

Factors Associated with Skin Injuries Due to the Use of N95 Masks among Brazilian Nursing Professionals

Authors : Elucir Gir, Laelson Rochelle Milanês Sousa, Renata Karina Reis, Soraia Assad Nasbine Rabeh, Mayra Gonçalves Meneguetti, Ana Cristina de Oliveira e Silva, Sheila Araújo Teles

Abstract : Context and significance: Nursing team professionals faced challenges in combating the COVID-19 pandemic around the world. They were subjected to exhausting workloads and prolonged use of Personal Protective Equipment. Using N95 masks for long periods of time can cause skin changes. In this context, health professionals who worked on the front lines of fighting the pandemic were more exposed to possible physical and psychological changes. Objective: The aim of the study was to analyze the factors associated with skin lesions resulting from the use of N95 masks among nursing team professionals. Method: The study was carried out in all regions of Brazil from October to December 2020, with professionals from the nursing team who worked in health care during the COVID-19 pandemic. Participants were recruited via social media, and information was collected electronically and stored on the Survey Monkey platform. Descriptive statistics were used to characterize the sample, association tests (Chi-square), with a statistical significance level of $p < 0.05$. Factors associated with skin lesions resulting from the use of an N95 mask were determined by Binary Logistic Regression, with a significance level of 5% ($\alpha = 0.05$). Results: 8,405 nursing professionals participated in the study, 5,492 nurses (65.3%), 2,747 nursing technicians (32.7%), and 7,084 females (84.3%). Female nursing team professionals were 1.4 times more likely to develop skin lesions due to the use of N95 masks when compared to males (OR 1.4 [CI95% 1.22 - 1.59] $p < 0.001$). The following protective factors were identified: nursing technician (ORA 0.608 [CI95% 0.43 - 0.86] $p = 0.005$) and not having provided assistance in field hospitals for COVID-19 (0.73 [CI95% 0.65-0.81] $p < 0.000$). Conclusion: It was concluded that female nursing team professionals were more likely to have skin changes related to the use of N95 masks. The need for intervention studies is emphasized in order to explore measures to prevent these types of injuries. Descriptors: Nursing professionals; COVID-19; SARS-CoV-2; Brazil.

Keywords : nursing professionals, COVID-19, SARS-CoV-2, Brazil

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