)
Don't know	29 (26.4%)
Injuries as a result of the physical violence	
Yes	32 (29.1%)
No	78 (70.9%)
Time taken off from work after being attacked	
Yes	29 (26.4%)
No	81 (73.6%)
Duration of time taken off from work after being attacked	
Less than one week	18 (62.1%)
1–4 weeks	7 (24.1%)
More than 4 weeks	4 (13.8%)
This incident attacked by using weapon	
Yes	42 (38.2%)
No	68 (61.8%)
This incident considered as routinely conducted in workplace	
Yes	61 (55.5%)
No	22 (20%)
Don't know	27 (24.5%)
Consequences for the attacker[a]	
None	33 (14%)
Verbal warning issued	56 (23.7%)
Care discontinued	27 (11.4%)
Reported to police	47 (19.9%)
Aggressor prosecuted	73 (31%)
Reasons for not reporting the incident[a]	
Not a target or witness of violence	64 (21.4%)
Not important to report	39 (13%)
Reporting never lead to change	96 (32.1%)
Not sure how to report	41 (13.7%)
No particular reason	25 (8.4%)
Didn't have a time	34 (11.4%)
Worker's satisfaction with the manner in which the physical incident was handled	
Very dissatisfied	28 (25.5%)
Dissatisfied	22 (20%)
Moderately satisfied	17(15.5%)
Satisfied	6 (5.4%)
Very satisfied	37 (33.6%)

[a]Each participant can provide more than one answer.

TABLE 3 Consequences of verbal workplace violence in the last 12 months ($N = 431$).

Consequences of verbal violence	*N* (%)
Action taken to investigate the causes of the incident	
Yes	173 (49.6%)
No	162 (46.4%)
Don't know	14 (4%)
Consequences for the attacker[a]	
None	58 (12.5%)
Verbal warning issued	114 (24.7%)
Care discontinued	2 (0.4%)
Reported to police	114 (24.7%)
Aggressor prosecuted	174 (37.7%)
This incident considered as routinely conducted in workplace	
Yes	208 (59.6%)
No	73 (21.2%)
Don't know	66 (19.2%)
Worker's satisfaction with the manner in which the incident was handled	
Very dissatisfied	116 (33.2%)
Dissatisfied	72 (20.6%)
Moderately satisfied	92 (26.4%)
Satisfied	13 (3.7%)
Very satisfied	56 (16.1%)

[a]Each participant can provide more than one answer.

be effective in reducing violence. Approximately 70% of the participants suggested that if hospitals conducted annual surveys to evaluate staff and patient satisfaction and improve reporting, statistics, and violence interventions, physical and verbal attacks in the workplace could be reduced.

Discussion

One of the main findings was that 44% of nurses who experienced physical violence reported that an investigation was conducted to determine the cause of violence. However, no action was taken against the perpetrators; instead, staff members were informed of the problem. This aligns with the contributing factors identified in the present study. Previous studies have shown that one-third of nurses believe that reporting incidents of violence will not lead to any change in the current situation (8, 14, 15). Inadequate assertive policies are believed to be responsible for this situation, as supported by the results of our study. The absence of clear policies and protocols to address this issue is one of the factors contributing to WPV against nurses in Jordan. Without proper guidelines and procedures, healthcare institutions face difficulties in preventing and managing violent incidents effectively. Comprehensive policies can provide a framework for prevention, reporting, and appropriate disciplinary actions (3, 43, 44).

TABLE 4 Contributing factors beyond exposure to workplace violence.

Contributing factors	Agreement	Uncertain	Disagreement
Poor communication between healthcare provider and patient/family	356 (82.6%)	37 (8.6%)	38 (8.8%)
Tribal nepotism and tribal culture control	294 (68.2%)	87 (20.2%)	50 (11.6%)
Failure to apply regulations and rules fairly in hospitals	364 (84.5%)	37 (8.6%)	30 (7%)
The leniency in the application of penalties against the perpetrators of violence inside the hospital.	382 (88.6%)	27 (6.3%)	22 (5.1%)
The feeling that violence is a means of achieving goals.	302 (83.3%)	55 (12.8%)	74 (17.2%)
Poor oversight and security in hospitals.	361 (83.8%)	29 (6.7%)	39 (9%)
Poor quality of care from staff	170 (39.4%)	109 (25.3%)	152 (35.3%)
Delay in investigations of incidents and issues related to violence in hospitals	319 (74%)	65 (15.1%)	47 (10.9%)
Favoritisms	333 (77.3%)	80 (18.6%)	18 (4.2%)
Shortage of staff	357 (82.8%)	32 (7.4%)	42 (9.7%)

TABLE 5 Suggestions and strategies to reduce workplace violence.

Suggestions and Strategies	Agreement	Uncertain	Dis-agreement
Improve staff-patient communication skills	413 (95.8%)	12(2.8%)	6 (1.4%)
Improve competence in diagnosis and treatment and shorten the waiting time	386(89.6%)	31 (7.2%)	14 (3.2%)
Patient screening (to record and be aware of previous aggression behaviors)	332(77%)	71 (16.5%)	28 (6.5%)
Hospital improvements in violence reporting, statistics, and interventions	300(69.6%)	81 (18.8%)	50 (11.6%)
Police officers stationed in the hospital	340(78.9%)	54 (12.5%)	37 (8.6%)
Develop annual surveys to evaluate staff and patient satisfactions	301(69.8%)	80 (18.6%)	50 (11.6%)
Strict laws and regulations to prevents families and relatives of patient to attain in the scene of staff–patient care and diagnostic areas	380 (88.2%)	26 (6%)	25 (5.8%)
Install cameras onwards, keep work areas bright by using lights at night	319 (74%)	52 (12.1%)	60 (13.9%)
Restricted entry of the public	361(83.9%)	41(9.5%)	29 (6.7%)
Enact workplace violence legislation	378 (87.7%)	51(11.8%)	2 (0.5%)
Develop violence prevention guidelines and plans	325 (75.4%)	67(15.5%)	39 (9%)
Correct perspective and reports by media, promote respect of medical workers	339 (78.7%)	71 (16.5%)	21 (4.9%)
Clear roles and responsibilities for medical workers committed to job descriptions	322 (74.7%)	44 (10.2%)	65 (15.1%)

Another significant finding of the current study was that more than half of the participants considered physical violence to be a routine incident in the workplace. This suggests that there are few policies or actions aimed at reducing WPV (18, 28). Poor management or admission procedures, a lack of rules and penalties, and other factors can contribute to violence becoming a routine occurrence (43). In addition, the current study showed that male workers were more exposed to violence than female workers. This can be attributed to certain cultures that teach males to believe that they are socially superior to women and that impulsive actions are necessary to be considered a "true man." (50). These ideas of masculinity may contribute to male nurses' increased exposure to violence. Gender dynamics also play a role in WPV against nurses in Jordan. Female nurses may face a higher risk of violence because of gender-based discrimination and stereotypes (51). A multifaceted approach is required to address this issue. Empowering female nurses, promoting gender equality in the workplace, and fostering a supportive environment that values diversity and inclusivity are some measures to tackle WPV against nurses (21, 44).

Studies have supported the idea that WPV can have physical, verbal, and other negative consequences. This can also result in many factors contributing to violence and various suggestions for limiting it. WPV can cause delays in effective communication, impaired peer relations, poor concentration at work, and prevent nurses from providing safe and effective care to patients (17, 24, 32). It can also lead to failure to raise safety concerns and seek assistance, resulting in delayed care (52). Another significant finding was that most participants did not take time off work after being attacked. However, exposure to violence can lead to job dissatisfaction, increased staff turnover/attrition rate, and errors in treatments or medications (15, 33, 37, 53). Workplaces can be challenging environments for workers, particularly when they are overloaded and lack knowledge about handling and reporting violence. Inadequate staffing levels and heavy workloads put a lot of pressure on nurses, which can create an environment that is

conducive to WPV (33, 37, 53). When nurses are overburdened, stressed, and unable to meet patient needs adequately, tensions can rise and frustration can escalate, leading to violent outbursts. To mitigate WPV, it is important to address staffing issues and ensure that workloads are manageable.

Approximately 31% of the respondents reported that verbal warnings were issued as a consequence of the attacker, which may have led to recurrent violent behavior. Another 23.7% of participants reported that the aggressor was prosecuted. Poor management and leadership practices can contribute to WPV among nurses in Jordanian hospitals. This can manifest in various forms such as lack of support and communication, failure to address and respond to incidents of violence, and a hierarchical culture that does not prioritize nurses' wellbeing (13, 25, 54). Hospital management must foster a supportive and inclusive work culture, provide adequate resources and training for managers, and ensure that nurses have channels to report incidents of violence without fear of retribution (55). In some Jordanian hospitals, a culture of violence and acceptance of aggression exists, which contributes to WPV against nurses (27, 42, 56). This culture can stem from various factors, such as a lack of consequences for aggressive behavior, normalization of verbal or physical abuse, and a hierarchical structure that perpetuates power imbalances (27). Addressing this issue requires collective effort, including strict enforcement of policies against WPV and the promotion of a culture of respect and professionalism (24).

It has been reported that verbal violence is as common as physical violence in Arab countries (57). However, many people who experience verbal violence do not report it because of fear of negative consequences or inadequate reporting procedures. In addition, health care providers, especially female ones, may not know how to handle or defuse violent situations (12). This can be influenced by cultural norms that undermine the authority and professionalism of nurses, leading to disrespectful behavior and aggression (27). To address this issue, awareness must be raised and nursing as a critical profession in healthcare must be promoted to challenge negative perceptions and foster a culture of appreciation and respect.

The findings reveal that the main contributing factor to WPV in hospitals, beyond exposure, is leniency in the application of penalties against perpetrators of violence inside the hospital. This is consistent with the results of previous studies (15, 27, 39, 42, 44). Therefore, it is essential to implement assertive policies and rules in hospitals to protect health care providers and enable them to provide care while feeling safe. Another important contributing factor is the failure to fairly apply regulations and rules in hospitals, which affects care delivery and contradicts human rights. Poor oversight and security in hospitals can worsen violence, which was reported by 83.8% of participants and is consistent with other studies (11, 27). Inadequate security measures and infrastructure in Jordanian hospitals can make nurses vulnerable to WPV. These include limited security personnel, insufficient surveillance systems, and poorly designed facilities that do not prioritize the safety of healthcare workers. Improving security measures, increasing the presence of security personnel, and investing in proper infrastructure are essential steps toward creating a safer work environment for nurses.

We summarize our main findings on effectively reducing violence against nurses in peripheral healthcare settings by examining the major strategies and recommendations suggested by the participants. 95.8 of the respondents, 95.8% stated that improving staff-patient communication skills is crucial. This can be interpreted as nurses being unable to understand and respond effectively to patients' needs. Miscommunication between care providers (nurses) and care seekers (patients and their families) can often lead to angry reactions from patients and their escorts (15, 27, 42, 58). Improving communication skills reduces verbal and physical violence (46). A total of 89.6% of participants recommended improving their competencies in diagnosis and treatment to reduce waiting times. Previous research has found that patients' and family members' anger can stem from a lack of competence during treatment (55). Of the respondents, 88.2% suggested introducing strict laws and regulations to prevent relatives from interfering in staff-patient care and restricting public entry to minimize the impact of violence. Most nurses (83.9%) suggested that effective communication and teamwork are crucial for creating a safe and supportive work environment. However, communication breakdowns and lack of teamwork can contribute to WPV. Poor communication among staff members, between healthcare professionals and patients, or inadequate conflict resolution skills can escalate tensions and increase the likelihood of violence (33, 59). Encouraging open dialogue, fostering respectful communication, and promoting teamwork are essential for minimizing WPV in Jordanian hospitals.

Nurses require effective coping strategies and support systems to deal with WPV. These include training programs equipping nurses with de-escalation techniques, self-defense training, and mental health support services (33). The Occupational Health and Safety Act (2019) highlights the pivotal role of occupational health services in mitigating verbal and physical violence against nurses. In countries like Jordan, where peripheral hospitals often face resource shortages, understaffing, and heavy patient loads, the risk of workplace violence is elevated (28, 56). To address these challenges, occupational health services offer targeted training for nurses in areas such as de-escalation, stress management, and conflict resolution, which are critical in resource-constrained environments (60). Furthermore, occupational health programs can advocate for improved staffing, structured breaks, and mental health support through counseling services (61, 62). Thus, creating a supportive work environment that encourages open communication, provides access to counseling services, and promotes peer support can also help nurses navigate the emotional and psychological impact of WPV (63, 64).

In Jordan, several studies have also underscored the importance of integrating preventive strategies and education to enhance occupational health and safety for healthcare workers. Ashour and Hassan recommend incorporating safety training and collaboration as integral components of safety management across different organizational environments (65). Similarly, Al-Natour et al., discuss strategies employed by nurses to manage workplace violence but note that these strategies lack specific education or training components (27). Rababah further emphasizes the need for adopting occupational health and safety standards in various sectors, aiming for comprehensive quality benchmarks that ensure

the highest safety levels (66). Through regular risk assessments and preventive health screenings, occupational health services foster safer working conditions, even in under-resourced settings, and promote a culture of safety and wellbeing, ultimately reducing workplace violence and ensuring nurses feel protected in their roles (67, 68).

Limitations

However, this study has some limitations, such as the use of a self-reported questionnaire that could be subject to self-reporting bias, recall bias, or underreporting of incidents. Additionally, this study focused on peripheral (rural) hospitals, which may not fully represent the situation in other hospitals. Additionally, the study examined verbal and physical WPV, while items for bullying, mobbing, harassment, and racial harassment were excluded, which could be related to an inadequate capture of the full scope of the problem. Acknowledging these limitations is vital for maintaining the credibility of the study and providing a clear understanding of its scope.

Implications

To address WPV in Jordanian hospitals, it is crucial to implement appropriate policies and preventive measures. This includes developing and enforcing clear policies against WPV, providing regular training sessions on violence prevention for all healthcare staff, and establishing reporting mechanisms that ensure the anonymity and safety of reporting incidents. In addition, hospitals should collaborate with law enforcement agencies to ensure swift responses to violence.

Education and training are essential to address WPV. Creating awareness among healthcare professionals, patients, and the general public about the impact of WPV and the importance of respect and professionalism is crucial. Training programs should be designed to teach nurses effective communication and de-escalation techniques, and how to report and document incidents of violence. By investing in education and training, hospitals can create safer and more supportive environments for nurses.

Conclusions

WPV against nurses in Jordanian hospitals is a serious issue that affects not only the wellbeing of nurses, but also the quality of patient care. This study highlights the various consequences and contributing factors to WPV, emphasizing the need for immediate action and intervention. To create a safe, respectful, and supportive environment for nurses, comprehensive policies must be implemented, organizational practices improved, and sociocultural norms addressed. It is important for all stakeholders, including healthcare institutions, policymakers, and society, to prioritize the safety and wellbeing of nurses. This ensures that they continue to provide high-quality care without fear of violence or aggression. Mitigating WPV against nurses requires a comprehensive, multifaceted approach. This approach should include the implementation of policies and protocols aimed at preventing incidents, improving security measures and infrastructure, providing training and education on violence prevention and de-escalation techniques, promoting a supportive organizational culture, and addressing sociocultural factors that contribute to violence. By collectively addressing these factors, we can create safer and more respectful working environments for nurses in Jordanian hospitals.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving humans were approved by the Jordanian Al-Zaytoonah University gave the approval for the study. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

MAln: Writing – original draft, Writing – review & editing. KH: Writing – original draft, Writing – review & editing. MAlz: Writing – original draft, Writing – review & editing. YS: Writing – original draft, Writing – review & editing. KA-M: Writing – original draft, Writing – review & editing. AS: Writing – original draft, Writing – review & editing. SF: Writing – original draft, Writing – review & editing.

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Conflict of interest

The 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.

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"They seemed to forget about us little people": the lived experiences of personal care attendants during the COVID-19 pandemic

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Background: Personal care attendants (PCAs) provided essential care and support to home care clients during the COVID-19 pandemic and thus were a vital part of the pandemic response in helping to keep older adults and individuals with disabilities out of nursing homes. Furthermore, they are one of the largest and fastest growing workforces in the United States. Yet this essential workforce received little attention during the pandemic. Guided by feminist theories on caregiving and the principles of community-based participatory research, this study examined the experiences of PCAs during the COVID-19 pandemic.

Methods: Data from 78 in-depth interview participants representing Medicaid-Funded Home and Community-Based Services (HCBS) PCAs, clients, family caregivers, and service providers in Kansas, United States, as well as additional data from 176 PCA survey participants were analyzed. Findings from this interactive, convergent, mixed-methods study were integrated by theme using the weaving approach.

Results: Four major themes emerged from the analysis: (1) PCAs remained in this field during the pandemic out of a commitment to their clients; (2) PCAs were undervalued and invisible as an essential workforce; (3) direct care work had an emotional toll on PCAs during the pandemic; and (4) PCAs have mixed feelings about their satisfaction with the job, and, as good workers quit, they were difficult to replace.

Discussion: PCAs held professional-level responsibilities without the recognition or pay of a professional. The pandemic had mixed impacts on job stress and satisfaction, suggesting that the intrinsic rewards of the job and social support had a protective impact. However, intrinsic rewards are not enough to retain this workforce, and the growing PCA workforce shortage leaves many clients having to choose between no care and poor care. Our findings indicate that institutions and systems must better support and recognize this essential workforce to build and maintain a quality in-home care services system.

KEYWORDS

COVID-19, personal care attendants, long term services and supports, home and community based services, mixed methods, Medicaid

Introduction

Personal care attendants (PCAs) provide essential hands-on support to older adults and people with disabilities in their homes by helping with tasks such as cooking, bathing, housekeeping, and shopping. In addition to providing support for activities of daily living, PCAs are also a source of emotional support for the clients they serve (Franzosa et al., 2019). These vital supports allow people with disabilities to continue living in the community and maintain their independence (Spillman, 2016), which was of critical importance during the COVID-19 pandemic as institutions became significant focal points for transmitting the virus. PCAs are now the largest workforce in the United States and one of the fastest growing occupations (PHI, 2023; Van Dam, 2024); however, they are also relatively invisible as an unlicensed workforce that works behind closed doors in private home settings. The purpose of this article is to explore PCA experiences in providing essential care during the pandemic, utilizing mixed-method interview and survey data from a broader study on the Medicaid Home and Community-Based Services (HCBS) system response to the COVID-19 pandemic in Kansas, United States.

Context and background

Key stakeholders and terminology in the HCBS system

Our study focuses on PCAs who provided Medicaid-funded HCBS personal care services during the pandemic in Kansas. Other stakeholders include clients, family caregivers, and providers. HCBS is the program that provides long-term services and supports (LTSS) in home and community settings as an alternative to institutional care. This is a complex system involving many stakeholders and industry-specific terminology; therefore, we detail the key players and terms here.

Adult HCBS waiver programs in Kansas include the Frail Elderly, Physically Disabled, Brain Injury, and Intellectual and Developmental Disability programs. We refer to those who receive these HCBS services as clients. In Kansas, HCBS clients can choose agency-based or self-directed care for their personal attendant care. In the traditional agency-based model, clients sign up with a home care agency who hires and manages the PCAs going into client homes. The home care agency is the PCA's employer in this model. In the self-directed model, clients can hire, fire, and manage their own workers. They sign up with a financial management service provider to manage PCA payroll. Financial management service providers also provide information and assistance to HCBS clients in carrying out their employer role but are not the employer. We also included other community-based providers who help support the delivery of HCBS by providing services such assisting clients with service applications and referrals or supporting providers. We use the term provider to refer to home care agency, financial management services, and other community providers at the organizational level and distinguish provider type when relevant.

There is little consistency in job titles for the direct support workforce that provides hands-on LTSS care. Direct support workers who specifically work in home care settings may be referred to as caregivers, home health aides, home care aides, direct support professionals, or personal care aides/attendants. Among these titles, only home health aides and personal care aides have a U.S. Bureau of Labor Statistics Occupational Code. We have chosen to use the personal care attendant (PCA) title because it more clearly delineates a non-certified worker who provides care in private homes, although the participants in our study used all of these different job titles. HCBS clients in the self-directed program can hire friends and family as their PCAs, so when relevant, we demarcate paid family caregivers as related PCAs. Unpaid family caregivers also provide valuable support to HCBS clients, sometimes managing and overseeing their paid care, and were included in our study. We refer to them as family caregivers. Pay is often the only thing that differentiates the roles and responsibilities of a paid vs. unpaid family caregiver, but since paid family caregivers are officially workers within the HCBS system, we call them PCAs.

Medicaid is privatized in Kansas, in which three for-profit managed care organizations administer the program. Managed care organization care coordinators develop care plans and authorize services for HCBS clients, including setting the approved PCA tasks and hours. Managed care organization representatives, including care coordinators, were not included as subjects in our study; however, they were frequently referenced by our study participants.

Medicaid HCBS and COVID-19 policy in the United States and Kansas

It is important to understand the policy context that shapes the wages, benefits, and job conditions for the PCA workforce. The United States is known for high rates of inequality, limited labor protections, and meager social benefits compared to other advanced industrial nations. Medicaid, the means-tested insurance program for low-income individuals, is the primary payer of LTSS in the U.S (Chidambaram, 2022). Medicaid is funded and administered through a state–public partnership, which results in wide variation across states in how these programs are operated. In Kansas, the state legislature sets the reimbursement rates that drive wages for the direct support workforce.

Turning to benefits, the Affordable Care Act was intended to provide universal healthcare coverage to Americans through a combination of private and public healthcare coverage. A key component of the Affordable Care Act was that Medicaid would be expanded to include more low-income Americans, and then, government subsidies were allotted to help cover the cost of private health insurance through the Affordable Care Act Marketplace for those with moderate-level incomes who do not qualify for Medicaid. However, the U.S. Supreme Court ruled that states could not be required to expand Medicaid (MACPAC, 2022). This resulted in a healthcare coverage gap for non-expansion states for those who earn too much to qualify for Medicaid but not enough to qualify for Affordable Care Act Marketplace subsidies. Kansas is one of 10 states that has still not expanded Medicaid (KFF, 2024). As a low wage workforce, PCAs often fall in this coverage gap (PHI, 2023). Of additional importance for understanding the conditions of this occupation, there is no guaranteed paid leave in the United States, with only 39% of the lowest-wage workers having access to paid sick leave (Gould and Wething, 2023).

The United States federal government invested more than $5 trillion into the COVID-19 pandemic response (Parlapiano et al., 2022). The initial federal financial aid package was the Coronavirus Aid, Relief, and Economic Security Act of 2020, designed to support worker safety and stabilize the economy. Nursing homes received direct Coronavirus Aid, Relief, and Economic Security Act funding to support their workforce, but HCBS providers had to apply for these funds (Wendel et al., 2023). The next federal financial aid package was the American Rescue Plan Act of 2021, which included funds allocated to states for their HCBS programs. States had a lot of latitude in how to use these funds within federal guidelines and oversight. Kansas received an estimated $102 million in American Rescue Plan Act funding, of which over $50 million was distributed to the HCBS PCAs in the form of bonuses (Heydon, 2023). This was designed as a one-time bonus since prolonged wage increases would require a long-term commitment from the state legislature.

Background theory and literature

Feminist theories on caregiving have highlighted the essential nature of care work and reproductive labor for the health, wellbeing, and survival of human society, while exploring the myriads of ways this essential labor has been devalued and exploited (e.g., Tronto and Fischer, 1990; Glenn, 2010; Tronto, 2013; Fraser, 2016; Folbre, 2024). Historically, Western society has deemed domestic labor in the private sphere as inferior to the paid labor performed within the male-dominated, public marketplace (Engels, 1884; Glenn, 1992; Tronto, 2013; Tong and Botts, 2017). Caregiving, whether paid or unpaid, is devalued and made invisible because it takes place within the household (Engels, 1884; Glenn, 1992; Tronto, 2013; Tong and Botts, 2017; Bandini et al., 2021). Traditional market-based economic measures fail to capture the true value of care work, which is undervalued as unpaid or underpaid labor. The economy relies on care work being free or cheap to sustain the workforce while minimizing labor costs, enabling greater profitability and economic productivity by exploiting the essential role of caregiving (Tronto, 2013; Fraser, 2016; Folbre, 2024).

Care work is also devalued by false assumptions that it is unskilled labor that comes naturally to women, but as Tronto and Fischer, (1990) illustrate, naturalistic assumptions about caring overlook that fact that quality care requires time, material resources, knowledge, and skill to carry out. Non-family caregiving performed by domestic laborers also has deep roots in slavery and indentured servitude (Glenn, 1992) magnifying the forced and exploitative nature of care work. The consequences of this history are evident in the demographics of both paid and unpaid caregiving for those with LTSS needs today. Women, particularly women of color and immigrant women, are overrepresented in unpaid and paid care-related work globally, including the United States' PCA workforce which is 87% female (PHI, 2021). This reflects the "dual devaluation of caring," discussed by Glenn (2010), in which society assigns caregiving to our most disadvantaged and powerless citizens because we do not value care, and, in turn, care work is reinforced as unskilled resulting in a cycle in which caring and caregivers are simultaneously devalued.

This devaluing of care is evidenced by the low wages and lack of benefits for formal caregivers (Blum and Mathis, 2021; Scales, 2021). In 2021, the median annual income for PCAs providing in-home care in the United States was approximately $18,100 (PHI, 2021). The median annual income for PCAs in Kansas is notably lower than the national average at $16,131 (PHI, 2023). For many people, this means they fall below the federal poverty level (FPL). For example, in the United States, 25% of PCAs have incomes less than 138% of the FPL and 28% of PCAs in Kansas have incomes below 138% of the FPL (PHI, 2023).

The undervaluing of care in our economic and social structures leads to secondary dependency in which caregivers become economically dependent on primary breadwinners or the state (Kittay, 1999; Glenn, 2010; Tronto, 2013). This is true of the many PCAs who struggle to support themselves financially; 53% of direct support workers rely on public assistance, such as food assistance, to afford necessities (PHI, 2021). Forty-six percent of PCAs in Kansas receive some form of public assistance (PHI, 2023). In the US, an average of 37% of the PCA workforce receives insurance through their employers, and 43% report Medicaid or Medicare as their primary form of health insurance coverage (PHI, 2021). Approximately 17% of the national PCA workforce was uninsured (PHI, 2021). In Kansas, 33% of PCAs rely on Medicaid or Medicare for health insurance coverage, while 25% are uninsured (PHI, 2023). Due to low wages, it is common for PCAs to have additional jobs. An estimated 6.41% of personal care aides hold second jobs; these estimates are approximately 35% higher than workers in other occupations (Baughman et al., 2022).

Reflecting the complex nature of care work, work-related stress is common among PCAs (Gray-Stanley and Muramatsu, 2011; Bandini et al., 2021; Maffett et al., 2022; Janssen and Abbott, 2023). Heavy workloads, abusive behaviors from clients and clients' families (Maffett et al., 2022), and lack of job autonomy contribute to stress and exhaustion that can lead to burnout (Gray-Stanley and Muramatsu, 2011; Bandini et al., 2021). Existing research indicates that work stress is positively associated with burnout (Gray-Stanley and Muramatsu, 2011). Access to resources, such as social support, has been shown to moderate the relationship between work-related stress and burnout; similarly, locus of control or being involved in care-related decision-making also moderates the relationship between work-related stress and PCA burnout and decreases overall job dissatisfaction (Gray-Stanley and Muramatsu, 2011; Kusmaul et al., 2020). PCAs have also reported that increased wages, benefits, and training opportunities would lower work-related stress and burnout (Janssen and Abbott, 2023; Karmacharya et al., 2023).

The COVID-19 pandemic exacerbated many of the ongoing challenges experienced by the PCA workforce as demand for this underpaid and undervalued workforce grew (Blum and Mathis, 2021; Scales, 2021; Kreider and Werner, 2023). During the COVID-19 pandemic, PCAs served people with disabilities and older adults who were at-risk populations while oftentimes being at-risk of serious illness themselves (Almeida et al., 2020; Sama et al., 2021). Since PCAs were not consistently classified as "essential workers," many PCAs reported not being able to access necessary personal protective equipment, COVID-19 testing, and vaccines (Bandini et al., 2021; Sama et al., 2021; Tyler et al., 2021; Wendel et al., 2023). As a result of these working conditions, some PCAs left the workforce, which exacerbated existing worker shortages (Blum and Mathis, 2021; Frogner and Dill, 2022), while others kept working throughout the pandemic due to financial constraints and a sense of duty to their clients (Blum and Mathis, 2021). PCAs are now one of the largest and fastest growing workforces in the United States (Van Dam, 2024) but

still falling far short of meeting the growing demand for home care services (Scales, 2021). Ultimately, feminist theorists attribute the caregiver crisis to the exploitation of caregivers and failure to value care in our capitalist society (e.g., Tronto, 2013; Fraser, 2016).

Methods

Data for this study are drawn from 78 in-depth interview participants across stakeholder groups (related PCAs $n = 12$; non-related PCAs $n = 14$; unpaid family caregivers $n = 5$; clients $n = 27$; providers $n = 21$) and survey data from 176 PCAs. These data come from a larger mixed-methods study that used in-depth interviews and surveys with HCBS clients, PCAs, family caregivers, and service providers to explore how the HCBS system in Kansas responded to the challenges of the COVID-19 pandemic. An interactive, convergent mixed-methods design was adopted. This process involved concurrent qualitative and quantitative data collection and analysis with independent interview and survey samples that iteratively informed subsequent data collection (Fetters et al., 2013). Data collection occurred between May 2021 and June 2023.

Guided by feminist theories on caregiving and the principles of community-based participatory research, all data collection tools (surveys and semi-structured interview guides) were developed with the input of a Stakeholder Advisory Board (SAB). The SAB included PCA, caregiver, client, provider, and advocate representatives and advised on all aspects of the project from research questions and data collection tools to policy implications and dissemination. This ensured research questions, methodologies, and interpretations were responsive to community needs and perspectives. Several members of the research team had relevant lived experience, either as family caregivers or prior work experience as PCAs, providing a deeply nuanced understanding of the challenges and complexities of caregiving and sensitizing them to potential research challenges such as confidentiality and privacy concerns, power dynamics, and participant vulnerabilities. The PI also drew on her prior applied research and advocacy in the HCBS system in developing the study. The diversity of experiences, perspectives, and training of the research team and the SAB provided collaborative reflexivity throughout the research process by challenging individual assumptions and revealing potential blind spots in research design and interpretation (Olmos-Vega et al., 2023). Regular research team and SAB meetings provided structured opportunities to discuss potential ethical challenges, engage in collective interpersonal, methodological, and contextual reflexivity, and were a mechanism for continuous feedback and collaborative knowledge production.

We drew on existing community connections to recruit SAB members and gatekeepers to recruit participants but also identified new partners to help fill key gaps in our community engaged design. The SAB was first convened during the proposal development stage and shared their experience from the field to help refine research questions and methodology. Initial drafts of interview guides and surveys were crafted based on the literature and expertise of the research team and then shared with SAB for further refinement. The semi-structured interview guides were adapted over time in response to initial results as well as reports from the field brought to the table by SAB members on service delivery or pandemic developments that warranted further investigation. They also advised on areas where research data could help guide policy and practice. Interviews were launched prior to the surveys, and therefore, early results also informed final revisions to the survey tools. SAB members with cognitive impairments conducted plain language review and editing of survey questions, as well as the informed consent statement. Survey questions were also tested using cognitive interviews (Beatty and Willis, 2007), in which participants were asked to verbalize their thought processes while completing the survey and respond to probing questions by a member of the research team to ensure survey questions were understood and accurately captured the intended information. Preliminary and emergent findings were discussed with the SAB providing member checking and additional contextual reflexivity (Olmos-Vega et al., 2023).

All recruitment materials were prepared in both English and Spanish, with translators available to assist Spanish speakers with interviews or surveys. Community partners were instrumental in facilitating recruitment of interview participants, along with snowball sampling and social media. Interview and survey participants were recruited independently, and selection into one sample had no influence on selection into the other. Five interview participants had previous professional encounters with a member of the research team (four providers and one PCA), and one PCA participant who had a closer professional relationship to one member of the team was interviewed by a different team member. Interviews were conducted via zoom or by phone, lasted approximately 90 min on average, and were recorded and transcribed verbatim and then deidentified. Turning to surveys, except for six PCA survey respondents recruited through social media, recruitment of PCAs for the quantitative sample was through home care agencies and financial management service providers who were willing to distribute recruitment materials to all PCAs in their organization and act as gatekeepers for recruitment in specific geographic areas. Survey data were collected using Qualtrics and analyzed using StataMP 17.

All study procedures were approved by the University of Kansas Human Subjects Protection Program (Study #:00146397), and additional care was taken to safeguard the wellbeing of research subjects. Study participants were compensated for their time. Interviews and surveys were confidential and conducted with informed consent; survey participants indicated agreement to an informed consent statement via a checkbox rather than a signature to allow surveys to be completed anonymously, and interview participants provided informed consent verbally prior to starting the audio-recording. Some interview participants requested confirmation that their interview was confidential before sharing critical or sensitive information, indicating heightened distrust of the system. Therefore, the research team took special care to de-identify the data. In addition to removing names and locations, other contextual details that could potentially identify the person to someone known to them were removed. Participants were free to withdraw from the study at any time and did not have to respond to any questions they did not feel comfortable answering. Finally, interviewers provided research participants with informational resources as appropriate, for example, where to find free personal protective equipment or COVID vaccines or shared HCBS policy or contact information to those with service-related concerns they wanted to address. The research team also had a protocol in place for responding to any abuse or serious mental health concerns that may be revealed during interviews, although this

circumstance did not occur. Many participants expressed appreciation for the study and being able to voice their concerns candidly and confidentially.

Interview and open-ended survey data were analyzed by the authors using iterative, consensus-based inductive coding (Cascio et al., 2019). First-level coding was completed separately by four members of the research team. Authors discussed initial codes and any discrepancies were resolved through discussions of the data. New codes and emerging themes were regularly discussed at team meetings. Approximately one in three interviews were double-coded to strengthen intercoder consistency. Dedoose software was used for all coding.

All codes and variables related to the nature of the PCA job—what they were doing, what they were experiencing, and how they and others felt about their job—were analyzed to explore the experiences of HCBS PCAs in Kansas during the COVID-19 pandemic. These qualitative codes were analyzed across all subgroups, including PCAs, clients, providers, and family caregivers. Thus, the qualitative data captured PCA's own experiences as well as the experiences of those who receive care from PCAs or supervise their work.

Quantitative data come from the survey sample of 176 PCAs. The PCA surveys included questions about PCA job satisfaction, stress, feelings of support and respect, intent to quit, COVID exposure and vulnerability, access to benefits, and self-reported health (see Tables 1, 2 in results for more detail on survey measures). Survey data were collected using Qualtrics and analyzed descriptively using StataMP 17.

Qualitative and quantitative data were integrated in our analysis using a constant, comparative method to systemically examine areas of agreement, contradiction, or expansion between datasets (Creswell and Plano Clark, 2018). Research team members worked across both the qualitative and quantitative datasets to immerse themselves in the data and identify patterns and discrepancies. The research team also met regularly to discuss emergent findings and areas in which qualitative data indicated a need to consult the quantitative data and vice versa. Qualitative and quantitative findings were integrated on a theme-by-theme basis in the text using a weaving approach (Fetters et al., 2013).

Demographic and program characteristics for the in-depth interview sample can be found in Tables 1, 2 and for the PCAs in the survey sample in Table 3. The sample is predominantly white, consistent with the racial makeup of Kansas (United States Census Bureau, 2023). This also reflects our concerted effort to recruit rural participants as the SAB advised that geography was an important dimension shaping service delivery and the pandemic response. The sample represents diverse program characteristics such as waiver type and self-directed vs. agency-based, which are also important dimensions influencing service delivery.

Results

Our findings are centered around four major themes: 1) PCAs remained in this field during the pandemic out of a commitment to their clients; 2) PCAs were undervalued and invisible as essential workers; 3) direct care work had an emotional toll on PCAs during the pandemic; and 4) PCAs have mixed feelings about their satisfaction with the job, and, as good workers quit, they were difficult to replace. Table 4 provides an overview of qualitative themes, subthemes, and exemplar quotes. Tables 5, 6 show descriptive statistics from the PCA survey related to job conditions, job satisfaction, and wellbeing.

The commitment and call to care during the pandemic

PCAs were drawn to this work out of a desire to care for others, and while some left this field during the pandemic, many others

TABLE 1 Demographic characteristics of client, PCA, and caregiver interview participants.

	Clients*	Non-related PCAs	Related PCAs	Family caregivers (unpaid)*	Total
	n = 27	*n* = 14	*n* = 12	*N* = 5	57
Age					
Range	23–81	21–72	45–73	55–69	21–81
Mean	54	49	59	58	54
Gender					
Male	7	2	2	0	11
Female	20	12	10	5	46
Race/Ethnicity					
Hispanic/Latino	3	1	1	1	5
American Indian or Alaska Native	2	0	0	0	2
Black	5	2	1	0	8
Asian	0	1	0	0	1
White Non-Hispanic	18	10	10	4	42

*One respondent was both a consumer and a family caregiver (middle-aged, Hispanic, white female) and is included in both categories but not double-counted in totals.
^One respondent was multiracial, and so, race/ethnicity subtotals are greater than total sample.

TABLE 2 Program characteristics of interview participants.

	Clients*	Non-related PCAs^	Related PCAs^	Family caregivers (unpaid)*^	Providers^	Other providers^#
	n = 27	*n* = 14	*n* = 12	*n* = 5	*n* = 13	*n* = 8
Waiver						
Brain Injury	5	1	2	0	9	5
Frail Elderly	5	9	2	1	10	5
Intellectual/ Developmental Disability	5	5	11	3	9	4
Physical Disability	12	7	6	3	10	5
Care Model						
Agency-based care	6	6	1	0	8	n/a
Self-directed care	15	7	6	2	3	n/a
Both	6	1	5	3	2	n/a
Geographic Region						
Metropolitan	20	9	9	2	2	4
Non-Metropolitan	7	5	3	3	3	1
Mix/both	n/a	n/a	n/a	n/a	8	3

*One respondent was both a self-directed Physical Disability Waiver client and an unpaid family caregiver to a self-directed Physical Disability Waiver client and is included in both categories but not double-counted in the total n.
^Some PCAs, family caregivers, and providers support multiple service recipient types, and therefore, subtotals are greater than the sample size.
#Other providers included two provider associations, four Aging and Disability Resource Centers, and two Community Developmental Disability Organizations.

remained largely out of a commitment to those they cared for. PCAs often formed deep bonds with their clients and felt personally responsible for ensuring they received safe, quality care during the pandemic. When asked to share anything else they would like us to know about their experiences as a PCA during the pandemic, one self-directed PCA survey participant added:

> We choose to do this job because our hearts are in it not because we make money or get benefits. I could definitely get a higher paying job. I just do not have the heart to leave my client not knowing the care he will receive.

The connections and relationships that develop also motivate PCAs to continue this work, as shared by an interview participant (self-directed PCA):

> There are no benefits for [PCAs]. The pay could be a lot better, but it pays in love.

An experienced agency-based PCA echoed this sentiment:

> I love [my job]… the interaction with my clients and bein' able to pretty much make their day and help them with whatever they need help with.

Some PCAs also felt particularly suited to caregiving, in that they both enjoy it and are good at it. A self-directed PCA who currently cares for her mom and uncle on the HCBS waiver, but has a long history of providing direct care in both nursing home and private home settings and has a goal of starting her own homecare agency, shared:

> I love what I do. I love taking care of people. That's what I do, is take care of people, even outside of my [family]… That's just my passion, helping people. Always been that.

Related PCAs often shared that they will always care for their family members, no matter what. Many increased their caregiving hours either due to workforce shortages or concerns about increased risk of COVID-19 from outside workers. A related PCA discussed increasing the care she provided her son on the Brain Injury waiver due to being unable to find enough outside PCAs and despite her back pain:

> It does not matter if [hurts] or not, I still have to do it. So if I have to work, you know a 16 hour shift… taking care of my son. It does not matter if he needs to be lifted, I have to lift him… I have to do it no matter what my physical condition is. There is nobody else to do it; it's me. I have arthritis. I've had it… since my early 20s. Sometimes I hurt, but even if I'm hurt, I'm taking care of my son.

PCAs also noted their role in keeping their clients out of nursing homes, which was especially important during the pandemic when the virus spread rapidly in congregate settings, as demonstrated by these written responses to the open-ended survey questions "Why did you choose to continue working as a PCA during the COVID-19 Pandemic?":

> Because someone had to do it, no one would be available to take care of this population if everyone quit. I could get a job starting out at $15 but I think it's important to be a caregiver. Because if we do not take care of them they'll end up in nursing homes and

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TABLE 3 Demographic characteristics of PCA survey respondents.

	N = 176%, (*n*)
Age	
Range	19–87
Mean (SD)	47.3 (1.09)
Gender	
Male	17.0 (30)
Female	82.4 (145)
Transgender/non-binary	0.6 (1)
Race/Ethnicity	
White	82.4 (145)
Black	13.1 (23)
American Indian or Alaska Native	4.0 (7)
Asian	2.8 (5)
Hispanic/Latino	2.8 (5)
Education	
Less than high school	5.7 (10)
High school graduate	24.4 (43)
Vocational, technical, or trade school	11.4 (20)
Some college, but no degree	25.6 (45)
Associate's degree	10.8 (19)
Bachelor's degree	10.2 (18)
Master's, professional, or doctoral degree	8.5 (15)
Care Model	
Agency-based care	14.2 (25)
Self-directed care	76.1 (134)
Both	6.3 (11)
Missing/Ambiguous	3.4 (6)
Employment Status	
Part-time	61.9 (109)
Full-time	37.5 (66)
Length of time as a PCA	
Less than a year	15.3 (27)
1–2 years	19.9 (35)
3–5 years	23.9 (42)
6–10 years	13.6 (24)
More than 10 years	27.3 (48)
Related to a client	
No	52.3 (92)
Yes	47.7 (84)
Employed as PCA prior to the COVID-19 Pandemic	
No	20.7 (54)
Yes	63.1 (111)
Not sure	2.8 (5)
Health insurance	
Uninsured	19.9 (35)

(Continued)

TABLE 3 (Continued)

	N = 176%, (*n*)
Insurance through another employer	11.9 (21)
Insurance through spouse, partner, or parent	19.3 (34)
Marketplace	10.8 (19)
Private pay insurance or not specified	1.1 (2)
Medicaid, Medicare, Military VA	29.0 (51)

Race/ethnicity category totals more than 100% as participants could select multiple races/ethnicities. Categories of each variable may not add to 176 due to missing data.

> die on us. As long as they stay in their home environments they live longer. (Agency-based PCA).
>
> Because my client needs someone there and without us PCAs he would be in a nursing home being neglected and not cared for as needed. (Self-directed PCA).

PCAs sacrifice pay and benefits to remain in this line of work as several of the above quotes demonstrated. There were many other personal sacrifices made by PCAs who went above and beyond to provide quality care to their clients during the pandemic. It was not unusual for PCAs to report providing uncompensated hours of care, which while might be expected of the paid family caregivers, non-related PCAs also donated their time to client care needs. For example, an experienced self-directed PCA with multiple non-family-member clients shared:

> The social workers and stuff wasn't going into the homes or making home visits which made it difficult. They could not get the hours that they needed. Sometimes I'd stay over my time. I just clocked out when I needed [to], but if the job wasn't done for the amount of hours they gave me, I went ahead and did it on my own free time because that's just the way I am.

An agency-based PCA echoed

> Sometimes I do stay a little longer than usual [and the approved hours]. I do not mind 'cause I care for her so much…. it'll only take me five or 10 min or something, and I'll do it for her.

Some PCAs also put in additional paid hours to help cover shifts in the face of growing workforce shortages or when their colleagues were in quarantine. An agency-based provider for the Intellectual and Developmental Disability waiver shared:

> We already are incredibly understaffed that's just a national fact in our field, but this pandemic made it even more impossible…. and we got to points where we were having people work all night and all day trying to cover people who are incredibly ill and at their most vulnerable place because we have got no one.

However, for those in the self-directed program, they did not get paid overtime for these extra hours. Essentially, overtime rates are not approved in self-directed consumer budgets, and so to make overtime wages work on paper and by law, PCAs agree to having their base wages reduced, as shared by one PCA, "We actually cut my pay so that would fit within time and a half," in which they end up working more hours for the same amount of total take-home pay. Several PCAs were frustrated by this but willing to put in these extra hours due to their commitment to care.

PCAs also provided unpaid supports that they felt were essential for their clients' physical and mental health but were not approved services for billing. Pandemic specific examples included checking in and providing companionship by phone during quarantines, shopping for and dropping off supplies for clients in quarantine when there was no way to clock-in for this service, or supporting clients while they were hospitalized. A self-directed PCA survey participant wrote:

> Yes, many of our tasks cannot be done virtually but out of care and concern for these clients we have built long-term relationships with, we did everything we could even when we could not be together in the same space.

A home care agency director lauded the various contributions she saw her staff make:

> The pandemic helped us, once again, understand that our Direct Support Professionals truly are one of a kind when it comes to caring for our clients. Their concern for their clients outweighed personal time or financial costs. Caregivers would deliver casseroles and leave them on the doorstep or offer to do laundry if it was left on the doorstep or pick up groceries for clients.

Most PCAs took COVID-19 safety practices very seriously but also noted this made their jobs more difficult and stressful. Many described going to great lengths to keep their clients safe from COVID-19. For example, a self-directed PCA described changing her clothes between households:

> I was precautious. Sometimes a little overly precautious…. Even in the cold weather, outside my front door before I go in my door… I would strip my clothes, my shoes, my panties, my underwear, everything off. Take that alcohol, rub it all over my body and put it in a bag. Then in my little suitcase that I carried with me, I'd re-change my clothes and my shoes.

Several PCAs described cleaning relentlessly, sometimes against the odds in homes with pests or hoarding issues. Some PCAs made personal sacrifices to keep their clients safe. For example, a related PCA shared her decision to continue her education remotely:

TABLE 4 Qualitative themes, subthemes, and illustrative quotes.

Theme 1: PCAs remained in this field during the pandemic out of a commitment to their clients.	
Subthemes	**Illustrative quotes**
PCAs were committed to client wellbeing, rooted in the duty to care and relational bonds.	We choose to do this job because our hearts are in it not because we make money or get benefits. I could definitely get a higher paying job I just do not have the heart to leave my client not knowing the care he will receive.
PCAs were motivated to keep their clients out of nursing homes during the pandemic.	Because my client needs someone there and without us PCAs he would be in a nursing home being neglected and not cared for as needed.
PCAs went above and beyond to deliver quality, safe care during the pandemic.	Sometimes I'd stay over my time. I just clocked out when I needed [to], but if the job wasn't done for the amount of hours they gave me, I went ahead and did it on my own free time because that's just the way I am.
Theme 2: PCAs were undervalued and invisible as an essential workforce.	
Subthemes	**Illustrative quotes**
Compared to other essential workers, PCAs felt unrecognized and invisible.	When they were giving all these blessings and compliments to the nurses that are at risk in the hospital, they seemed to forget about us little people and the elderly there in the homes that are doing just as good as job as they were.
The invisibility of PCAs as essential workers impacted their access to key pandemic resources, such as access to personal protective equipment, vaccines, or hazard pay.	It felt that as an agency that provides non-medical services… we were left out. Oftentimes we would find out after the fact about programs that would hand out donated gloves and other [personal protective equipment] items. Additionally, convincing the Health Dept. that our staff needed vaccinations was a problem!
The devaluing of PCAs is evident in their low wages and poor benefits.	Having contracted COVID-19 on my [PCA] job, I had to self-isolate for 10 days, during which I could not work either of my jobs while I recovered…. Not only were we at higher risk for exposure, when we got sick, we had no sick pay or unemployment benefits and shouldered the financial consequences on our own.
The knowledge of PCAs as experts on their clients' care needs was not well recognized or supported.	All I know is what their needs are…. These people (care coordinators) wasn't listening to the clients' needs… When we were out here being their eye and the voice, they would not listen to us.
Theme 3: Direct care work had an emotional toll on PCAs during the pandemic.	
Subthemes	**Illustrative quotes**
PCA's work is physically, mentally, and emotionally challenging.	It's hard work… I do not think people understand how hard it can be because we go in there every day and take care of people that have different personalities. They have different medical needs, and we have to make sure that they have everything that they need, and that we have everything we need. I've been pinched. I've been hit. I've had my hair pulled. I've been kicked.
PCAs feared contracting the virus or spreading it to their vulnerable clients.	Personally, for me, if I knew I had COVID and I gave it to someone else… and they died, I would, literally, probably never forgive myself. I would feel so bad… I was really nervous to go back to work in general.
PCAs also had to help manage the emotions, loneliness, or increased behaviors of their clients experienced in response to the pandemic	Telling the individuals they could not see their family, while driving home to my family every night. It changed me. Being the bad guy to people who did not understand. I saw behaviors in individuals that were extremely out of character because they missed their families.
PCAs experienced role overload as responsibilities increased, contributing to burnout.	[I was] tired but I did [it]…I'm in between a rock and a hard spot. This is my passion. I also feel like if I'm not there, [then] nobody else will be there…there's just me… I had some of [my clients say], "Please do not go. Could you spend a little bit more time with me? I'm tired of being here alone."
PCAs practiced self-care and valued emotional support, but support available was inconsistent.	-At one point, during lockdown, they sent us little packages with paperclips, a journal with little positive thoughts in it. Just little simple things. A card that said you were appreciated. [My company] is very good about letting you know we appreciate you. We're blessed with a very special CEO. They do so much. -What support?
Theme 4: PCAs have mixed feelings about their satisfaction with the job and as good workers quit, they were difficult to replace.	
Subthemes	**Illustrative quotes**
PCAs qualified their sense of job satisfaction as enjoying the job but not the pay and benefits	[I am satisfied] with the job, but not the pay.
Poor wages and benefits contributed to high-quality workers leaving the field	She [former PCA] had a really good personality. She was jolly to be around. She did a fabulous job. She would come if I needed something after she had gotten home. She would come back over, just a very good person…. She left (during the pandemic) for full-time employment with benefits.
Workforce shortages combined with low pay drew poor workers to the field	I've had the pleasure of having—I've had my car stolen, I've had money stolen, I've had my meds stolen…. If you had better pay, you would get better quality of people, I hope.

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TABLE 5 Job conditions and job satisfaction among PCAs.

	All (*N* = 176) %, (*n*)
"I feel respected by clients as part of their home care team."	
Strongly agree	72.2 (127)
Somewhat agree	15.9 (28)
Neither agree nor disagree	6.8 (12)
Somewhat disagree	2.8 (5)
Strongly disagree	2.3 (4)
How has the respect you feel from clients as part of their home care team changed since before the pandemic?	
I feel more respected by my clients as part of their care team	15.9 (28)
I feel less respected by my clients as part of their care team	3.4 (6)
I do not feel there is any difference in how much I am respected by my clients as part of their care team	52.8 (93)
"Overall, my employer provided good support and assistance during the pandemic."	
Strongly agree	25.0 (44)
Somewhat agree	6.8 (12)
Neither agree nor disagree	12.5 (22)
Somewhat disagree	1.7 (3)
Strongly disagree	4.0 (7)
How satisfied are you with your occupation as PCA?	
Extremely satisfied	60.2 (106)
Somewhat satisfied	33.0 (58)
Somewhat dissatisfied	5.1 (9)
Extremely dissatisfied	0.6 (1)
How has your satisfaction with your job changed compared to before the pandemic?	
I am more satisfied with my job	12.5 (22)
I am less satisfied with my job	5.7 (10)
There has been no change in my job satisfaction	52.3 (92)
How likely is it that you will stop working as a PCA in the next year?	
Very likely	7.4 (13)
Somewhat likely	17.0 (30)
Not at all likely	65.3 (115)
How often do you find your job as PCA stressful?	
Always	4.5 (8)
Often	18.2 (32)
Sometimes	42.6 (75)
Rarely	23.9 (42)
Never	9.1 (16)
How has your job stress changed compared to before the pandemic?	
I have less work stress now than before the pandemic	8.0 (14)
I have more work stress now than before the pandemic	10.2 (18)
I have about the same amount work stress now as before the pandemic	52.8 (93)
Did you incur out of pocket expenses to make home care services safer?	
No	65.3 (115)
Yes	33.0 (58)

(Continued)

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TABLE 5 (Continued)

	All (*N* = 176) %, (*n*)
Receives no benefits from employer (health insurance, paid leave, holiday pay, etc.)	
No	25.0 (44)
Yes	73.3 (129)
Were you ever exposed to COVID-19 through your job as a PCA?	
No	50.0 (88)
Yes	39.2 (69)
Not sure	10.8 (19)
Did you provide home care services to anyone while they had COVID-19?	
No	63.1 (111)
Yes	29.5 (52)
Not sure	7.4 (13)
Did quarantining due to COVID-19 symptoms, diagnosis, or exposure of self or household member impact the number of hours you worked as a PCA?	
No	75.5 (133)
Yes	23. 9(42)
Since the start of the pandemic, did you feel that any of the physical home environments you worked in were hazardous (hoarding, infested with pests, very unsanitary)?	
No	65.3 (115)
Yes	9.7 (17)
Has your household had any financial difficulties because of the COVID-19 pandemic?	
No	38.6 (68)
Yes	48.3 (85)
Not sure	9.7 (17)
Not including yourself, is anyone in your household at higher risk of complications from COVID-19 due to their age or health conditions?	
No	38.1 (67)
Yes	43.8 (77)
"My age or health put me at increased risk for severe complications from COVID-19."	
Strongly agree	31.3 (55)
Somewhat agree	27.8 (49)
Neither agree nor disagree	23.3 (41)
Somewhat disagree	9.1 (16)
Strongly disagree	8.0 (14)
Benefits offered through job as PCA	
Paid leave (such as sick leave, personal days off, paid vacation days)	6.25 (11)
Extra pay or shift differential for working certain hours (e.g., holidays, weekends, or overnights)	7.4 (13)
Extra pay or bonus pay for working during the COVID-19 pandemic	12.5 (22)
Assistance with childcare (including facilitating arrangements or allowing you to bring your child to work)	1.7 (3)
Health insurance	5.1 (9)
Dental and/or vision insurance	4.0 (7)
Retirement contributions or pension plan	2.8 (5)

Categories of each variable may not add to 176 due to missing data.

TABLE 6 Self-reported health, quality of life, and mental health among PCAs.

	All (N = 176) %, (n)
Overall health	
Excellent	18.2 (32)
Very good	35.8 (63)
Good	34.7 (61)
Fair	9.7 (17)
Poor	0.6 (1)
Quality of life during height of pandemic	
Excellent	16.5 (29)
Very good	23.9 (42)
Good	33.5 (59)
Fair	16.5 (29)
Poor	5.7 (10)
Mental health during height of pandemic	
Excellent	12.5 (22)
Very good	17.6 (31)
Good	38.6 (68)
Fair	22.7 (40)
Poor	5.7 (10)

Categories of each variable may not add to 176 due to missing data.

> We all love people, but we just have to be cautious anymore. It's sad to have to be that way, but it's about trying to stay healthy…. I'm doing school online and stuff. I usually like to be on campus, but, since the pandemic, I try not to enroll in classes that's on campus because there's so many people. It's just so risky…. I wanna be protected for [my clients]. I do not wanna bring it to them. If I'm going to school, and then I get it from school, and then have them at risk.

Another PCA detailed limiting her music therapy business, even though this was a higher paying job, to keep her clients safe:

> I used to see a lot of people for a short amount of time, a lot of 30-min sessions. I feel like that's not a safe choice because of the vulnerable people I see. I feel like for everyone involved, the safer thing is to do more caregiving at a lower rate of pay [than music therapy] to minimize exposure…. cause if I brought COVID to [my main client], he would probably die, and I would carry that with me the rest of my life.

Others described limiting their social bubbles to only their immediate household members and clients, at the expense of no longer seeing other close friends and family in person, as described by an agency-based PCA:

> I kind of stayed away from relatives and different things because I knew I was working with older people. I would call them and talk to them, but I did not go and see them, or if I did see them, it was like go see them outside in the air, you know what I mean?

Another PCA, self-directed, described not being available to help care for her adult daughter with COVID because the PCA was unwilling to risk that exposure for the sake of her clients. Finally, many PCAs incurred out-of-pocket costs to provide safe care by purchasing their own masks and other personal protective equipment. A self-directed related PCA shared:

> I pay for my own supplies. I even pay for my own sanitizer and my own [gowns], I do not depend on [my clients] to get anything…. I could not even tell you exactly how much I've been spending but… it adds up.

The survey data revealed that 33% of PCAs incurred out-of-pocket expenses to make the homecare services they provide safer.

An undervalued and invisible essential workforce

PCAs remained in this field because they knew how important their work was for the health and wellbeing of their clients. Their value was widely recognized by their employers and clients, who often lauded PCAs as invaluable and the backbone of the HCBS system. Furthermore, PCAs surveyed overwhelmingly felt they were respected by clients as part of their home care team (72 and 16% strongly agreed or somewhat agreed with this statement). In contrast, however, interview participants felt this work often went unrecognized by the general public and undervalued by policy makers. An exceptionally committed PCA, who donated both time and financial resources to her clients, shared her frustration about being invisible:

> When they were giving all these blessings and compliments to the nurses that are at risk in the hospital, they seemed to forget about us little people and the elderly there in the homes that are doing just as good as job as they were. We wasn't even mentioned. We are a healthcare [worker, but] we were not recognized for nothing…. Even a client said we oughtta call up there, and we oughtta tell 'em how good of a job you are doing…. I guess that was good enough 'cause I knew they appreciated me, but it did kinda hurt my feelings.

A client on the Physical Disability waiver who is also a caregiver to her spouse with a brain injury was also frustrated by this oversight:

> My recommendation is that the caregivers that came into these homes knowing that this pandemic was still out there, they risked their lives … for the people that they worked for…. I do not think they got recognition in that… 'cause without them, we could not have stayed in our homes. We could not have been cared for as we were…. Give 'em an award. Give 'em a medal. Give 'em a letter. Each state senator should send a letter to these people and caregivers and say, "Thank you for your duty. Thank you for caring for another person."

This invisibility had real-life consequences for PCAs and their clients. It was not always clear if PCAs were essential workers, as shared by a client on the Physical Disability waiver:

> When it first started, nobody was sure. I wasn't sure. PCAs were not sure if they could go out because we were in lockdown.

Although state officials and providers confirmed that PCAs were essential workers, the lack of awareness of this workforce impacted access to key pandemic resources. As noted above, many PCAs purchased their own personal protective equipment. This reflects the fact that their employers had inconsistent access to these critical supplies or funding, as shared by a provider for the Intellectual and Developmental Disability waiver:

> We felt very much like the forgotten stepchild, that the medical providers we are getting all of the support and [personal protective equipment] and we even had providers that… were scrutinized for having that [personal protective equipment] and told that we need to save those for hospitals. But we were expected to work directly with these clients, because they were not being hospitalized when they were diagnosed with COVID so our staff who are making close to minimum wage, a little bit above, are expected to work directly with COVID positive clients and we are also scrutinized for providing PPE for them so that was very overwhelming.

A home care agency provider indicated in an open-ended survey response:

> It felt that as an agency that provides non-medical services… we were left out. Oftentimes we would find out after the fact about programs that would hand out donated gloves and other [personal protective equipment] items. Additionally, convincing the Health Dept. that our staff needed vaccinations was a problem.

This quote also illustrates how PCAs were not consistently recognized as a priority group for initial COVID-19 vaccination, as will be further detailed in a future paper.

The ultimate devaluing of this workforce is in their low wages and lack of benefits, as well documented in the literature and reinforced by our findings. Only 6 and 5% of PCAs surveyed in our study reported access to paid leave or health insurance, respectively, through their job. Most PCAs were insured through either public program (e.g., Medicaid, Medicare, or the VA) (29%) or a family members coverage (19%), but nearly 20% were uninsured. When only looking at PCAs ages 64 and under, who do not qualify for Medicare (the universal health insurance program for older adults in the United States), the uninsurance rate was 24%. For context, this is about twice the average rate of uninsurance for working aged adults in the United States (12%) (Cohen and Cha, 2023).

The invisibility of this workforce also impacted access to COVID-19 emergency funding to cover hazard pay, sick leave, or overtime for this workforce. The self-directed workforce had no access to hazard or sick pay, as clients were their employers and did not have feasible mechanism for accessing COVID-19 emergency funds for this purpose, as further detailed in Wendel et al. (2023). A self-directed PCA provided written comment on how this impacted her:

> Having contracted COVID-19 [at] my [PCA] job, I had to self-isolate for 10 days, during which I could not work either of my jobs while I recovered. No income… my (unemployment) application was rejected… There was NO HELP from anyone. It was very frustrating AND demeaning. Not only were we at higher risk for exposure, when we got sick, we had no sick pay or unemployment benefits and shouldered the financial consequences on our own. (Emphasis in original).

Approximately 39% of participants surveyed reported being exposed to COVID-19 through their PCA job, and nearly 24% reported missing work hours due to needing to quarantine their self. It was also difficult for agency-based providers to access these funds. A small homecare agency detailed that her request for bonus pay, from county funds earmarked for the pandemic, was denied which she felt was because the county commissioners did not understand the nature of PCA work and the risks they took on:

> I asked for bonuses… and the commissioners refused to give it to my three [PCAs]… We lost a very, very, very great [PCA] over it… and those [PCA] were still going into those homes… while risking themselves because some of the clients still had different people visiting them…. It was only going to be $500 or $1,000 for the [PCAs'] bonus and they refused to give it to them…. That was very difficult. I almost walked because of that, but I just could not do that to my staff, and boy, I hate to even think about it because it really, really, really upsets me.

The difficulty obtaining COVID-19 emergency funding for home-based services resulted in uneven access to COVID-19 benefits among this essential workforce.

A notable exception was the recruitment and retention bonuses utilizing American Rescue Plan Act funds, described above, which allotted between $1,500 and $2,000 per qualified PCA (Heydon, 2023). These funds were distributed relatively late in the pandemic and during our data collection period, during the fall of 2022, but were addressed in later interviews and surveys. PCAs and providers were grateful for these bonuses but also shared concerns. The state struggled to identify PCAs who were eligible for these bonuses, highlighting their invisibility in state data and communications systems, which resulted in a prolonged and convoluted process for distributing the bonuses. Clients and caregivers expressed frustration that former PCAs did not receive these funds, even though they provided essential care during the frightening early days of the pandemic. They also noted that the criteria for recruitment bonuses were not clear, and therefore, they did not advertise the bonus when recruiting new workers, as shared by a paid family caregiver who was also trying to hire external PCAs:

> They did not explain a lot of the details. I could tell you for certain there was a lot of confusion on a lot of the Facebook parent groups that I'm on. People were saying, "I was told this." Somebody else was like, "No. That's not right, I just talked to our [Targeted Case Manager], and they said this." Somebody else said, "That's not right either."

A self-directed PCA who worked throughout the pandemic stressed that while every dollar helps, the bonus was not nearly enough to offset costs she incurred:

> The fact that all those (personal protective equipment) supplies are out of pocket is a hindrance… There's no PTO (paid time off).

> If I get exposed to COVID or my roommate did, that was two weeks I lost of income, [that happened] at least three times, so six weeks [unpaid].

Finally, some agency providers shared they were not aware of the bonus or found out too late, and, therefore, never received these funds for their PCAs.

PCAs as experts on their clients' care needs were also not well recognized or supported. Care coordinators, case managers, and eligibility assessors all moved to virtual contact only, with PCAs then often being the only remaining professionals who had direct contact with HCBS clients. PCAs were the eyes and ears of the HCBS system, yet the system was not set up to accept their feedback. Many PCAs did not understand how the HCBS system operates, including how their wages are funded, how care plans are set up, or where to take their concerns. Yet, the few PCAs who were system-savvy expressed frustration that their concerns were ignored, as demonstrated by an experienced self-directed PCA:

> I'm not that knowledgeable about what's on their record or in their file. All I know is what their needs are…. I put my job on the line out there to do things. I had to do them because I wasn't getting no help for these people. These people (care coordinators) wasn't listening to the clients' needs… When we were out here being their eye and the voice, they would not listen to us.

Another PCA reached out to state officials and legislators about her system-level concerns, only to be dismissed because her name was not in the provider registry, indicating a fundamental lack of knowledge of the PCA role and their invisibility in the system. She also noted that public stakeholder feedback opportunities were designed for providers or family caregivers and not PCAs.

Emotional toll of direct care work during COVID-19

The daily work of PCAs is challenging on a "normal" day, but during the pandemic, these challenges were magnified. PCAs expressed intensified feelings of fear for the health and safety of their clients, and these heightened anxieties exacted an emotional toll on PCAs during the pandemic. These challenges are built on top of the low wages and lack of benefits described above. This emotional toll, the unrelenting nature of their work, limited resources, lack of respite care, and lack of institutional support led some PCAs to experience burnout.

A majority of PCAs (61.3 percent) described their mental health during the pandemic as "fair" to "good," and 57.4 percent described their quality of life as "good" to "very good" during the pandemic. Despite the survey data indicating that mental health of most PCAs fared well during the pandemic, interviews uncovered specific areas of anxiety and concern. The work of PCAs is physically, mentally, and emotionally challenging as described by an agency-based PCA:

> It's hard work… I do not think people understand how hard it can be because we go in there every day and take care of people that have different personalities. They have different medical needs, and we have to make sure that they have everything that they need, and that we have everything we need…. I've been pinched. I've been hit. I've had my hair pulled. I've been kicked.

Given that PCAs provide services within the client's homes, they also face the associated risks of working within the client's social network and home environment. PCAs described carrying out care tasks in homes that were dangerously unclean. An agency-based PCA shared:

> There are occasional houses that we go into that do hoard and it's hard to keep everything clean and sanitized. And we have had a couple that I've had roaches and we have had an increase of people with bedbugs lately.

Unrelated PCAs have an intrinsic boundary to protect their personal and professional lives by virtue of their scheduled hours. Related PCAs, especially those that live with their care recipients, do not have this same intrinsic boundary. It is often difficult for related PCAs to find times when they are not "on the clock." A related PCA shared the unrelenting nature of her care work,

> I have to manage everything. I have to tell the insurance company when they are not paying things correctly. I have to tell school districts when they are not following the law. I have to tell doctors when they are not doing what they need to do… I do not know if people realize that how much, when you are the caregiver, you have to run things. It's exhausting.

The pandemic intensified these challenges primarily due to fewer PCAs to share the care work load with, increased safety measures, the social isolation of quarantining and social distancing, and the fear of the unknown of contracting and spreading the virus. Fear of catching or spreading COVID-19 to their vulnerable clients was a common sentiment and source of anxiety for PCAs. An agency-based PCA described her fear at the start of the pandemic and when returning to work after the lockdowns:

> A lot of people were dying. The hospitals were filled. I was scared about getting it, and then, also, I was really also scared about giving [it] to someone else. Personally, for me, if I knew I had COVID and I gave it to someone else… and they died, I would, literally, probably never forgive myself. I would feel so bad… I was really nervous to go back to work in general.

To limit exposure to the virus while caring for clients, PCAs often adopted strict safety guidelines beyond what their employers required, as described above. However, their ability to control the spread of the virus was limited by the choices and behaviors of their coworkers, clients and their family members, and other social networks. A self-directed PCA described how her client's other PCA had exposed not only the client but also infected other care team members with the virus:

> I'm gonna say that [my client] had one staff that exposed 11 people… [by] not wearing [a] mask… I was pretty upset. I'm very protective about our people. That's part of our job is to ensure their safety.

A PCA from the survey shared that the client's home environment exposed her to COVID-19, which was the most challenging part of the pandemic for her:

> Despite taking all precautions, contracting COVID-19 most certainly from my client/her senior apartment building, where management and residents did not take full precautions.

Not being able to rely on others to take pandemic-era safety seriously potentially held higher costs to PCA wellbeing and financial livelihood than the general population, due to the lack of benefits described above; as one PCA shared, "Other people's decisions greatly affect me."

When clients ultimately contracted and lost their battle with the COVID-19 virus, PCAs had to manage their own grief while continuing to protect themselves and care for other clients. A self-directed PCA shared,

> We lost a customer… It was like I shoved it all down, and I came to work. I was like, 'I'm sick from shoving my emotions on the side.' … It has gotten better, but it's a lot some days.

PCAs not only had to handle their own anxiety about keeping themselves and others safe during the pandemic but also had to help manage the emotions of their clients. HCBS clients who thrive on strict daily routines or social engagement were suddenly faced with drastic changes to their everyday life. Social isolation was a particularly difficult challenge for many clients, and workers were often the only interaction clients had with the "outside" world, as shared by a survey respondent:

> Telling the individuals they could not see their family, while driving home to my family every night. It changed me. Being the bad guy to people who did not understand. I saw behaviors in individuals that were extremely out of character because they missed their families.

The pressure of being a clients' only source of support and socialization led PCAs to experience a sense of role overload which negatively influenced their job performance and led to burnout. In addition to long, unrelenting work hours, PCAs felt guilty for setting boundaries between their work because their clients were often isolated from their social networks. A PCA shared:

> I was taking care of people three hours during the day and four hours during the early afternoon, four or five hours in the evening up until midnight. Then I had a client that I did night shift all night long. [I was] tired but I did [it]…I'm in between a rock and a hard spot. This is my passion. I also feel like if I'm not there, [then] nobody else will be there…there's just me… I had some of [my clients say], "Please do not go. Could you spend a little bit more time with me? I'm tired of being' here alone."

In addition, many related PCAs reduced the help they received from external workers, as explained by a PCA to her daughter on the Brain Injury waiver:

> I did not want people in my house. I mean, nobody understood COVID yet and how it was transmitted, and I said, stop. I do not want people coming in my-people are dying in the hospital, and you know… Everybody was afraid, including me. I mean, I'm my daughter's caregiver, I do not want to die because I got COVID. I said, No [PCAs] right now until this is figured out.

As a result, related PCAs received less respite in their caregiving role.

The work-related stress and emotional experiences of PCAs during the pandemic was neither static nor isomorphic across the workforce. Overall, PCAs surveyed did not report high stress levels, with only approximately 23% indicating their jobs were always or often stressful. Furthermore, over half of survey respondents indicated that their job-related stress was the same as before the pandemic. This contrasts with interview participants, who more typically described job-related stress as increasing during the pandemic. Several PCAs interviewed described experiencing more anxiety and depression early in the pandemic, but after vaccines became available and social distancing lessened, work-related stress lessened. PCAs described their work during the pandemic as meaningful, providing them a sense of purpose in knowing that they were providing an essential service to others during a global crisis. One PCA shared:

> It gets me going every day, for one thing. I know people depend on me. Helping them makes you feel good—and their friendship. It's just good for me.

The diverse experiences of PCAs during the pandemic may reflect the support systems and self-care strategies that PCAs utilized during the pandemic. Coworkers were found to be sources of support primarily because they understood exactly what each other were going through during the pandemic. A PCA wrote, "My coworkers were always a shoulder to cry on when days were unbearable." Faith was also an important coping strategy shared by PCAs. Professional mental health services also provided much needed support for PCAs. An insured agency-based PCA stated:

> I did get some bad anxiety and depression [during the pandemic], so I was able to go to [therapy]. That helped a lot. Getting therapy helped a lot.

Some agency-based employers provided important support by providing COVID guidance and emotional support. A PCA shared that her financial management service provider distributed small tokens of appreciation:

> At one point, during lockdown, they sent us little packages with paperclips, a journal with little positive thoughts in it. Just little simple things. A card that said you were appreciated. [My company] is very good about letting you know we appreciate you. We're blessed with a very special CEO. They do so much.

However, both agency-based and self-directed employers varied widely in the support provided to PCAs. Approximately 32% of PCAs surveyed strongly agreed or somewhat agreed that their employer provided good support and assistance during the pandemic, 6% disagreed, and 12.5% neither agreed nor disagreed. When we asked PCAs the open-ended question, "What was the most important thing others have done to support you in your role as a Direct Support

Worker during the pandemic?" few respondents pointed to tangible supports, but several mentioned emotional support or feeling appreciated by their clients and their family. However, among those who provided a response, over a quarter indicated there was no support, with written responses such as "Umm… nothing" and "What support?"

Impact on job satisfaction and worker quality

Participants overwhelmingly found their roles as PCAs to be meaningful and fulfilling, as shared above. Participants discussed how they feel called to do this work and can support clients when others cannot. One caregiver shared their experiences with PCAs:

> The individuals that are out there are just wonderful. They really are! They truly are doing the work that they are doing because they care about these individuals. So, [the providers] really, really have been able to assemble a really wonderful team of people. It's just there aren't enough of them.

Clients and their families rely on PCAs to be passionate about their jobs and emotionally invested in the support they provide to clients. One PCA shared,

> This is my passion, and I like to care for the people. I'm happy that I was there for them when nobody else would be.

Yet, finding PCA work fulfilling is not always enough by itself to be satisfied with their jobs.

When asked about how satisfied they are with their jobs, responses were mixed across surveys and interviews. Approximately 89% of survey participants reported that they were extremely satisfied or somewhat satisfied with their jobs. During interviews, when asked whether they were satisfied with their job, PCAs typically provided a nuanced answer, as succinctly stated by one PCA, "With the job, but not the pay." Another PCA shared conflicting feelings about their job:

> I was not satisfied… I was like this is not good. I'm caring for people and I do not like it… There's a forum on Reddit, people would be like, 'I'm burnt out. What do I do?' Or they are like, "I hate my job." It's like I'm not the only one…. I think the reason why I do not like this job is because, one, the pay is way too low. That is unreasonable. I'm not trying to compare jobs or anything like that, but if my friend who works at Target gets paid $3 an hour more—she gets $13.50, $14 an hour, while I get paid $10 an hour or $9 an hour at the beginning, I was like, I'm literally cleaning up stuff. I'm peri-care. I'm doing these medication regimens. I was like, 'This is crazy.'

This PCA eventually left the field and noted her new job pays much more and is far less stressful. Participants expressed widespread dissatisfaction with the low pay and poor benefits associated with the job. Approximately 46% of PCAs surveyed reported experiencing financial difficulties due to the COVID-19 pandemic, and as shared above, access to paid leave was minimal. One participant shared their thoughts about benefits, particularly the importance of paid time off,

> I think we should get paid more or get some type of benefits. They do not offer no insurance, like I said, no sick days, no vacation. I have not had a vacation, which I take, so I have to take a vacation with no pay. Because you need the time off and I have not had time off. I was in the hospital, maybe about a month ago…when I came out of the hospital I just took the week off …. I'm like, 'I gotta recuperate, get myself together'. You need time out, everybody needs a vacation.

There was an important counter trend to the dedicated PCAs who felt called by caregiving and committed to the safety of their clients during COVID-19. To begin with, many PCAs quit in the face of low wages, leading to workforce shortages that are well documented in the literature. Seven percent of survey respondents said they were "very likely," and 16.4% said they were "somewhat likely" to leave the PCA workforce in the next year. A client-employer described losing a PCA due to lack of benefits,

> She [former PCA] had a really good personality. She was jolly to be around. She did a fabulous job. She would come if I needed something after she had gotten home. She would come back over, just a very good person…. She left (during the pandemic) for full-time employment with benefits.

Another client-employer shared:

> I honestly did hire one outside person. Oh, I loved her. She was about the best caregiver I'd had in my entire life. Then she recently quit [because of] burnout.

The well-qualified PCAs who left the field were difficult to replace, with clients and caregivers instead finding they were left with a pool of poor workers. Some respondents spoke of PCAs who simply did not do the work they were hired for, while others pointed to more serious concerns, as indicated by a related PCA in managing outside PCAs on her son's care team:

> We had some pretty interesting folks come through. I mean, we were at the point where we had to give the job to whoever applied, or we were doing it ourselves. I mean, we are talking—I've had caregivers leave their drug paraphernalia in my house. I've had people steal from there. I mean, all kinds of stuff.

A self-directed client described having their property and medications stolen:

> I've had the pleasure of having—I've had my car stolen, I've had money stolen, I've had my meds stolen…. I've had one that tried to blackmail me into getting my meds… and she was a CNA (Certified Nursing Assistant), so I thought it would be a heck of a good fit. I was totally wrong on that…. With my granddaughter, I'm not getting [all] the hours or what I need done, done, but at least I do not have to worry about her stealing anything…. If you had better pay, you would get better quality of people, I hope.

As noted by one self-directed client, "you get what you pay for," low wages limited their choice of workers and some felt they were stuck with workers rejected from other jobs. Furthermore, some expressed concern that the private home environment attracted PCAs who preyed on this vulnerability.

The shortage of quality workers puts clients and their families in the difficult position of needing to weigh their need for PCAs to provide care and support to remain in the community against the risk of allowing questionable PCAs into their home. Ultimately, clients and caregivers fired workers who engage in bad behavior, such as stealing or providing subpar care, although sometimes with delay or hesitation due to the workforce shortages and concerns about being able to replace these workers. One financial management service provider explained:

> That's a problem. People keep—have kept workers that they really did not want to keep because they could not find anybody else. That's still a problem today.

Finally, many family caregivers felt they did not really have a choice other than to continue serving as a PCA for their loved ones. A few shared that they would prefer outside help but cannot find anyone in the face of the workforce shortages, as shared by one mother:

> I did not choose [this occupation]. My daughter receives PCA hours, and we have been unable to find a worker for her…. We would much prefer that over me getting paid.

These family caregivers often noted sacrifices to their career, including earning potential, or that caregiving duties have become increasingly difficult for them in light of their age or own health conditions. Another family caregiver for an adult son with a brain injury noted she would prefer to focus on the emotional bonds of motherhood while delegating the more intensive caregiving duties to outside PCAs, sharing:

> I only fill in, yeah. I do not have any set hours for me…. I wanna be mom. I do not wanna be [the] caregiver… I do it when I have to.

Discussion

Study results demonstrate the commitment of PCAs to care for older adults and individuals with disabilities during the COVID-19 pandemic, despite low wages, inadequate benefits, and limited support. PCAs often went above and beyond to provide quality care and keep their clients safe during this time but were not well recognized, rewarded, or supported as essential workers.

Our findings on job stress and satisfaction were nuanced. While PCAs in the interview sample described the increased stress and strain of working during the pandemic, surveyed PCAs indicated that, overall, work-related stress had stayed about the same in comparison with before the pandemic. This may be due to the non-monetary, emotional rewards of this work. PCAs described that while the workload can be intense and challenging, their work also provides them with a sense of purpose, importance, and motivation. In other words, the benefits balance out the emotional costs. This may be the very factor that privatized healthcare systems rely on to justify paying PCAs less, knowing that PCAs feel a strong sense of dedication and commitment to their clients despite the emotional, financial, and physical toll of this work. Similar arguments have been made about the exploitation of 'caring' among teachers (McKittrick-Sweitzer, 2023), and home care companies market the compassion and warmth of their employees to clients (Franzosa and Tsui, 2020). Similarly, Folbre (2001) highlights how care workers become "prisoners of love," in that they are often unwilling to quit or strike in the face of poor working conditions because extended absences would threaten the welfare of those they serve, which reinforces their low wages. However, growing PCA workforce shortages demonstrate that relying on those who are dedicated to care work despite low wages is inadequate to meet the growing demand for home care.

Burnout among PCAs is one reason for the caregiving crisis facing the United States (Green, 2022). Particularly for PCAs, the combination of low wages, lack of employer benefits (such as paid time off, health insurance, and hazard pay), the emotional and physical demands of their work, and lack of recognition are primary markers for occupational burnout. Maslach (Maslach and Jackson, 1981) identified three primary characteristics of occupation burnout: emotional exhaustion, depersonalization, and lacking a sense of personal accomplishment or having autonomy and voice within one's occupation. PCAs in our study repeatedly described instances of feeling overwhelmed and emotionally exhausted during the pandemic, and despite seeing their work as worthwhile and rewarding, the low pay, benefits, and recognition prompted some to seriously contemplate leaving their position.

The respondents in our study engaged in various self-care activities and found support through their social networks of clients, coworkers, friends, and family; however, these internal practices only protect workers against occupational burnout to a point. External or institutional factors such as flexible schedules, fair wage and benefit structures, growth opportunities, having a voice in decision-making within the organization, and availability of peer, supervisor, and training supports help to prevent and mitigate occupational burnout for workers (Rehder et al., 2021). Rehder et al. (2021) argue that PCAs who engage in quality self-care practices and possess resilient psychological attitudes toward their work can still experience burnout if they work in continuously toxic, unsupportive work environments. Similarly, PCAs, who work in supportive environments, who lack self-care strategies, and hold a negative stance toward their work, can still experience occupation burnout. While a majority of PCAs felt respected by individual clients as part of the care team, the lack of larger structural supports and societal acknowledgment of the work that they do contributed to ambivalent feelings about their work. Protecting PCAs against burnout, therefore, requires both individual and institutional support factors to prevent and mitigate occupational burnout (Gray-Stanley and Muramatsu, 2011; Boerner et al., 2017; Rehder et al., 2021).

In supporting individuals with complex care needs, PCAs have professional-level responsibilities but without the pay, recognition, or influence of a professional healthcare worker. The United States missed a key opportunity to invest in this workforce when over $400 billion in funding for in-home care was removed from the Infrastructure and Jobs Act (Higgins, 2021). The inclusion of care workers as human infrastructure in the proposed bill was a novel approach, reflecting a recognition of not only the value of caring for children, individuals with disability, and older adults, but also the role of paid caregivers in allowing family caregivers, especially women, remain in the workforce. However, conservative lawmakers pushed back against the notion that care workers

were vital to the nation's infrastructure and economy, and this funding was removed in the bipartisan compromise to pass the bill (Li and Laughlin, 2023). The failure to recognize care work as vital to the nation's infrastructure illustrates that, as long noted by feminists theorists on caregiving (e.g., Tronto, 2013; Fraser, 2016; Folbre, 2024), policy makers continue to neglect the contributions of caregiving to our economy. This further demonstrates the importance of taking this growing workforce out of the shadows and educating policymakers on their essential role, an important step in enhancing the recognition of this workforce (Lyons and O'Malley Watts, 2024). Most everyone will eventually need LTSS as they age (Johnson and Dey, 2022), but unless critical investments are made in this workforce, a growing number of Americans will find that this care is not available for themselves or their loved ones when they need it.

Professionalizing the PCA workforce also entails recognizing the expertise of PCAs as knowledgeable members of the care team. PCAs have frequent, hands-on contact with their clients and, during the pandemic, were often the only healthcare professionals with this face-to-face contact, yet we found they struggled to make their voices heard when advocating for client care needs. Many efforts are underway to professionalize this work force through skills development and training [Centers for Medicare and Medicaid Services (CMS), 2023; Lyons and O'Malley Watts, 2024], but there is also a need for program development and evaluation on practices that can support the meaningful contribution of PCAs in care planning and system advocacy (Stone and Bryant, 2019). In addition to job skills development, PCAs would benefit from education on the HCBS delivery system, the role of the care plan, and how to communicate effectively with other healthcare providers. Formalized systems also need to be developed to permit PCAs to actively engage in care plan development.

The strengths and limitations of our study point to directions for future research. A key strength of this study was collecting data from stakeholders differentially situated in the HCBS system by including PCAs, family caregivers, clients, and providers. The data we collected from PCAs, especially the interview data, are likely biased toward high-quality workers, who were motivated by their passion for this work to also participate in this study. However, in also collecting the perspective of clients and family caregivers, we gained insight into the problem of poor quality PCAs. Our findings point to a polarization of the workforce, with a sharp divide between the high-quality, self-sacrificing PCAs and those who neglect or exploit their clients, and illustrate how the workforce shortage forced many clients and caregivers into the difficult choice of no care or poor care. The literature has well-documented the dedication of PCAs, but more research is needed on the "bad apples" in this field and the difficult decisions self-directed clients face as employers, to identify strategies needed to prevent and mitigate abuse, exploitation, and neglect.

Our interview and survey data were collected over a 26-month time span within a constantly evolving pandemic context, which had both advantages and disadvantages. This allowed us to see how shifts in COVID-19 infection rates, availability of personal protective equipment or vaccines, and the policy response impacted the everyday work of PCAs. However, it also sometimes made it difficult to compare and contrast experiences when data were collected at different time points in a rapidly changing situation. Ultimately, however, the ever-changing nature of the pandemic was the real context within which PCAs were performing their jobs. Another limitation is that while clients, caregivers, and providers spoke to high turnover rates, very few former PCAs who quit their jobs during the pandemic participated in our study, despite efforts to recruit them. Therefore, it is possible we did not capture the full experience of PCAs, especially those who were most dissatisfied with their work during the pandemic. There is a need for longitudinal research on this workforce to better understand how the changing social and policy environment shapes their job experiences and factors that influence decisions to leave this field.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by University of Kansas Human Research Protection Program. The studies were conducted in accordance with the local legislation and institutional requirements. The ethics committee/institutional review board waived the requirement of written informed consent for participation from the participants or the participants' legal guardians/next of kin because oral informed consent was instead obtained for the interviews to support remote interviews completed by phone or teleconference during the pandemic; and informed written consent was obtained for the surveys.

Author contributions

CW: Conceptualization, Formal analysis, Funding acquisition, Investigation, Methodology, Supervision, Writing – original draft, Writing – review & editing. DS: Formal analysis, Investigation, Writing – original draft, Writing – review & editing. JB: Formal analysis, Investigation, Project administration, Writing – original draft, Writing – review & editing. TL: Formal analysis, Funding acquisition, Investigation, Methodology, Writing – original draft, Writing – review & editing.

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Conflict of interest

The 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.

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Understanding the willingness of healthcare workers to treat viral infected patients in Saudi Arabia: evidence from post-COVID-19 pandemic

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During the recent COVID-19 pandemic, healthcare workers played an essential role in saving millions of lives and stopping the spread of the virus worldwide. This study investigates the impact of perceived behavioral control, attitudes, subjective norms, and emotion-focused coping on willingness to treat viral-infected patients in Saudi Arabia. However, the theory of planned behavior was extended by including emotion-focused coping. Data were collected from 283 male and female healthcare workers from public, private, and semi-government hospitals. "Structural Equation Modeling" (SEM) was applied to test the hypothetical relationship using SmartPLS software. Overall, the findings indicate that healthcare workers perceived behavioral control, subjective norms, and emotion-focused coping significantly impact healthcare workers' willingness to treat viral-infected patients. In contrast, attitudes showed a negative effect. In addition, emotion-focused coping mediates the relationship between perceived behavioral control, subjective norms, and willingness to treat viral-infected patients; emotion-focused coping does not mediate the relationship between attitudes and willingness to treat viral-infected patients. Overall, findings suggested that healthcare workers showed positive perceived behavioral control, subjective norms, and emotion-focused coping toward viral-infected patients. On the other hand, due to the novelty of the viral-infected viruses, attitudes of healthcare workers toward willingness to treat viral-infected patients shows that healthcare workers feel stressed and scared to treat viral-infected patients.

KEYWORDS

healthcare workers, willingness, treat, COVID-19, patients

1 Introduction

The outbreak of the novel coronavirus (COVID-19) has posed unprecedented challenges to healthcare systems worldwide, necessitating swift and adaptable responses from healthcare professionals across various disciplines (Spoorthy et al., 2020; Shaikh et al., 2022). Among these professionals, healthcare workers have provided psychosocial support, advocacy, and assistance to patients and their families during these times of crisis (Ness et al., 2021; Snoubar and Zengin, 2022). Their willingness and readiness to engage directly in the care of COVID-19 patients are crucial for ensuring comprehensive and effective healthcare delivery (McCready et al., 2023). However, the novelty of the virus has created a challenging environment, with some healthcare professionals hesitant to treat infected patients due to fear and uncertainty. This hesitance contrasts with their responsibility to treat and minimize the spread of the virus (Shaikh et al., 2022; Matta et al., 2023).

However, in Saudi Arabia, the healthcare landscape has rapidly evolved to manage the challenges posed by COVID-19 (Shaikh et al., 2022), which aims to save lives (Tripathi et al., 2020) and normalize the social and economic activities (Khan et al., 2021). As the pandemic continues to strain healthcare resources and infrastructure globally, understanding the perspectives and willingness of healthcare social workers in Saudi Arabia to treat COVID-19 patients becomes paramount. Recently, Wu et al. (2020) highlighted that the willingness of healthcare social workers to treat viral-infected patients is influenced by multifaceted factors, including personal beliefs, training adequacy, perceived risks, institutional support, and the broader socio-cultural context within which they operate. Despite the critical role of healthcare social workers in providing psychosocial support and advocacy, their willingness to directly treat viral-infected patients in Saudi Arabia remains underexplored (Matta et al., 2023). Understanding the factors influencing their readiness and the barriers they face is essential for optimizing healthcare delivery during past pandemics. Thus, there is a pressing need to investigate the willingness of healthcare social workers in Saudi Arabia to treat viral-infected patients to enhance their preparedness and effectiveness in responding to public health emergencies. The present study aims to investigate and conclude the willingness of healthcare workers to treat viral-infected patients in Saudi Arabia by employing the extended theory of planned behavior.

Notably, the global healthcare community continues to learn from the ongoing COVID-19 pandemic. The insights gained from this study are instrumental in strategizing policies and practices that bolster the resilience and preparedness of healthcare social workers in Saudi Arabia and beyond. Enhancing the willingness and capacity of healthcare social workers to treat patients infected with viruses is crucial for strengthening the overall healthcare response and ensuring comprehensive care for all individuals affected by the pandemic. This research provides valuable insights into the pivotal role of healthcare workers during the recent COVID-19 crisis, highlighting opportunities to foster their engagement in patient care. It contributes to the broader discourse on healthcare resilience in Saudi Arabia. By addressing these issues, the study aims to inform evidence-based strategies that support and empower healthcare workers in their mission to provide compassionate and effective care amid the challenges posed by pandemics.

In addition, this study explores and acknowledges the barriers that healthcare workers face in Saudi Arabia while treating viral-infected patients. These barriers may include personal safety, insufficient training, lack of resources, and cultural or social factors. Addressing these challenges is essential for developing targeted interventions and policies to support healthcare workers and optimize their patient care roles. Therefore, findings from the present study contribute to educating policymakers, healthcare institutions, and professional bodies on how to motivate healthcare workers to treat infected patients. Overall, findings from the present study strengthen support systems, improve training protocols, and enhance the resilience of healthcare social workers in responding to future pandemics or public health emergencies like Monkeypox.

2 Literature review and hypotheses development

This section employs and extends the theory of planned behavior to synthesize research on perceived behavioral control, attitudes, subjective norms, and emotion-focused coping, exploring their impact on healthcare professionals' willingness to treat viral-infected patients. After identifying key trends and gaps in the existing literature, the present study notably proposes to test the direct and indirect hypotheses. These hypotheses examine how these psychological constructs influence decision-making processes in medical settings.

2.1 Perceived behavioral control, emotion-focused coping, and willingness to treat viral infected patients

Perceived behavioral control is a fundamental dimension of the theory of planned behavior, effectively predicting individuals' perceptions of their ability to perform specific activities (Shubayr et al., 2020). Factors influencing perceived behavioral control include the availability of resources such as personal protective equipment, the adequacy of training, and perceived support from healthcare institutions. Prior research highlights that preventive and awareness behavior is vital for crafting customized interventions and aiding healthcare policymakers in identifying pandemic-related issues that require broad attention (Shubayr et al., 2020; Aschwanden et al., 2021). Ngwewondo et al. (2020) investigated and concluded that the healthcare staff, through a COVID-19 awareness and prevention program, exhibit positive emotions toward COVID-19 patients, motivating them to provide care. The emotions of healthcare professionals, whether favorable or unfavorable, play a significant role in their willingness to treat COVID-19 patients. However, due to the novelty of the pandemic, limited existing studies explore the key factors that motivate medical professionals to treat viral-infected patients during a pandemic (Riaz et al., 2020; AlMazeedi et al., 2020). Kaye et al. (2021) examined and confirmed a significant positive relationship between treating COVID-19 patients and the perceived efficacy of the pandemic response. Similarly, Saqlain et al. (2020) identified the novelty of the virus as a source of stress related to perceived efficacy, with fear playing a significant role among healthcare professionals. Following the above arguments and criticism, limited studies explore the link between perceived behavioral control and emotion-focused coping. Thus, the present study proposed the following hypothesis.

> *H1*: Perceived behavioral control significantly and positively impacts emotion-focused coping.

2.2 Attitudes, emotion-focused coping, and willingness to treat viral infected patients

Attitude is a key dimension of the theory of planned behavior, which is defined as an individual's liking or dislike of a particular behavior (Conner and Sparks, 2005; Shoaib and Saleem, 2023). In contrast, it is easier to describe a healthcare professional's positive or negative emotions in treating viral-infected patients if their behavior is defined. Saqlain et al. (2020) highlight that most medical professionals feared treating COVID-19 patients because of the pandemic's novelty and risk of getting infected, demonstrating their

unfavorable emotions toward affected people. Nonetheless, earlier research by Abdel Wahed et al. (2020) and Huynh et al. (2020) found a significant correlation between attitudes and emotional readiness to treat COVID-19 patients. Accordingly, Limbu et al. (2020) discussed that medical professionals show a significant positive attitude toward COVID-19 patients. At the beginning of the epidemic, most healthcare professionals found it difficult to be optimistic with COVID-19 patients. Furthermore, Olum et al. (2020) concluded that treating COVID-19 patients during the pandemic in Uganda is considerably aided by the upbeat attitude of healthcare professionals. Moreover, Nguyen et al. (2021) demonstrated that healthcare professionals' readiness to treat COVID-19 patients was compromised by uncertainties about which drugs to administer to positive patients as initial treatment and how to administer them properly. As a result, limited research has been carried out in developing countries, mainly Saudi Arabia. Therefore, this study proposed the following hypothesis to investigate the healthcare workers' attitudes toward emotion-focused coping to treat viral infected patients.

> *H2*: Attitude toward the viral infections pandemic significantly and positively impacts emotion-focused coping.

2.3 Subjective norms emotion-focused coping and willingness to treat viral infected patients

Subjective norms are defined as the influence of peers, family, and friends on how medical professionals handle COVID-19 patients (Patwary et al., 2021). Healthcare professionals are emotionally vulnerable to the COVID-19 virus due to its rapid transmission from person to person (Minuye et al., 2021). Despite the risk of infection, most healthcare professionals were often compelled by their social circles or personal inclinations to avoid treating or associating with COVID-19 patients (Sin and Rochelle, 2022). Empirical research has shown that subjective norms can influence healthcare professionals' willingness to treat COVID-19 patients by shaping their emotional responses to the pandemic. In this context, Godbersen et al. (2020) observed that social norms encourage healthcare personnel to adhere to preventative measures such as maintaining social distance, using face masks, and frequently washing and sanitizing hands. Additionally, Aschwanden et al. (2021) found that housekeepers in healthcare settings are required to rigorously follow all preventive guidelines when treating or visiting patients afflicted with COVID-19. A study in Ethiopia by Minuye et al. (2021) further revealed that most healthcare personnel's subjective norms positively inspire them to treat COVID-19 patients, highlighting the crucial role of healthcare professionals in saving lives during the pandemic by effectively communicating the risks involved. Therefore, despite the considerable danger of infection, healthcare professionals must continue to treat every COVID-19 patient with vigilance (Nguyen et al., 2021). Further, there is a lack of empirical studies that examine the relationship between subjective norms and emotion-focused coping strategies. Thus, the present study proposed the following hypothesis.

> *H3*: Subjective norms toward the viral infections pandemic significantly and positively impact emotion-focused coping.

2.4 Emotion-focused coping and willingness to treat viral infected patients

Emotion-focused coping involves managing emotions rather than changing the stressor (Nikolaev et al., 2023). This emotional approach is particularly relevant in healthcare settings, where healthcare professionals often face high-stress situations, such as treating patients infected with viruses (Sharma et al., 2020). Understanding how emotion-focused coping influences healthcare professionals' willingness to treat these patients can guide interventions to support them effectively. Riaz et al. (2020) found that emotion-focused coping positively impacts healthcare professionals' willingness to treat patients, indicating that those with higher levels of emotion-focused coping are more likely to treat viral-infected patients. Additionally, Nikolaev et al. (2023) highlighted that coping strategies such as seeking social support and positive reinterpretation help healthcare professionals manage stress and maintain a positive attitude toward challenging pandemic situations, potentially enhancing their willingness to engage in treatment. However, there is limited research on the relationship between emotion-focused coping and the willingness to treat viral-infected patients, especially in developing countries. According to Nikolaev et al. (2023), "emotion-focused coping—behaviors and thoughts to merely make them feel better (e.g., venting and denial)—which can then promote eudaimonic well-being such as a sense of personal growth and meaning" (p. 2123). Emotion-focused coping involves regulating individuals' positive or negative feelings and emotional responses to the problem instead of addressing the issue. In the present study, emotion-focused coping defines the medical social workers' emotional response toward treating COVID-19 patients. Therefore, the present study is among the first studies proposing to examine the direct link between emotion-focused coping and willingness to treat viral-infected patients in Saudi Arabia. Hence, the present study suggested the following hypothesis.

> *H4*: Emotion-focused coping significantly and positively impacts willingness to treat viral-infected patients.

2.5 The mediating role of emotion-focused coping

After the direct hypotheses, the present study aims to test the mediating role of emotion-focused coping between perceived behavioral control, attitudes toward the pandemic, subjective norms, and healthcare professionals' willingness to treat COVID-19 patients. This coping mechanism, which involves regulating emotional responses rather than altering the stressful situation (Riaz et al., 2020), is particularly relevant in the high-stress context of a pandemic (Saqlain et al., 2020). For instance, perceived behavioral control, reflecting individuals' beliefs in their capabilities to perform tasks, directly influences their willingness to act (Shaikh et al., 2022). However, the actual engagement in treating patients may depend on how these individuals manage the emotional toll such responsibilities entail. Similarly, attitudes toward the pandemic can significantly affect emotional states, shaping behavior (Aschwanden et al., 2021). Negative attitudes might reduce willingness unless effectively managed through emotion-focused coping (Zhong et al., 2024). Likewise, subjective norms influence perceived social pressures and

expectations, enhancing or diminishing motivation depending on emotional coping strategies (Shaikh et al., 2022). Thus, emotion-focused coping is a crucial bridge, converting intrinsic beliefs and external pressures into practical readiness to face challenging healthcare tasks. Therefore, this study proposed the following mediating hypotheses.

> *H5*: Emotion-focused coping mediates the relationship between perceived behavioral control and willingness to treat COVID-19 patients.
>
> *H6*: Emotion-focused coping mediates the relationship between attitudes toward the pandemic and willingness to treat COVID-19 patients.
>
> *H7*: Emotion-focused coping mediates the relationship between subjective norms toward the pandemic and willingness to treat COVID-19 patients.

2.6 Underpinning theory

The theory of planned behavior is a prominent psychological framework used to understand and predict human behavior in various contexts, including healthcare settings. Developed by Icek Ajzen in the late 1980s (Ajzen, 1991). The theory of planned behavior posits that an individual's behavioral intentions are influenced by three main dimensions, i.e., attitudes, subjective norms, and perceived behavioral control (Fishbein and Ajzen, 2010). Montano and Kasprzyk (2015) stated that the theory of planned behavior builds upon its predecessor, the theory of reasoned action, by incorporating the concept of perceived behavioral control. The theory of reasoned action suggests that attitudes toward behavior and subjective norms drive behavioral intentions. Ajzen extended this theory to include perceived behavioral control, which reflects the perceived ease or difficulty of performing the behavior (Fishbein and Ajzen, 2010).

Empirically, the theory of planned behavior has been widely applied in healthcare research to investigate various behaviors among healthcare professionals, including their willingness to treat patients under specific conditions (Ko et al., 2004; Patwary et al., 2021; Shaikh et al., 2022). In the context of infectious diseases, such as during the COVID-19 pandemic, the theory of planned behavior has been particularly relevant in understanding healthcare workers' attitudes and intentions toward treating infected patients. Practically, in Saudi Arabia, the COVID-19 pandemic has highlighted the importance of understanding healthcare workers' willingness to treat viral-infected patients (Shubayr et al., 2020). Post-pandemic, applying the theory of planned behavior can provide valuable insights into the factors influencing the intentions of healthcare social workers in this regard. Post-pandemic, empirical studies like (Alshehri et al., 2024) applied the theory of planned behavior in Saudi Arabia to investigate healthcare workers' willingness to treat viral-infected patients. Research findings informed healthcare policies and interventions to enhance healthcare workers' readiness and willingness to respond to future infectious disease outbreaks.

Overall, the theory of planned behavior provides a robust framework for exploring the complex dynamics influencing healthcare social workers' willingness to treat viral-infected patients in Saudi Arabia post-COVID-19 pandemic. By examining attitudes, subjective norms, and perceived behavioral control, researchers can gain valuable insights to support healthcare workforce preparedness and enhance patient care strategies in infectious disease contexts.

3 Methods

A close-ended questionnaire was administered in public, private, and semi-government hospitals in Riyadh, the capital city of Saudi Arabia, from June 2022 to February 2024. The ultimate motivation for choosing Riyadh as a survey site is that several healthcare professionals were affected in Riyadh while treating COVID-19 patients during the pandemic (Aleanizy et al., 2021). Furthermore, the number of positive cases of COVID-19 was higher in Riyadh than in other cities in Saudi Arabia (Alharbi et al., 2021). However, before starting this survey, the selected hospitals and COVID-19 facilities centers were visited to identify the distinctive features of participants working in these hospitals. Then, the top management was reached, and permission was requested from the targeted respondents to conduct this survey. In addition, before starting the survey, participants were briefed about the study's objectives and informed that they could choose not to participate or withdraw at any point. Furthermore, the researchers followed ethical standards for human research, maintaining the anonymity and confidentiality of participants throughout the study. Using a convenience sampling approach, data was gathered solely via an online survey distributed through multiple platforms such as WhatsApp and email. According to Irfan et al. (2021), the convenience sample approach is more valuable and accessible for surveying specific contexts, such as experimental behavioral research.

3.1 Demographic characteristics

To obtain the aim of the present study, 300 questionnaires were distributed among healthcare professionals, from which 283 were returned. Demographically, 74.5% of respondents were male, and 24% were female; the majority of the age group was 36–45 years old, 43.9%. Furthermore, the demographic information of the respondents is presented in Table 1. All the demographic information was calculated utilizing SPSS software.

3.2 Measurements

A research model based on the five constructs (i.e., attitudes, subjective norms, perceived behavioral control, emotion-focused coping, and willingness to treat viral-infected patients) was developed for the current study. Thus, the current study's research model was developed using an extended theory of planned behavior. Additionally, attitudes, subjective norms, perceived behavioral control, and willingness to treat viral-infected patients measuring items were adapted from Shaikh et al. (2022), while emotion-focused coping was derived from Nikolaev et al. (2023). In the present study, behavioral disengagement was measured, as suggested by Nikolaev et al. (2023). Furthermore, the present study applied a static measure to measure coping behavior. As a result, the paper

TABLE 1 Demographic characteristics.

	Items	Frequency	Percentage
Gender	Male	211	74.55
	Female	72	24.55
Age	18–25	33	11.60
	26–35	51	18.02
	36–45	102	36.04
	45 and above	97	34.27
Educational background	MBBS	167	59.01
	PG Diploma	97	34.27
	Other	19	6.71
Working sector	Public	193	68.19
	Private	23	8.12
	Semi-public and private	67	23.67
Working experience	<1 year	88	31.09
	1–3	54	19.08
	4–7	48	16.96
	7–10	64	22.61
	More than 10 years	29	10.24

also made certain modifications considering the present study's setting.

Additionally, the questions were measured using a five-point Likert scale (1 being strongly disagree and five being strongly agree) (Johns, 2010). According to Saleem et al. (2022), item factor loadings were considered >0.06. Hence, five items of emotion-focused coping loading values were lower than 0.06; thus, these items were deleted from consideration for the study's hypothetical analysis (Saleem et al., 2023). Nonetheless, Cronbach's Alpha ranged from 0.703 to 0.851, composite reliability (CR) ranged from 0.705 to 0.885, and finally, average variance extracted (AVE) from 0.501 to 0.510 were used to calculate the constructs' reliability and validity tests. According to the statistical results, all constructs fit within the study's parameters (Wong, 2013). Thus, Table 2 and Figure 1 present the model's factor loading, reliability, and validity. Therefore, Table 3 and Table 4 indicate the present study model's discriminant validity.

The results from Tables 3, 4 provide insight into the discriminant validity of the constructs under investigation, assessed through the Heterotrait-Monotrait Ratio (HTMT) and Fornell-Larcker criterion.

Table 3 highlights the HTMT values, a more rigorous approach to evaluate discriminant validity. The HTMT values for all construct pairs are below the conservative threshold of 0.85, except for emotion-focused coping with subjective norms (0.880) and willingness to treat viral-infected patients (0.891). These high values suggest potential issues with discriminant validity between these constructs, indicating they may overlap conceptually.

Table 4 presents the Fornell-Larcker criterion results, where the square root of the average variance extracted (AVE) for each construct (diagonal values) should exceed its correlations with other constructs. All constructs meet this criterion, implying an acceptable level of discriminant validity. For instance, attitudes (0.714) and subjective norms (0.711) exceed their correlations with other constructs, confirming that they capture distinct concepts.

TABLE 2 Measurement items.

Constructs/items	Loading	α	CR	AVE
Perceived behavioral control		0.737	0.785	0.508
PBC1	0.789			
PBC2	0.640			
PBC3	0.709			
PBC4	0.644			
Attitudes		0.703	0.805	0.510
ATT1	0.681			
ATT2	0.616			
ATT3	0.724			
ATT4	0.821			
Subjective norms		0.670	0.802	0.770
SN1	0.687			
SN2	0.770			
SN3	0.603			
SN4	0.770			
Emotion-focused coping		0.851	0.885	0.501
EFC4	0.744			
EFC5	0.713			
EFC8	0.721			
EFC9	0.660			
EFC10	0.676			
EFC11	0.676			
EFC12	0.714			
EFC13	0.688			
Willingness to treat viral infected patients		0.739	0.786	0.509
WTP1	0.665			
WTP2	0.738			
WTP3	0.687			
WTP4	0.678			

4 Data analysis

The direct and indirect relationship between attitudes, subjective norms, perceived behavioral control, emotion-focused coping, and willingness to treat viral-infected patients was examined using structural equation modeling (SEM) using SmartPLS software. Crockett (2012) states that SEM assesses the study model and the structural coefficient path estimate. Researchers in the social and management sciences frequently use SEM methodologies to evaluate the validity and dependability of their research models (Saleem et al., 2022). Furthermore, the best methods, "covariance-based" (CB-SEM) and "partial least squares," are often used to assess the study's structural model. Consequently, PLS-SEM test procedures were used to examine the complex relationship between the constructs, provide route coefficient values, and support the theoretical techniques used in the study (Hair et al., 2017). Therefore, the direct and indirect relationships between attitudes, subjective norms, perceived behavioral control,

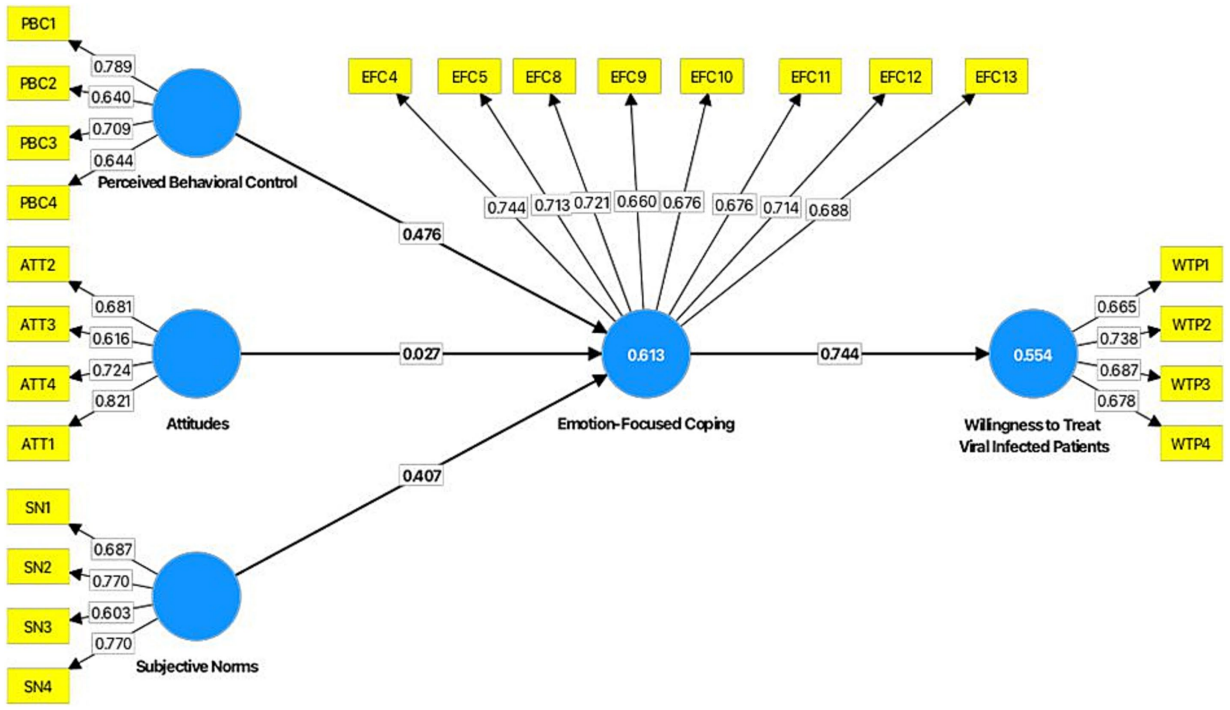

FIGURE 1
Structural model.

emotion-focused coping, and willingness to treat viral-infected patients were ascertained using a bootstrapping approach with 5,000 subsamples and the t-statistic. In the structural model (Figure 1 and Table 4), path coefficients and coefficients of determination (R^2) are finally displayed.

4.1 Hypotheses testing

To achieve the objectives of the present study, we developed five direct hypotheses and tested the estimated relationships using Partial Least Squares Structural Equation Modeling (PLS-SEM) through SmartPLS. Four of the five hypotheses were supported, and the overall statistical findings are detailed below.

The first hypothesis (H1) indicates that perceived behavioral control significantly predicts emotion-focused coping strategies among healthcare social workers where the (t = 4.96). Higher perceived control over their actions and decisions in treating viral-infected patients correlates positively with the tendency to adopt emotion-focused coping mechanisms.

The second hypothesis (H2) shows that the attitudes toward treating viral-infected patients do not significantly predict the use of emotion-focused coping strategies, and the statistical results are presented as (t = 0.048). This suggests that healthcare workers' evaluations (attitudes) regarding patient treatment do not influence their coping strategies to manage emotional responses.

The third hypothesis (H3) statistically shows that the (t = 4.413) presents that the subjective norms, which reflect perceived social pressures and expectations, significantly predict emotion-focused coping strategies. Healthcare workers who perceive strong social norms regarding patient treatment are more likely to employ emotion-focused coping methods.

The fourth hypothesis (H4) illustrated that the (t = 11.688), which interpreted that the emotion-focused coping strategies significantly predict healthcare social workers' willingness to treat viral-infected patients. Those who use more emotion-focused coping mechanisms are more inclined to express a willingness to engage in patient

TABLE 3 HTMT discriminate validity.

Constructs	1	2	3	4	5
Attitudes					
Emotion-focused coping	0.402				
Perceived behavioral control	0.447	0.816			
Subjective norms	0.611	0.880	0.852		
Willingness to treat_viral infected patients	0.643	0.891	0.893	0.803	

TABLE 4 Fronell-Larcker criterion discriminate validity.

Constructs	1	2	3	4	5
Attitudes	0.714				
Emotion-focused coping	0.344	0.700			
Perceived behavioral control	0.296	0.679	0.693		
Subjective norms	0.408	0.667	0.551	0.711	
Willingness to treat_viral infected patients	0.444	0.643	0.579	0.671	0.692

TABLE 5 Direct hypotheses.

Path	Original sample (O)	T statistics	*p*-values
Perceived behavioral control → Emotion-focused coping	0.442	4.960	0.000
Attitudes → Emotion-focused coping	0.048	0.736	0.462
Subjective norms → Emotion-focused coping	0.404	4.413	0.000
Emotion-focused coping → Willingness to treat viral infected patients	0.743	11.688	0.000

TABLE 6 Mediating hypotheses.

	Original sample (O)	*T*-value	*P*-values
Perceived behavioral control → Emotion-focused coping → Willingness to treat viral infected patients	0.354	7.133	0
Attitudes → Emotion-focused coping → Willingness to treat viral infected patients	0.02	0.434	0.664
Subjective norms → Emotion-focused coping → Willingness to treat viral infected patients	0.303	4.055	0

treatment despite the challenges posed by infectious diseases. Therefore, overall direct hypothetical results are presented in Table 5.

The present study also tested the mediating role of emotion-focused coping between perceived behavioral control, attitudes, and willingness to treat viral-infected patients. Therefore, we developed three mediating hypotheses, which are discussed below.

The fifth hypothesis (H5) of this study shows that the $t = 7.133$ indicates a positive relationship between perceived behavioral control and willingness to treat viral-infected patients through emotion-focused coping.

The sixth hypothesis (H6) demonstrated that the insignificant relationship between attitudes and willingness to treat viral-infected patients mediates by emotion-focused coping, where the ($t = 0.434$).

The seventh hypothesis (H7) statistically shows that the ($t = 4.055$) confirmed that emotion-focused coping mediates the relationship between subjective norms and willingness to treat viral-infested patients.

Overall, perceived behavioral control and subjective norms positively affect the willingness to treat viral-infected patients through emotion-focused coping. In contrast, attitudes do not significantly affect the willingness to treat viral-infected patients through emotion-focused coping. Therefore, the overall mediating hypotheses results are presented in Table 6.

5 Discussion

The present study aims to investigate and conclude the direct and indirect relationship between perceived behavioral control, attitudes, subjective norms, emotion-focused coping, and willingness to treat viral-infected patients among healthcare social workers. Overall findings show mixed results on the factors influencing healthcare workers' readiness and decision-making in challenging healthcare contexts.

First, perceived behavioral control is a critical determinant of healthcare workers' willingness to treat viral-infected patients (Shaikh et al., 2022). The significant positive relationship indicates that healthcare social workers who feel more confident and in control of their emotional ability to manage patient care are more inclined to express readiness to treat viral infections. This finding highlighted the importance of self-efficacy in healthcare settings, particularly during infectious disease outbreaks where effective patient management is essential. In this regard, Shubayr et al. (2020) suggested that interventions to enhance healthcare workers' perceived control over their emotional actions and decisions could bolster their preparedness and resilience in responding to public health emergencies.

Second, in contrast to perceived behavioral control, attitudes toward treating viral-infected patients did not significantly predict emotion-focused coping to treat (Aschwanden et al., 2021). This unexpected result suggests that while healthcare workers may hold personal beliefs and evaluations about patient care, these attitudes may not directly translate into their willingness to treat infected patients (Alshehri et al., 2024). The lack of a significant relationship between attitudes and emotion-focused coping strategies suggests that healthcare workers' evaluations of treating patients are not strongly tied to how they manage emotional responses. This could be attributed to the nature of coping, which may be influenced more by individual psychological traits, situational stress, or institutional support than evaluative attitudes. Healthcare workers might rely on pre-established coping mechanisms irrespective of their views on treating patients, especially in high-stress environments like pandemics.

Theoretically, this study highlights the importance of distinguishing between fear-based and positive attitude components in measuring attitudes. Emotional biases, heightened by stress, may skew responses, reflecting fear rather than genuine evaluative intentions. Practically, healthcare institutions must address these emotional barriers through psychological support, training, and resource adequacy to realign attitudes with the willingness to treat. Future research should integrate multidimensional attitude scales and consider contextual stressors to provide a nuanced understanding of these relationships.

This finding of the present study challenges conventional assumptions about the importance of attitudes in shaping healthcare emotions. It highlights the need to explore the interplay between attitudes and other influencing factors, such as perceived control and subjective norms.

Third, subjective norms, reflecting perceived social pressures and expectations, significantly predict healthcare workers' emotion-focused coping to treat viral-infected patients (Shaikh et al., 2022). This finding highlights the role of the social environment in shaping healthcare professionals' behavioral intentions. Healthcare workers are

influenced by the norms and expectations within their professional and social circles, which can encourage or discourage their willingness to engage in patient care during infectious disease outbreaks (Wu et al., 2020; Sims et al., 2022). Understanding and leveraging these social dynamics are crucial for fostering a supportive and encouraging environment that promotes healthcare workers' emotional commitment to patient care amidst public health challenges.

Fourth, emotion-focused coping plays a significant role in influencing healthcare professionals' willingness to treat viral-infected patients. Such a coping strategy involves managing the emotional distress of challenging situations rather than directly addressing the problem. In healthcare, especially when dealing with highly contagious and potentially dangerous viral infections, emotion-focused coping can help professionals navigate the emotional and psychological hurdles of treating such patients (Nikolaev et al., 2023). According to Riaz et al. (2020), emotion-focused coping allows healthcare professionals to regulate their emotional responses, reducing anxiety, fear, and stress associated with treating viral-infected patients. By managing these emotions, professionals can maintain a calmer, more composed state crucial for effective patient care. Regular engagement in emotion-focused coping strategies, such as seeking social support, engaging in relaxation techniques, or practicing mindfulness, can enhance mental resilience (Nikolaev et al., 2023).

Fifth, a strong positive relationship between perceived behavioral control and willingness to treat viral-infected patients through the mediator of emotion-focused coping. Findings suggest that when healthcare professionals feel confident in their ability to manage and treat viral infections, they are more likely to use emotion-focused coping strategies, which enhances their willingness to treat such patients. This significance emphasizes empowering healthcare professionals with skills, training, and resources to boost their perceived control over their actions (Riaz et al., 2020).

Sixth, the findings of this study suggest that positive attitudes toward treating viral-infected patients do not necessarily lead to an increased willingness to treat them through emotion-focused coping. It might imply that attitudes alone, without the support of coping mechanisms or other factors, are insufficient to influence healthcare professionals' willingness to engage in challenging clinical tasks (Limbu et al., 2020; Sims et al., 2022).

Seventh, a substantial positive relationship between subjective norms and willingness to treat viral-infected patients through emotion-focused coping. Overall findings suggest that when healthcare professionals perceive intense social pressures or support to treat viral-infected patients, they are more likely to engage in emotion-focused coping, which increases their willingness to treat such patients (Olum et al., 2020; Hernández-Fernández and Meneses-Falcón, 2022). This highlights the role of social influence and the importance of creating a supportive and encouraging work environment.

6 Implications

6.1 Implications for practice and policy

These findings of the present study have important implications for healthcare practice and policy. Firstly, interventions to strengthen healthcare workers' perceived behavioral control, such as training programs focused on infection control measures and patient management strategies, could enhance their confidence and preparedness in handling viral-infected patients. Secondly, efforts to cultivate supportive and normative environments within healthcare settings may encourage greater willingness among healthcare workers to participate in patient care during infectious disease outbreaks. Strategies could include promoting team cohesion, providing adequate resources and support, and addressing safety and risk management concerns.

6.2 Implications for policy development

Policymakers can use the study's findings to inform evidence-based policies to enhance healthcare workforce resilience and preparedness during infectious disease outbreaks. Policies should prioritize investments in healthcare infrastructure, including adequate supply chains for personal protective equipment (PPE), robust infection prevention and control measures, and comprehensive healthcare worker training programs. By implementing policies that support healthcare workers' perceived behavioral control and address influential subjective norms, governments and healthcare organizations can strengthen the healthcare system's capacity to respond effectively to public health emergencies.

Furthermore, policy initiatives should aim to promote interdisciplinary collaboration and knowledge exchange across healthcare sectors. Engaging stakeholders from public health, epidemiology, behavioral sciences, and healthcare administration can facilitate a holistic approach to pandemic preparedness and response. By fostering partnerships and leveraging expertise from diverse disciplines, policymakers can develop innovative strategies and adaptive solutions that enhance healthcare workforce readiness and mitigate the impact of infectious disease outbreaks on healthcare delivery systems.

7 Conclusion

This study aimed to determine if medical professionals were willing to treat COVID-19 patients during the pandemic. Therefore, to thoroughly test all the potential indicators that might motivate healthcare professionals to treat COVID-19 patients during the pandemic, the structural model using the theory of planned behavior was expanded in this paper by incorporating five constructs (i.e., perceived behavioral control, attitudes, subjective norms, emotion-focused coping, and willingness to treat viral infected patients). A survey was conducted in Riyadh, Saudi Arabia, using PLS-SEM approaches to test the assumptions. Overall results indicate that healthcare staff's willingness to treat COVID-19 patients is favorably impacted by perceived behavioral control, subjective norms, and emotion-focused coping, where attitudes show negative results. Conversely, regarding the impression of the pandemic's efficacy and the perceived danger of successfully shaping the willingness of healthcare workers to treat COVID-19 patients in Saudi Arabia, the Ministry of Health and the Government of Saudi Arabia should pay more attention to these indicators. It should also be emphasized how important it is to restructure and set up healthcare professionals' training programs so they can learn how to minimize the perceived danger and effectiveness of the

pandemic. As a result, these actions may eventually encourage physicians to treat patients during a national pandemic.

8 Limitations and future directions

While this study provides valuable insights, several limitations should be considered. The findings are based on a specific sample and context, which may limit their generalizability to other healthcare settings or regions. Future research could explore these relationships across diverse populations and healthcare disciplines to validate the findings and identify potential cultural or contextual variations. Additionally, longitudinal studies could investigate how these factors evolve over time and in response to different phases of infectious disease outbreaks, providing a deeper understanding of healthcare workers' adaptive behaviors and decision-making processes.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

AA: Writing – original draft, Writing – review & editing.

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Conflict of interest

The author declares that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fsoc.2025.1461479/full#supplementary-material

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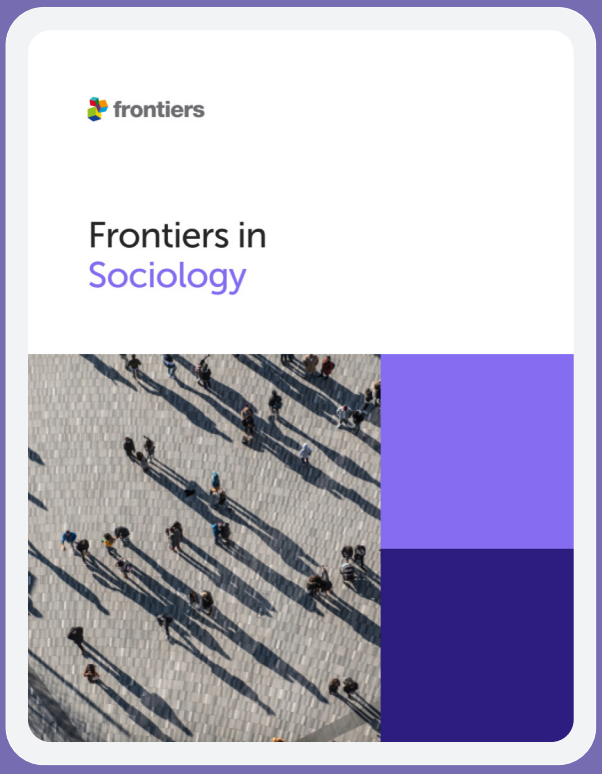

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