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#### **Original Article**

# Characterization of primary health care professionals in a Pernambuco municipality during the COVID-19 pandemic

Caracterização dos profissionais da atenção primária à saúde de um município pernambucano durante a pandemia da COVID-19

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#### Abstract

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Objective: To characterize the profile of primary healthcare professionals in a municipality of Pernambuco state during the coronavírus disease (COVID-19) pandemic. Methods: This cross-sectional study included 33 healthcare professionals from the family health strategies teams in Olinda, Pernambuco. Data were collected using a Google form after participants accepted and signed the informed consent form. Variables were expressed as absolute frequencies. Results: Most participants were community health agents, nurses, physicians, and nursing and pharmacy technicians. Of these, 84.8% were female, aged between 31 and 50, and possessed either technical or higher education. Half of the participants tested positive for COVID-19; 60% were diagnosed by PCR. Although all participants used personal protective equipment (PPE), only 14.3% reported no absence from work. Conclusion: Primary healthcare professionals were susceptible to COVID-19 despite not being on the front line. PPE was insufficient to prevent the disease, leading to absence from work.

Keywords: COVID-19; Health personnel; Primary health care.

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#### Resumo

**Objetivo:** Caracterizar o perfil dos profissionais da Atenção Primária à Saúde de um município pernambucano durante a pandemia da COVID-19. **Métodos**: Trata-se de uma pesquisa quantitativa, observacional do tipo transversal. Os participantes voluntários foram 33 profissionais de saúde das equipes de Estratégias de Saúde da Família do município de Olinda, Pernambuco. Os dados foram coletados por meio do Google formulário após o aceite e assinatura do Termo de Consentimento Livre e Esclarecido (TCLE) de todos os participantes. As variáveis foram expressas como frequência absoluta. **Resultados**: A maioria dos profissionais eram os Agentes Comunitários de Saúde (ACS), enfermeiros e os técnicos de enfermagem e farmácia. Destes profissionais que eram técnicos ou com formação superior. Houve uma prevalência de 50% testarem positivo para COVID-19, destes 60% diagnosticados pelo PCR. Todos os entrevistados relataram utilizar equipamento de proteção individual (EPI) e apenas 14,3% não relataram afastamento do trabalho. **Conclusão**: Percebe-se que os profissionais da atenção primária à saúde também estiveram susceptíveis ao coronavírus, mesmo não estando na linha de frente do combate à pandemia. O uso de EPIs pela totalidade dos entrevistados não foi suficiente para a prevenção da doença, refletindo no afastamento das atividades laborais destes profissionais.

Palavras-chave: COVID-19; Profissionais de saúde; Atenção primária à saúde.

### INTRODUCTION

The World Health Organization (WHO) has been on alert since the first cases of the coronavirus disease (COVID-19) were identified by the end of 2019. This disease spread progressively worldwide, reaching more than 110 countries and creating great concern due to its high rate of transmissibility and severity in some cases. As a result, the WHO classified the disease as a pandemic on March 11, 2020. In Brazil, the first case of COVID-19 was diagnosed on February 26, 2020, and one year later, the country had more than nine million cases and more than 200 thousand deaths.<sup>1-6</sup>

Given the rapid progression of the pandemic, social distancing proved to be the most appropriate measure, following the experiences of other countries. This measure was essential to avoid overcrowding in the unified health system (SUS, Brazil) and ensure adequate access to the population, reducing the number of cases requiring care in intensive care units and ventilatory support.<sup>3,7,8</sup>

Despite widespread implementation of control measures, the COVID-19 pandemic is devastating. In addition, healthcare professionals working at the front line of the COVID-19 pandemic are one of the main risk groups because they directly deal with infected patients.

In this sense, the need for training and the proper use of personal protective equipment (PPE) was essential to prevent contamination. However, many healthcare professionals were infected due to the rapid spread of the COVID-19 pandemic, impairing their personal and professional lives and leading to death in the most serious cases.<sup>9-12</sup> This study aimed to characterize the

profile of primary health care professionals in a municipality of Pernambuco during the COVID-19 pandemic.

#### **METHODOS**

This cross-sectional study was conducted in the basic care units of a municipality in Pernambuco, and the participants were healthcare professionals from the family health strategies teams.

The non-probabilistic convenience sample included 33 professionals employed by the municipality or outsourced with a technical level or higher education. They had to be part of the team for at least one year before the COVID-19 pandemic. Those who were absent from work during the study were excluded.

Data were collected using a questionnaire (Google Forms<sup>®</sup>) after participants agreed to participate and signed the informed consent form. Participants spent about ten minutes responding to the questionnaire. The variables were expressed as absolute frequencies.

#### **RESULTS AND DISCUSSION**

During the COVID-19 pandemic, family health teams were the first contact for users suspected of having COVID-19. They contributed to the care network and community approach.<sup>13,14</sup> However, few reports on these professionals were found in the COVID-19 pandemic context.

In this study, most healthcare professionals were community health agents, nursing and pharmacy technicians, physicians, and nurses (Figure 1), corresponding to the family strategy team and others from the basic care unit. The reduced number of physicians was either because they were absent at the time of data collection or they were in attendance.



Sociodemographic data are presented in Table 1. Among these healthcare professionals, 84.8% were female, aged between 31 and 50 years, and the education level ranged from high school (technicians) to higher education.

Frequency
15.2%
84.8%
3.0%
0.0%
36.4%
36.4%
18.2%
6.1%
63.0%
37.0%

 Table 1. Sociodemographic data of healthcare professionals

A total of 50% of healthcare professionals tested positive for COVID-19; 60% were diagnosed by PCR. Moreover, only 14.3% did not report absences from work (Table 2). Although they reported using PPE, the equipment did not present a preventive effect. Healthcare professionals were three-fold more likely to contract COVID-19 than the general population<sup>15,16</sup>, corroborating our results. According to Kowalski *et al.* (2020), healthcare professionals represented 3.8% to 20.0% of the infected population in Brazil, highlighting the significant impact of the disease on the workforce.<sup>17</sup> In addition, the state of Pernambuco had more than 1,353 healthcare professionals who tested positive for COVID-19.<sup>15</sup>

Variables	Frequency
Use of PPE	
Yes	100.0%
No	0.0%
COVID-19	
Yes	48.5%
No	51.5%
Diagnosis	
PCR	62.5%
Quick test	25.0%
Serological test	12.5%
Absence from work	
No	14.3%
7 days	28.6%
10 days	23.8%
14 days	33.3%

Table 2. Pattern of involvement of healthcare professionals by COVID-19

Source: PPE: personal protective equipment

#### CONCLUSION

Primary health care professionals were susceptible to the coronavirus, even though they were not on the front line of the COVID-19 pandemic. PPE was insufficient to prevent the disease, leading to absence from work.

#### **CONFLICTS OF INTEREST**

The authors declare no conflicts of interest.

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#### **AUTHOR CONTRIBUTIONS**

**RMPMS:** Investigation, data curation, visualization, and writing of the original draft. **DJAA:** Investigation, data curation, visualization, and writing of the original draft. **IFGG:** Investigation, data curation, visualization, and writing of the original draft. **SCSC:** Investigation, data curation, visualization, and writing of the original draft. **DMFS:** Investigation, data curation, and visualization. **CYM:** Conceptualization, formal analysis, project administration, supervision, and writing (review and editing). **JLVS:** Conceptualization, formal analysis, project administration, supervision, and writing (review and editing). All authors approved the final version.

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