

INTISARI

Coronavirus disease 2019 (COVID-19) merupakan penyakit pernapasan yang disebabkan oleh *beta-coronavirus*. *World Health Organization (WHO)* menamakan virus penyebab COVID-19 tersebut sebagai SARS-CoV-2. Tenggorokan dan kelenjar saliva menjadi media replikasi dan transmisi virus pada COVID-19 sehingga diperlukan penggunaan antiseptik oral. Penulisan *narrative review* bertujuan untuk mengetahui perbandingan obat kumur *povidone-iodine* dengan obat kumur *cetylpyridinium chloride* dalam mengurangi *viral load* SARS-CoV-2 serta untuk mengetahui efektivitas dan efikasi obat kumur *povidone-iodine* dan obat kumur *cetylpyridinium chloride* dalam pencegahan transmisi COVID-19 pada praktik kedokteran gigi.

Pencarian literatur pada *narrative review* ini dilakukan menggunakan *database* PubMed, Google Scholar, dan *Science direct* dengan kata kunci COVID-19, SARS-CoV-2, *Mouthwash*, *Dental practice*, *Povidone-iodine* dan *Cetylpyridinium chloride*. Hasil pencarian pada *database science direct*, PubMed, dan google scholar mendapatkan total literatur sebanyak 482 artikel. Sebanyak 98 artikel menunjukkan hasil duplikasi dan didapatkan total hasil seleksi duplikasi sebanyak 384 artikel. Literatur berupa *original article* dan *case report* sebanyak 134 artikel. Selanjutnya sebanyak 73 artikel tidak memenuhi kriteria inklusi dan eksklusi, sehingga total artikel yang di-review sebanyak 61 artikel.

Obat kumur *povidone-iodine* dan obat kumur *cetylpyridinium chloride* menunjukkan hasil yang sama dalam mengurangi *viral load* SARS-CoV-2. Obat kumur *povidone-iodine* dan obat kumur *cetylpyridinium chloride* sama-sama efektif untuk mencegah transmisi COVID-19 pada praktik kedokteran gigi tetapi *povidone-iodine* memiliki efektifitas dan efikasi lebih baik dibandingkan *cetylpyridinium chloride*. Oleh karena itu, penggunaan obat kumur *povidone-iodine* dan *cetylpyridinium chloride* disarankan sebagai tindakan pra-prosedural untuk membantu mengurangi risiko paparan COVID-19 melalui jalur oral.

Kata kunci: *Povidone-iodine*, *cetylpyridinium chloride*, COVID-19, efektifitas, efikasi

ABSTRACT

Coronavirus disease 2019 (COVID-19) is a respiratory disease caused by *beta-coronavirus*. The *World Health Organization (WHO)* has been announced the official names for the virus responsible for COVID-19 as SARS-CoV-2. The throat and salivary glands become the media for viral replication and transmission in COVID-19, so the use of oral antiseptics is necessary. This *narrative review* aimed to determine the viral load reduction of SARS-CoV-2 using *povidone-iodine* compared to *cetylpyridinium chloride* mouthwashes and to determine the effectiveness and the efficacy of *povidone-iodine* and *cetylpyridinium chloride* mouthwashes in preventing the transmission of COVID-19 in dental practice.

Database for literature searching in this *narrative review* were PubMed, Google Scholar, Science direct with the keywords COVID-19, SARS CoV-2, Mouthwash, Dental practice, *Povidone-iodine* and *Cetylpyridinium chloride*. A total of 482 articles were collected from the databases. Ninety eight articles showed duplication so that a total of 384 articles were obtained. Literature in the form of original articles and case reports were 134 articles. There were 73 articles were not eligible for the inclusion and exclusion criteria, so that total of articles in this narrative review were 61.

Both of *povidone-iodine* and *cetylpyridinium chloride* mouthwashes are capable to reduce the viral load of SARS-CoV-2. *Povidone-iodine* and *cetylpyridinium chloride* mouthwashes are equally effective in preventing the transmission of COVID-19 on dental practice but the effectiveness and the efficacy of *povidone-iodine* mouthwash better than *cetylpyridinium chloride*. Therefore, the use of *povidone-iodine* and *cetylpyridinium chloride* mouthwash is recommended as a pre-procedural prophylaxis to reduce the risk of COVID-19 transmission through the oral route.

Keywords: *Povidone-iodine, cetylpyridinium chloride, COVID-19, effectiveness, efficacy*