BRIEF REPORT

Healthcare workers' distress and perceived discrimination related to COVID-19 in Colombia

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Abstract

This study examined the association of perceived discrimination related to COVID-19 with psychological distress in healthcare workers in the Colombian Caribbean region. The authors designed and conducted a cross-sectional study, recruiting a non-probabilistic sample by email or instant messaging. Participants filled out a questionnaire including scales for perceived discrimination, anxiety, depression, perceived stress related to COVID-19, and suicide risk. Healthcare workers ($n = 150$) aged 18 to 68 years participated; of these, 72% were women, and the breakdown by occupation was 39.3% nursing assistants, 18.0% nurses, and 42.7% physicians. Perceived discrimination scores showed positive correlations with depressive symptoms among nursing assistants and physicians ($r_s = 0.34$), and suicide risk in nursing assistants ($r_s = 0.35$) and physicians ($r_s = 0.31$). Among nurses, all measurements were independent of perceived discrimination. Nursing assistants scored highest in perceived discrimination. Physicians scored higher for COVID-19 perceived stress than nursing assistants, and nurses showed similar scores to physicians. In conclusion, perceived discrimination is related to depressive symptoms and suicide risk among nursing assistants and physicians. Nursing assistants report more perceived discrimination than nurses and physicians.

KEYWORDS
healthcare workers, psychological distress, SARS virus, social discrimination stigma COVID-19

Key points
- The COVID-19 pandemic has had negative social impacts on healthcare workers, including stigma and discrimination.
- Discrimination is a significant stressor and affects mental and physical health.
- Discrimination can be associated with perceived stress, depressive symptoms, and suicide risk.

1 | INTRODUCTION

The COVID-19 pandemic is having several negative social impacts on health workers, including discrimination by the general population (Cassiani-Miranda et al., 2020). Beyond this, some healthcare workers even self-stigmatize (Zolnikov & Furio, 2020). Discrimination has a negative impact on mental and physical health because it is a significant stressor (Meyer, 2003).

Some researchers reported a significant relationship between perceived stigma, discrimination, and psychological distress in the general

population before the COVID-19 pandemic (Mak et al., 2007; Schmitt et al., 2014). Similarly, Wang et al. (2020) reported high psychological distress and discrimination among Chinese citizens during the COVID-19 pandemic, while Monterrosa-Castro et al. (2020) found a significant association between social discrimination and symptoms of generalized anxiety among Colombian physicians.

Perceived discrimination has also been frequent in health personnel during the COVID-19 pandemic. Uvais et al. (2020) found that perceived stigma correlated to perceived stress among dialysis technicians and nurses. Ramaci et al. (2020) reported that stigma–discrimination led to burnout in a large hospital, while Zandifar et al. (2020) showed a strong significant correlation between stigma and post-traumatic stress symptoms in general hospital workers.

Our goal in this study was to examine the association of perceived discrimination related to COVID-19 with psychological distress among healthcare workers in the Caribbean region of Colombia.

2 | METHODS

2.1 | Design and ethical considerations

This is a cross-sectional study for which the Research Ethics Board at Universidad del Magdalena, Santa Marta, Colombia gave approval. All participants gave informed consent (World Medical Association, 2018) and all the instruments applied are free to use in their Spanish versions.

2.2 | Participants

The sample was non-probabilistic. The authors sent an invitation by email or instant message to nursing assistants, nurses, and physicians living in the Colombian Caribbean region and collected data between October 1 and November 30, 2020. The sample was expected to include at least 100 participants, which would be an acceptable number for parametric comparisons (Hernández Blanco, 2006).

2.3 | Variables

Participants filled out an electronic form that included demographic information and scales for measuring perceived discrimination, anxiety, depression, perceived stress related to COVID-19, and suicide risk.

2.3.1 | Perceived discrimination

We used four items adapted from the Experiences of Discrimination Questionnaire to quantify perceived discrimination, for

example, "have you experienced being stigmatised for caring for patients during the pandemic?" Each item offered a dichotomous response (Krieger et al., 2005) and each affirmative answer is assigned a point. In this study, the Cronbach's alpha was 0.80.

2.3.2 | Anxiety

The five-item version of Zung's anxiety scale measures anxiety during the previous month (De La Ossa et al., 2009). Each item offers four scores from one to four; a higher score indicates significant levels of anxiety. In the present sample, the scale had a Cronbach's alpha of 0.82.

2.3.3 | Depression

The Patient Health Questionnaire (PHQ-9) quantified depressive symptoms in the previous 2 weeks (Kroenke et al., 2001). The PHQ-9 comprises nine items that offer four answers with possible scores from zero to three; the higher the scores, the more severe the depression.

2.3.4 | Perceived stress related to COVID-19

The pandemic-related Perceived Stress Scale of COVID-19 (PSS-10-C) includes 10 items exploring stress perception in the previous month (Campo-Arias et al., 2020). The PSS-10-C offers five options with possible scores from zero to four; the higher the score, the higher the perceived stress. In the present study, the PSS-10-C showed a Cronbach's alpha of 0.76.

2.3.5 | Suicide risk

The Suicidal Ideation Scale of the Centre for the Epidemiological Study of Depression (CES-D-SI) explored suicide risk. This instrument explores suicide risk in the previous 2 weeks with four items that present four options with possible scores from zero to three; the higher the score, the higher the suicide risk (Roberts, 1980). In the current sample, the CES-D-SI had a Cronbach's alpha of 0.38.

2.4 | Data analysis

We calculated the frequencies (percentages), means (with standard deviations), and medians (with interquartile ranges), and used Spearman's correlations (r_s) to establish the association between perceived discrimination and psychological distress indicators. We used the t- and F-tests to compare scores according to profession. Correlations were more generous than 0.30, and other statistical tests that showed p-values <5% were accepted as significant.

TABLE 1 Scores on measurements

Measurement	Low-high	M (SD)	Me (IQR)
Discrimination experiences	0–4	1.22 (1.43)	0.5 (0–3)
Anxiety symptoms	5–19	8.56 (2.64)	8 (7–10)
Depressive symptoms	0–22	2.91 (3.97)	1 (0–4)
COVID-19 perceived stress	0–37	12.35 (5.88)	12 (8–16)
Suicide risk	0–6	0.69 (1.28)	0 (0–1)

Abbreviations: IQR, interquartile range; M, mean; Me, median; SD, standard deviation.

TABLE 2 Means (standard deviations) of the measurements according to profession

Measurement	Assistant nurses	Nurses	Physicians
Discrimination experiences	1.78 (1.54)[a]	0.85 (1.23)[a]	0.86 (1.25)[a]
Anxiety symptoms	8.15 (2.18)	8.52 (2.58)	8.95 (2.86)
Depressive symptoms	2.54 (4.02)	2.63 (2.45)	3.88 (4.42)
COVID-19 perceived stress	11.08 (5.40)[b]	12.15 (5.17)	13.59 (6.38)[b]
Suicide risk	0.66 (1.27)	0.81 (1.50)	0.67 (1.21)

[a]Significantly higher among assistance nurses than nurses ($p = 0.004$) and physicians ($p = 0.001$).
[b]Significantly higher among physicians than assistance nurses ($p = 0.021$).

3 | RESULTS

One-hundred and fifty healthcare workers aged between 18 and 68 years (M = 39.6, SD = 11.1) participated in the study. Of these, 72% were women ($n = 108$); the breakdown by occupation was 39.3% nursing assistants ($n = 59$), 18.0% nurses ($n = 27$), and 42.7% physicians ($n = 64$). Table 1 presents the scale scores.

The scores for experiences of discrimination revealed positive correlations with the depressive symptom scores (both $r_s = 0.34$) and suicide risk in nursing assistants ($r_s = 0.35$) and physicians ($r_s = 0.31$). Among nurses, all measurements were independent of perceived discrimination. Nursing assistants scored higher in perceived discrimination than nurses and physicians. Physicians scored higher for COVID-19 perceived stress than nursing assistants, and nurses showed similar scores to physicians (see Table 2).

4 | DISCUSSION

The relationship between perceived discrimination and psychological distress observed is consistent with previous reports showing that stigma–discrimination phenomena are harmful to mental health (Park et al., 2018; Ramaci et al., 2020; Uvais et al., 2020; Zandifar et al., 2020).

The lack of association between perceived discrimination and psychological distress in nurses and the asymmetric distribution of perceived discrimination, which appears more frequently for nursing assistants, is striking in these findings. Many variables can affect this association, depending on the context (Mak et al., 2007; Schmitt et al., 2014; Wang et al., 2020). Meanwhile, the occupation's social status may explain the fact that the most significant number of perceived discrimination situations were recorded among nursing assistants.

Nursing assistants have a lower social status than nurses and physicians as the occupation only requires two or three semesters of technical training. Therefore, nursing assistants may fall victim to discrimination more often than physicians and nurses (Lynn & Ellerbach, 2017).

4.1 | Relevance for clinical practice

Like other stressors, perceived discrimination adversely affects health workers' practice by undermining decision-making and interaction with patients, family members, and co-workers (Menon et al., 2020; Payne et al., 2020). Moreover, Chew et al. (2021) found that perceived stigma related to COVID-19 may decrease health personnel's willingness to receive the vaccine as they may believe that the vaccine can cause infection.

Hospitals' management structures must guarantee biosafety provisions for health workers, as a lack increases the stress risk (Monterrosa-Castro et al., 2020), and measures should be implemented to manage the higher stress levels associated with personal and family concerns and a more significant number of deaths during working hours to guarantee healthcare worker's emotional well-being. Independent mental health professionals can implement measures such as cognitive-behavioral therapy to strengthen psychosocial adaptation skills during the pandemic; aid in dealing with emotional expression and management; and perceived and internalized discrimination (Weiner et al., 2020).

An assessment of the impact of the COVID-19 pandemic on health workers must consider population heterogeneity in perceived discrimination and skills in coping with stressors associated with the work environment. Strategies may differ according to the group affected, namely, physicians and nursing assistants (Cassiani-Miranda & Campo-Arias, 2020).

4.2 | Conclusions

In conclusion, perceived discrimination correlates with depressive symptoms and suicide risk in nursing assistants and doctors. Nursing assistants report more perceived discrimination than nurses and doctors. Findings indicate a differential impact of the COVID-19 pandemic on healthcare workers in the Colombian Caribbean region. Hospitals must implement actions to help nursing assistants face perceived discrimination adaptively, and doctors to more objectively assess the situations associated with patient care during the COVID pandemic. These observations are provisional.

AUTHOR CONTRIBUTIONS

Adalberto Campo-Arias contributed to the study conception, data interpretation, and statistical analysis; drafted the article; and revised and approved the final version. María Paola Jiménez-Villamizar and Carmen Cecilia Caballero-Domínguez contributed to the study design, data interpretation, and revised the intellectual content, and approved the final version.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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