

## ABSTRACT

**Background:** Occupational contact dermatitis is the most frequent case for occupational dermatoses, and most of the cases involve the hand. In health workers, the most common offending agents are water, hand cleansers, and gloves, which are increasingly used to manage the COVID-19 pandemic. Occupational contact dermatitis contributes for 25% lost work days, making it important to be treated and prevented. However, the issue seems to be overlooked in Indonesia, including in the COVID-19 pandemic era. This study aimed to investigate the issue, observing occupational skin symptoms on the hands in a hospital in Indonesia during the COVID-19 pandemic.

**Objective:** The study aimed to measure and compare hand skin symptoms prevalence in health workers stationed in COVID-19 wards and polyclinics to those outside COVID-19 wards and polyclinics in dr. Sardjito General Hospital, as well as determining other factors influencing hand skin symptoms occurrence in the health workers.

**Method:** Two hundred health workers in dr. Sardjito General Hospital were included in the cross-sectional study and were to fill the modified and Indonesian-translated Nordic Occupational Skin Questionnaire version 2002 (long version) questionnaire distributed online.

**Results:** One hundred and fifty health workers responded and submitted the questionnaire. Hand skin symptoms were more frequent in health workers stationed in COVID-19 wards and polyclinics (adjusted odds ratio: 23,031,  $p < 0,001$ ). Additionally, gender (adjusted odds ratio for males: 0,095,  $p: 0,003$ ) and exposure to irritants at work (adjusted odds ratio for those exposed: 3,93,  $p: 0,041$ ) were factors that influenced hand skin symptoms' occurrence in the health workers.

**Conclusion:** Hand skin symptoms were more frequently found in health workers stationed in COVID-19 wards and polyclinics. Other factors that influenced hand symptoms' occurrence were health workers' gender and exposure to irritants at work. Prevention and management of hand skin symptoms in healthcare workers include educating about hand hygiene changes to prevent skin complaints as well as provision of moisturizers or other skin medications.

**Keywords:** COVID-19, hand skin symptoms, health workers, dr. Sardjito General Hospital