

**PREVALENSI DERMATITIS KONTAK IRITAN AKIBAT  
HAND- HYGIENE PADA TENAGA KESEHATAN DI MASA PANDEMI  
COVID-19: SEBUAH RAPID REVIEW**

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**ABSTRAK**

**Latar belakang:** Sejak pandemi *Coronavirus Disease 2019* (COVID-19), *World Health Organization* (WHO) menghimbau kepada seluruh komunitas terutama tenaga kesehatan untuk menggunakan Alat Pelindung Diri (APD) dan mencuci tangan secara rutin menggunakan sabun atau alkohol sebelum, sesaat, dan sesudah berinteraksi dengan pasien untuk mencegah transmisi COVID-19. Tenaga kesehatan di masa pandemi COVID-19 sangat berisiko terkena dermatitis kontak iritan. Dermatitis kontak iritan merupakan respons inflamasi non-imunologis pada kulit yang dipicu oleh kontak langsung dengan substansi iritan. Kontak dengan sabun maupun alkohol yang berulang dapat merusak fungsi barier epidermis kulit dan merusak sel keratin sehingga memicu pelepasan mediator pro-inflamasi. Penelitian ini berfokus pada prevalensi terjadinya dermatitis kontak iritan akibat *hand hygiene* pada tenaga kesehatan di masa pandemi COVID-19.

**Tujuan:** Untuk merangkum prevalensi dermatitis kontak iritan akibat *hand hygiene* pada tenaga kesehatan di masa pandemi COVID-19 dengan menggunakan penelitian yang telah ada.

**Metode:** Penelitian ini menggunakan metode *rapid review* berdasarkan penelitian sebelumnya mengenai prevalensi dermatitis kontak iritan akibat *hand hygiene* pada tenaga kesehatan di masa pandemi COVID-19. Artikel didapat dari *database* PubMed, MedRxiv, dan Google Scholar. Kriteria inklusi yaitu seluruh artikel yang memuat data dermatitis kontak iritan pada tenaga kesehatan akibat *Hand Hygiene* dan dipublikasikan dalam rentang waktu Desember 2019 – Maret 2021, sedangkan kriteria eksklusi yaitu artikel yang tidak *full text*, data tidak lengkap, dan tidak berbahasa Inggris atau Indonesia.

**Hasil:** Didapatkan 8 artikel yang memenuhi kriteria inklusi dan eksklusi yang menampilkan data prevalensi dermatitis kontak iritan pada tenaga kesehatan di masa pandemi COVID-19. Artikel tersebut menggunakan metode studi *cross-sectional*, *cohort*, dan *case report*. Didapatkan rentang prevalensi sebesar 15-94.5%. Dermatitis kontak iritan banyak ditemukan pada perawat, jenis kelamin wanita, rentang usia 18-69 tahun, frekuensi cuci tangan 6-30 kali per hari, dan melakukan prosedur *hand-hygiene* menggunakan sabun cair dan alkohol >60%.

**Kesimpulan:** Prevalensi dermatitis kontak iritan akibat prosedur *hand-hygiene* pada tenaga kesehatan di masa pandemi COVID-19 berdasarkan artikel dengan studi cross-sectional memiliki rentang prevalensi 15% - 90.4%, studi cohort memiliki rentang insidensi 88% - 94.5%, dan studi case report sebanyak 59%.

**Kata kunci:** dermatitis kontak iritan, *hand-hygiene*, tenaga kesehatan, COVID-19.

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## PREVALENCE OF IRRITANT CONTACT DERMATITIS DUE TO HAND-HYGIENE IN HEALTHCARE WORKERS DURING THE COVID-19 PANDEMIC: A RAPID REVIEW

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### ABSTRACT

**Background:** Since the Coronavirus Disease 2019 (COVID-19) pandemic, the World Health Organization (WHO) urges all communities, especially healthcare workers to use Personal Protective Equipment (PPE) and wash hands regularly with soap or alcohol before, during, and after interact with patients to prevent the transmission of COVID-19. Healthcare workers during the COVID-19 pandemic are at high risk of developing irritant contact dermatitis. Irritant contact dermatitis is a non-immunologic inflammatory response of the skin triggered by direct contact with an irritant substance. Repeated contact with soap or alcohol can damage the skin's epidermal barrier function and damage keratin cells, triggering the release of pro-inflammatory mediators. This study focuses on the prevalence of irritant contact dermatitis due to hand hygiene for healthcare workers during the COVID-19 pandemic.

**Objective:** To summarize the prevalence of irritant contact dermatitis due to hand hygiene in healthcare workers during the COVID-19 pandemic using existing research.

**Methods:** This study used a rapid review method based on previous research regarding the prevalence of irritant contact dermatitis due to hand hygiene in healthcare workers during the COVID-19 pandemic. Articles were obtained from the PubMed, MedRxiv, and Google Scholar databases. The inclusion criteria were all articles containing data on irritant contact dermatitis in healthcare workers due to Hand Hygiene and published in the period December 2019 - March 2021, while the exclusion criteria were articles that not full text, incomplete data, and did not English or Indonesian languages.

**Results:** There were 8 articles that met the inclusion and exclusion criteria that presented data on the prevalence of irritant contact dermatitis among healthcare workers during the COVID-19 pandemic. This article uses a cross-sectional, cohort, and case report study method. The prevalence range is 15-94.5%. Irritant contact dermatitis was found in nurses, female gender, age range 18-69 years, frequency of hand washing 6-30 times per day, and performing hand-hygiene procedures using liquid soap and alcohol >60%.

**Conclusion:** The prevalence of irritant contact dermatitis due to hand-hygiene procedures in healthcare workers during the COVID-19 pandemic based on articles with cross-sectional studies has a prevalence range of 15% - 90.4%, cohort studies have an incidence range of 88% - 94.5%, and case report studies as much as 59%.

**Keywords:** irritant contact dermatitis, hand-hygiene, healthcare workers, COVID-19.

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