

PHC Chapter 1: Dental and oral conditions

- 1.1 Abscess and caries, dental**
 - 1.1.1 Dental abscess**
 - 1.1.2 Dental caries**
- 1.2 Candidiasis, oral (thrush)**
- 1.3 Gingivitis and periodontitis**
 - 1.3.1 Uncomplicated gingivitis**
 - 1.3.2 Periodontitis**
 - 1.3.3 Necrotising periodontitis**
- 1.4 Herpes simplex infections of the mouth and lips**
- 1.5 Aphthous ulcers**
- 1.6 Teething, infant**

1.1 ABSCESS AND CARIES, DENTAL

1.1.1 DENTAL ABSCESS

K04.7

DESCRIPTION

Acute or chronic suppuration related to teeth, due to infection. It is characterised by:

- » acute, severe, throbbing pain
- » swelling adjacent to the tooth, or on the face
- » pain worsened by tapping on affected teeth
- » restricted mouth opening or difficulty chewing
- » pus collection located around the tooth or at the apex of the root

MEDICINE TREATMENT

Initiate treatment before referral:

Children

- Amoxicillin, oral, 10–20 mg/kg 8 hourly for 5 days.

Weight kg	Dose mg	Use one of the following:				Age Months/years
		Susp		Capsule		
		125mg/ 5mL	250mg/ 5mL	250 mg	500 mg	
>11–25 kg	250 mg	10 mL	5 mL	1 cap	–	>18 months–7 years
>25 kg	500 mg	–	–	2 caps	1 cap	>7 years

AND

- Metronidazole, oral, 7.5 mg/kg/dose 8 hourly for 5 days. See dosing table, pg 23.7.

Adults

- Amoxicillin, oral, 500 mg 8 hourly for 5 days.

AND

- Metronidazole, oral, 400 mg, 8 hourly for 5 days.

Severe penicillin allergy:

Z88.0

Children < 18 kg

- Macrolide, e.g.:
- Azithromycin, oral, 10 mg/kg/dose, daily for 3 days. See dosing table, pg 23.2.

Children > 35 kg and adults

- Macrolide, e.g.:
- Azithromycin, oral, 500 mg daily for 3 days.

Pain:

Children

- Paracetamol, oral, 10–15 mg/kg/dose 6 hourly when required. See dosing table, pg 23.8

Adults

- Paracetamol, oral, 1 g 4–6 hourly when required.
 - Maximum dose: 15 mg/kg/dose.
 - Maximum dose: 4 g in 24 hours.

Note: Dental rinses are not recommended for prevention of Covid-19 transmission during dental procedures.

LoE: IIIb¹**REFERRAL**

All cases for dental treatment

1.1.2 DENTAL CARIES

K02.0-5/K02.8-9

To be managed by a dentist or dental therapist.

For local anaesthesia for dental procedures:

- Lidocaine (Dentist and dental therapist).
- Lidocaine with adrenaline (epinephrine) (Dentist and dental therapist).

Note: Dental rinses are not recommended for prevention of Covid-19 transmission during dental procedures.

LoE: IIIb²**1.2 CANDIDIASIS, ORAL (THRUSH)**

B37.0

DESCRIPTION

A candida infection of the mouth and sometimes of the pharynx.

Commonly presents as painful creamy white patches that can be scraped off the tongue and buccal mucosa.

Often occurs in healthy babies up to one month of age.

Risk factors for candidiasis include:

- » poor oral hygiene
- » immunosuppression (may be responsible for severe cases of oral thrush)
- » prolonged use of broad-spectrum antibiotics or corticosteroids (including inhaled)
- » certain chronic diseases, e.g., diabetes mellitus
- » trauma e.g., from poorly fitting dentures or dentures worn whilst sleeping

GENERAL MEASURES

- » Identify underlying causes, based on risk factors.
- » Improve oral hygiene.
- » Feed infants using a cup instead of a bottle.
- » Ensure proper fitting dentures.

MEDICINE TREATMENT

- Nystatin suspension, oral, 100 000 IU/mL, 1 mL 6 hourly after each meal/feed for 7 days.
 - Keep in contact with the affected area for as long as possible prior to swallowing.

- In older children, ask the child to swirl in the mouth, prior to swallowing.
- In infants, advise mothers to apply to front of the mouth and spread over the oral mucosa with a clean finger.
- Continue for 48 hours after cure.

Note: In PLHIV candidiasis may involve the oesophagus as well as the mouth. Pain and difficulty in swallowing in an HIV-infected patient with oral candidiasis suggest oesophageal involvement, which requires systemic treatment with fluconazole. See Section 11.3.3: Candidiasis, oesophageal.

REFERRAL

No improvement.

1.3 GINGIVITIS AND PERIODONTITIS

1.3.1 UNCOMPLICATED GINGIVITIS

K05.0/K05.1

DESCRIPTION

Inflammation of the gum margin causing the gums to separate from the teeth. Pockets (recesses) form between the gums and the teeth. Pus and bacteria can collect in these pockets, eventually causing periodontitis. See section 1.3.2: Periodontitis.

Characteristics of uncomplicated gingivitis:

- » may be painful
- » bleeding
- » gum recession may occur
- » redness
- » swollen gums

PROPHYLAXIS AND GENERAL MEASURES

Oral hygiene is usually adequate to prevent superficial mouth and gum infection:

- » Oral hygiene after each meal to remove plaque and food debris.
- » Brush teeth twice daily.
- » Floss teeth at least once daily.
- » Rinse mouth with homemade salt mouthwash for one minute twice daily (i.e., ½ medicine measure of table salt in a glass of lukewarm water).

MEDICINE TREATMENT

Brush, floss, rinse mouth with water and then rinse with:

- Chlorhexidine 0.2%, 15 mL as a mouthwash, twice daily, after brushing teeth, for 5 days.
 - Do not swallow.

Note: Do not eat or drink immediately after this.

Pain:

Children

- Paracetamol, oral, 10–15 mg/kg/dose 6 hourly when required. See dosing table, pg 23.8.

Adults

- Paracetamol, oral, 1 g 4–6 hourly when required.
 - Maximum dose: 15 mg/kg/dose.
 - Maximum dose: 4 g in 24 hours.

1.3.2 PERIODONTITIS

K05.2/K05.3

DESCRIPTION

Progressive gingivitis to the point where the underlying bone is eroded. It is characterised by loose teeth and is a cause of tooth loss in adults.

GENERAL MEASURES

- » Provide advice on improving and maintaining oral hygiene.
- » Brush teeth frequently, at least twice daily.

MEDICINE TREATMENT

Brush, floss, rinse mouth with water and then rinse with:

- Chlorhexidine 0.2%, 15 mL as a mouthwash, twice daily, for 5 days.
 - Do not swallow.

Note: Do not eat or drink immediately after this.

Pain:Children

- Paracetamol, oral, 10–15 mg/kg/dose 6 hourly when required. See dosing table, pg 23.8

Adults

- Paracetamol, oral, 1 g 4–6 hourly when required.
 - Maximum dose: 15 mg/kg/dose.
 - Maximum dose: 4 g in 24 hours.

Note: Dental rinses are not recommended for prevention of Covid-19 transmission during dental procedures.

LoE: IIIb³**REFERRAL**

All cases for dental treatment.

1.3.3 NECROTISING PERIODONTITIS

K05.2

DESCRIPTION

An acute, very painful infection of the gingival margin. It is characterised by:

- » foul smelling breath
- » necrosis and sloughing of the gum margin, especially of the interdental papillae
- » loss of gingiva and supporting bone around teeth

May be associated with underlying disease, e.g. HIV.

May lead to disease of surrounding lips and cheeks if not adequately treated.

GENERAL MEASURES

- » Relieve pain.
- » Improve oral hygiene.
- » Exclude underlying disease e.g. HIV.

MEDICINE TREATMENT

Brush, floss, rinse mouth with water and then rinse with:

- Chlorhexidine 0.2%, 15 mL as a mouthwash, twice daily, for 5 days.
 - Do not swallow.

Note: Do not eat or drink immediately after this.

Initiate treatment before transferralChildren

- Metronidazole, oral, 7.5 mg/kg/dose 8 hourly for 5 days. See dosing table, pg 23.7.

Adults

- Metronidazole, oral, 400 mg, 8 hourly for 5 days.

Pain:Children

- Paracetamol, oral, 10–15 mg/kg/dose 6 hourly when required. See dosing table, pg 23.8.

Adults

- • Paracetamol, oral, 1 g 4–6 hourly when required.
 - Maximum dose: 15 mg/kg/dose.
 - Maximum dose: 4 g in 24 hours.

Note: Dental rinses are not recommended for prevention of Covid-19 transmission during dental procedures.

LoE: IIIb ⁴

REFERRAL

All cases for dental treatment.

1.4 HERPES SIMPLEX INFECTIONS OF THE MOUTH AND LIPS

B00.1-2

DESCRIPTION

Acute, painful vesicular eruptions of the lips or ulcerations of the lips and mouth caused by Herpes simplex virus and characterised by:

- » shallow, painful ulcers on the lips, gingiva, tongue and pharynx
- » pain exacerbated by eating

It is a self-limiting infection with symptoms subsiding within 10 days.

GENERAL MEASURES

- » Rinse mouth with homemade salt mouthwash for one minute twice daily (i.e. ½ medicine measure of table salt in a glass of lukewarm water).

- » Ensure adequate hydration.
- » Fluid diet for children.
- » Avoid acidic drinks, e.g. orange juice or soft drinks, as they may cause pain.

MEDICINE TREATMENT

- Cover lesions on the lips with petroleum jelly.

Pain:

Children

- Paracetamol, oral, 10–15 mg/kg/dose 6 hourly when required. See dosing table, pg 23.8.

Adults

- Paracetamol, oral, 1 g 4–6 hourly when required.
 - Maximum dose: 15 mg/kg/dose.
 - Maximum dose: 4 g in 24 hours.

Extensive oral herpes:

For children > 6 years and adults

- Tetracaine 0.5 %, topical, applied every 6 hours.
 - Apply a thin layer on the affected areas only (may be used inside mouth).

Note: Safety in children < 6 years of age has not been established.

The following patients should be treated with an antiviral:

- » Children with extensive oral herpes **provided treatment can be started within 72 hours of onset of symptoms.**
- » PLHIV with herpes infections of the lips or mouth.

Children < 15 years of age

- Aciclovir, oral, 250 mg/m²/dose, 8 hourly for 7 days. See dosing table, pg. 23.1

Children ≥ 15 years of age and adults

- Antiviral, (active against herpes simplex) e.g.:
 - Aciclovir, oral, 400 mg, 8 hourly for 7 days.

REFERRAL

- » Severe condition.
- » Dehydrated patients.
- » No improvement after 1 week of treatment.

1.5 APHTHOUS ULCERS

K12.0

DESCRIPTION

Painful ulcers in the mouth, except the gums, hard palate and dorsum of the tongue. Minor ulcers (< 1 cm diameter) usually heal within 10 days. Major ulcers (> 1 cm diameter) are very painful, often very deep and persist. Major ulcers usually indicate advanced HIV infection.

MEDICINE TREATMENT

Minor aphthous ulcers:

Children < 6 years of age

- Paracetamol, oral, 10–15 mg/kg/dose 6 hourly when required. See dosing table, pg 23.8.

Children > 6 years of age and adults

- Tetracaine 0.5 %, topical, applied every 6 hours.
 - Apply a thin layer on the affected areas only (may be used inside mouth).

Note: Safety in children < 6 years of age has not been established.

REFERRAL

- » Major ulcers for further diagnostic evaluation.
- » Ulcers that are not healing within 10 days.

1.6 TEETHING, INFANT

K00.7

DESCRIPTION

Teething is the appearance of teeth through the gums in the mouth of infants and young children.

Symptoms often associated with teething include:

- » fretfulness
- » biting or chewing on hard objects
- » drooling, which may often begin before teething starts
- » gum swelling and tenderness
- » refusing food
- » sleeping problems

Teething is not a cause of severe or systemic symptoms, such as high fever or diarrhoea. Exclude conditions other than teething in infants who are systemically unwell or in distress.

Advise caregivers to seek medical advice if the infant becomes systemically unwell.

GENERAL MEASURES

Teething is a normal physiological process; simple self-care measures are recommended.

- » Gentle massage to the gum or biting on objects (such as teething rings) may produce relief by producing counter-pressure against the gums (beware of choking risks).
- » Cold objects may help to ease symptoms.

Do not use local oral anaesthetic preparations in infants, as these have been associated with severe adverse events.

REFERRAL

All children with systemic symptoms (e.g., high fever or diarrhoea) that cannot be managed at primary healthcare level.

References:

- ¹ Dental rinses for prevention of COVID-19: National Department of Health: Affordable Medicines, EDP-PHC/Adult Hospital level. Medicine Review: Dental rinses as IPC for COVID-19, 20 May 2021. <https://www.knowledgehub.org.za/content/standard-treatment-guidelines-and-essential-medicines-list>
- ² Dental rinses for prevention of COVID-19: National Department of Health: Affordable Medicines, EDP-PHC/Adult Hospital level. Medicine Review: Dental rinses as IPC for COVID-19, 20 May 2021. <https://www.knowledgehub.org.za/content/standard-treatment-guidelines-and-essential-medicines-list>
- ³ Dental rinses for prevention of COVID-19: National Department of Health: Affordable Medicines, EDP-PHC/Adult Hospital level. Medicine Review: Dental rinses as IPC for COVID-19, 20 May 2021. <https://www.knowledgehub.org.za/content/standard-treatment-guidelines-and-essential-medicines-list>
- ⁴ Dental rinses for prevention of COVID-19: National Department of Health: Affordable Medicines, EDP-PHC/Adult Hospital level. Medicine Review: Dental rinses as IPC for COVID-19, 20 May 2021. <https://www.knowledgehub.org.za/content/standard-treatment-guidelines-and-essential-medicines-list>

**SOUTH AFRICAN PRIMARY HEALTHCARE LEVEL ESSENTIAL MEDICINES LIST
CHAPTER 1: DENTAL CONDITIONS
NEMLC RECOMMENDATIONS FOR MEDICINE AMENDMENTS (2020 -2023 REVIEW CYCLE)**

Medicine amendment recommendations, with supporting evidence and rationale are listed below.
Kindly review the medicine amendments in the context of the respective standard treatment guideline (STG).

MEDICINE AMENDMENTS:

SECTION	MEDICINE/MANAGEMENT	ADDED/DELETED/AMENDED
1.1.1 Dental abscess	Dental rinses	Not added
1.1.2 Dental caries	Dental rinses	Not added
1.3.2 Periodontitis	Dental rinses	Not added
1.3.3 Necrotising periodontitis	Dental rinses	Not added
1.4 Herpes simplex infections of the mouth and lips: Children <15 years of age	Antiviral, active against herpes simplex	Not added as a therapeutic class
	Aciclovir, oral	Retained
	Valaciclovir, oral	Not added as an example of therapeutic class
	Famciclovir, oral	Not added as an example of therapeutic class

Note: Following dissemination for external comment, no evidence-supported motivations relevant for primary level of care were received.

DENTAL RINSES TO PREVENT COVID-19 TRANSMISSION DURING DENTAL PROCEDURES

Dental rinses: not added

Please refer to the medicine review: Dental rinses to prevent COVID-19 transmission during dental procedures, 20 May 2021:



Dental
mouthrinses-COVID

Recommendation: The PHC/Adult Hospital Level Committee suggests that dental rinses not be used for prevention of COVID-19 transmission during dental procedures (conditional recommendation).

Rationale: There is currently insufficient evidence of efficacy and harms.

Level of Evidence: III RCTs of low methodological quality

Review indicator: New high quality evidence of a clinically relevant benefit

NEMLC MEETING 24 JUNE 2021:

NEMLC Recommendation: The NEMLC accepted the proposed recommendation made by the PHC/Adult Hospital Level Committee.

The following narrative was added to the relevant STGs, as listed above:

Note: Dental rinses are not recommended for prevention of Covid-19 transmission.

1.4 HERPES SIMPLEX INFECTIONS OF THE MOUTH AND LIPS

Children < 15 years of age

Antiviral, (active against herpes simplex): not added as a therapeutic class

Aciclovir, oral: retained

Valaciclovir, oral: not added as an example of therapeutic class

Famciclovir, oral: not added as an example of therapeutic class

As previously indicated in the previous review cycle, valaciclovir and famciclovir are not indicated for use in children¹.

¹ British National Formulary for children, 2020 edition

**South African National Essential Medicine List
Adult Hospital Level Medication Review Process
Component: Dental conditions**

TITLE: INFECTION CONTROL FOR COVID-19 IN DENTISTRY

Date: 20 May 2021

Key findings

- ➔ It is hypothesised that keeping a clean and dry environment in the dental office would help decrease the persistence of 2019-nCoV. This empathises the fact that effective sanitisation of the dental room plus dental equipment is critical to prevent transmission of nosocomial infection.
- ➔ It is therefore encouraged that pre-operative antimicrobial mouth rinse should be undertaken prior to any dental procedure as this generally has the potential to reduce oral microbes and thus limit transmission of potential oral pathogens particularly during dental procedures.
- ➔ We conducted a rapid review of available clinical evidence on the effectiveness of pre-procedural mouth rinses for preventing transmission of COVID-19 in dental practice. We searched Love Epistemonikos, PubMed and the Cochrane Covid-19 study registry and found two relevant review and two ongoing clinical trials.
- ➔ Two publications reporting on antimicrobial mouthwashes and nasal sprays administered to patients with suspected or confirmed COVID-19 infection to protect healthcare workers treating them were identified; however, the reviews did not include any relevant study on the subject.

PHC/ADULT HOSPITAL LEVEL EXPERT REVIEW COMMITTEE RECOMMENDATION:

Type of recommendation	We recommend against the option and for the alternative (strong)	We suggest not to use the option (conditional)	We suggest using either the option or the alternative (conditional)	We suggest using the option (conditional)	We recommend the option (strong)
		x			

Recommendation: The PHC/Adult Hospital Level Committee suggests that dental rinses not be used for prevention of COVID-19 transmission during dental procedures.

Rationale: There is currently insufficient evidence of efficacy and harms.

Level of Evidence: III RCTs of low methodological quality

Review indicator: New high quality evidence of a clinically relevant benefit

NEMLC MEETING OF 24 JUNE 2021:

NEMLC Recommendation: The NEMLC accepted the recommendation proposed by the PHC/Adult Hospital Level Committee.

Monitoring and evaluation considerations: n/a

Research priorities: n/a

Background

The practice of dentistry, which by default is associated with proximity of patient during dental care, generation of aerosols due to the practice involving the use of aerosol-generating equipment suction machines, is commonly associated with droplets and aerosols from patients undergoing a dental procedure (Bajaj et al, 2020). These likely contaminate the whole surface in dental offices if coming from a patient who is harbouring an infection. Furthermore, SARS-CoV-2 has been found in saliva of infected patients. These suggests that oral cavity poses as a potential reservoir of the virus and hence has potential for transmission SARS-CoV-2 (COVID-19) Vergara-Buenaventura et al, 2020. In addition, it has been shown at room temperature that human corona virus (HCoV) remains infectious from 2 hours up to 9 days and persists better at 50% compared with 30% relative humidity.

Thus, it is hypothesised that keeping a clean and dry environment in the dental office would help decrease the persistence of 2019-nCoV. This empathises the fact that effective sanitisation of the dental room plus dental equipment is critical to prevent transmission of nosocomial infection (Peng et al, 2020). Furthermore, it is encouraged that pre-operative antimicrobial mouth rinse should be encouraged prior to any dental procedure as this generally has the potential to reduce oral microbes and thus limit transmission of potential oral pathogens.

The commonly used antiseptics are 1% hydrogen peroxide and 0.2-1.5% povidone iodine. These are the recommended antiseptics as they have the potential to reduce salivary microbes including SARS-2 coronavirus (Peng et al, 2020; Lo Giudice, 2020; Bidra et al, 2020, Castro-Ruiz et al, 2020). Other antiseptics include 0.05% cetylpyridinium chloride, which has also shown potential for exerting good clearance of salivary microbes. It is not recommended to use chlorohexidine solution, as efficacy data is conflicting. The data by Peng et al, 2020 points to the fact that chlorohexidine is ineffective despite its common usage as an antiseptic in dental practice. However, Vergara-Buenaventura et al, 2020 suggest that chlorohexidine at higher dosage has some potential effectiveness at exerting oral microbial clearance.

Povidone Iodine is the most commonly recommended effective oral antiseptic followed by hydrogen peroxide for reduction of the risk of coronavirus transmission during dental procedures. It further suggested that use of oral prophylactic protocol with PVP-I for dental healthcare workers and patients as an adjunct to the current preventive safety guidelines could help reduce the transmission of corona virus infection during this pandemic era.

Review Question:

Does pre-rinsing with povidone/hydrogen peroxide mouthwashes among COVID-19 asymptomatic patients prevent transmission of COVID-19 in dental practice to dental practitioners?

Methods:

We conducted a rapid review including a systematic search of searched the Cochrane Covid-19 study registry, love epistemonikos and PubMed on the 23rd April 2021. The details of the search are in appendix 1. We included systematic reviews of randomised controlled trials and randomised controlled trials. We excluded observational studies. The details of each search output are presented in appendix 1. The search output was imported into Covidence where studies were screened in duplicate by two reviewers (OA and VN) and with discrepancies settled by the third reviewer (PN). We found two eligible reviews (table 1) and two on-going trials (table 2). The reviews identified did not find any completed studies to include in the two studies.

Eligibility criteria

- P (patient/population): *Asymptomatic patients attending dental clinics.*
- I (intervention): *Antiseptic mouthwashes (povidone/ hydrogen peroxide) used for dental patients at the start of a dental procedure.*
- C (comparator): *No antiseptic mouth wash, alternative mouth wash (non-antiseptic).*
- O (outcome): *-COVID-19 acquisition in dental staff and adverse events of mouth washes to patients.*

Results

Search

The search produced 199 studies and 46 duplicates were removed. 153 studies were screened, and 145 studies were irrelevant. 8 full texts were assessed for eligibility. Two reviews were identified for inclusion and two ongoing trials

were identified. The relevant reviews to our PICO did not include any completed study but identified 16 ongoing studies (14 RCTs) that have not yet been completed.

PRISMA diagram

Description of included studies

The main characteristics of the included studies were described in table 1 while the excluded studies were reported in table 3 and table 2 described the ongoing studies identified. The reviews did not find any completed eligible studies to include but found some ongoing randomised controlled trials.

Conclusion

There is currently no evidence to support our research question.

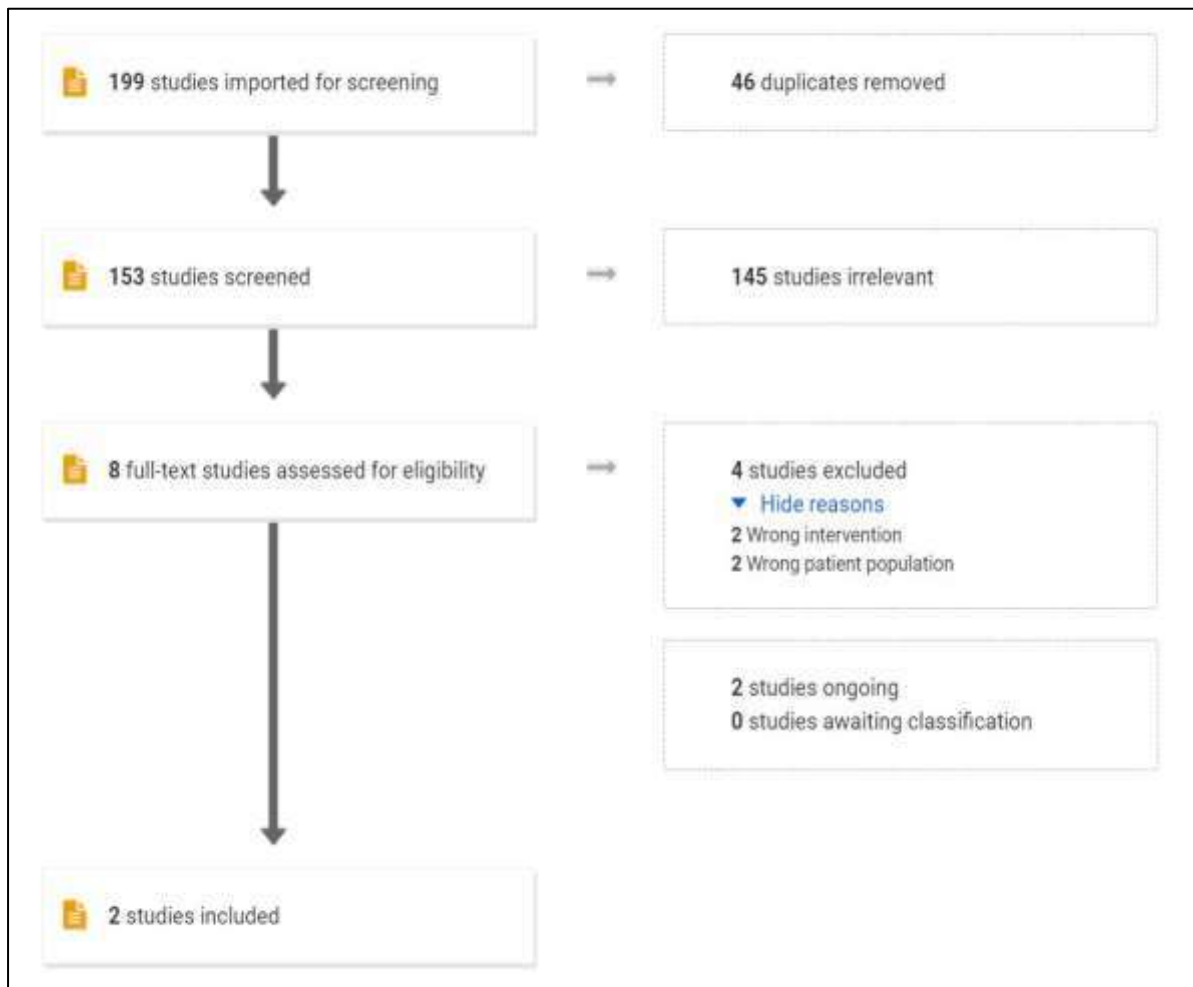


Figure 1: Process for searching and selecting studies for inclusion

Table 1. The main characteristics and outcomes of this report

Author, date	Type of study	Intervention	Population	Comparators	Primary outcome	Effect sizes	Comments
Burton MJ, 2020a	Systematic review	Any antimicrobial mouthwash and/or nasal spray (alone or in combination) to suspected/confirmed COVID-19 patients.	Patients with suspected or confirmed COVID-19 infection.	No treatment or saline or water.	1. Mortality; hospitalisation status; use of ventilation; use of renal dialysis. 2. Incidence of symptomatic or test-positive COVID-19 infection in HCWs. 3. Significant adverse events.	Nil	The review did not identify any study for inclusion.
Burton MJ, 2020b	Systematic review	Any antimicrobial mouthwash and/or nasal spray (alone or in combination) at any concentration, delivered to the patient or HCW before and/or after an aerosol-generating procedure (AGP).	healthcare workers (HCWs) and/or patients when undertaking aerosol-generating procedures (AGPs) on patients without suspected or confirmed COVID-19	No treatment or saline or water.	Incidence of symptomatic or test-positive COVID-19 infection in HCWs or patients. • Significant adverse event: anosmia (or disturbance in sense of Smell	Nil	No completed study was found to include in the review

Table 2. Characteristics of planned and ongoing studies

Title of the study	Study design	Participants	Interventions
Kejner et al. Povidone-Iodine Intranasal for Prophylaxis in Front-line Health-care Personnel and Inpatients During the Sars-CoV-2 Pandemic. ClinicalTrials.gov, NCT04364802. April 28, 2020	Open-label non-randomized phase II clinical trial.	Front-line healthcare workers, Inpatients who have a 7+ day hospitalization and Community participants.	povidone-iodine nasal spray and gargle (10% diluted 1:30)
Perznski et al. Role of Naso-oropharyngeal Antiseptic decolonization to Reduce Covid-19 Viral Shedding and disease transmission: SHIELD Study. ClinicalTrials.gov, NCT04478019. July 20 2020	Randomized cross-over open label phase I clinical trial	Participant is an essential worker performing at least some in-person job duties (not 100% remote)	Treatment is 3 weeks of nasal (10% povidone-iodine swab sticks in each nostril) and CHG oral decolonization (swish and spit 15 ml 0.12% CHG oral rinse for 30 seconds, four times/day) procedures, followed by 2 weeks of washout, and 3 weeks of standard personal protective equipment without any PI or CHG intervention (control

Table 3. Characteristics of excluded studies

Excluded studies	Reasons
1 Guenezan J, et al. Povidone Iodine Mouthwash, Gargle, and Nasal Spray to Reduce Nasopharyngeal Viral Load in Patients with COVID-19: A Randomized Clinical Trial. JAMA Otolaryngology–Head & Neck Surgery. 2021 Apr 1;147(4):400-1.	Wrong patient population
2 Nagraj SK, et al. Interventions to reduce contaminated aerosols produced during dental procedures for preventing infectious diseases. Cochrane Database of Systematic Reviews. 2020(10).	Wrong intervention
3 NCT04719208. [COVID-19] Reduction of Sars-CoV-2 Oral Viral Load With Prophylactic Mouth Rinse	Wrong patient population
4 Sette-de-Souza PH, et al A critical appraisal of evidence in the use of preprocedural mouthwash to avoid SARS-CoV-2 transmission during oral interventions. European review for medical and pharmacological sciences. 2020 Oct 1;24(19):10222-4.	Wrong intervention

Appendix 1

Data sources

1. Love Epistemonikos
2. Cochrane Covid-19 study register
3. PubMed

Search strategy

1. L-OVE Platform (<https://app.iloveevidence.com/>)

Date: 23 April 2021

Search strategy: povidone OR "hydrogen peroxide" OR "mouth wash" OR mouthwash OR "mouth washes" OR mouthwashes OR "mouth rinse" OR "mouth rinses" OR mouthrinse OR mouthrinses

Records retrieved: 42 systematic reviews
42 randomised trials

2. Cochrane COVID-19 Study Register (<https://covid-19.cochrane.org/>)

Date: 23 April 2021

Search strategy: povidone OR "hydrogen peroxide" OR "mouth wash" OR "mouth washes" OR mouthwash OR mouthwashes OR "mouth rinse" OR "mouth rinses" OR mouthrinse OR mouthrinses

Records retrieved: 81 studies

3. PubMed

Date: 23rd April 2021

Search	Query	Results
#6	Search: (#1 AND #2) NOT (animals[mh] NOT humans[mh]) Filters: Randomized Controlled Trial, Systematic Review Sort by: Most Recent	22
#5	Search: (#1 AND #2) NOT (animals[mh] NOT humans[mh]) Filters: Systematic Review Sort by: Most Recent	20
#4	Search: (#1 AND #2) NOT (animals[mh] NOT humans[mh]) Sort by: Most Recent	252
#3	Search: #1 AND #2 Sort by: Most Recent	254
#2	Search: Povidone[mh] OR povidone[tiab] OR hydrogen peroxide[mh] OR hydrogen peroxide[tiab] OR mouthwash*[tiab] OR mouth wash*[tiab] OR mouth rins*[tiab] OR mouthrins*[tiab] Sort by: Most Recent	104,513
#1	Search: Coronavirus[mh:noexp] OR coronavirus*[tiab] OR corona virus*[tiab] OR COVID-19[mh] OR covid-19[tiab] OR covid19[tiab] OR covid 2019[tiab] OR SARS-Cov-2[mh] OR SARS-CoV-2[tiab] OR SARS-CoV2[tiab] OR SARSCoV2[tiab] OR SARsCov-2[tiab] OR SARS-coronavirus*[tiab] OR severe acute respiratory syndrome coronavirus 2[nm] OR severe acute respiratory syndrome coronavirus 2[tiab] OR 2019-nCov[tiab] OR 2019nCov[tiab] OR nCov2019[tiab] OR nCOV-2019[tiab] OR hCOV*[tiab] OR n-cov[tiab] OR ncov*[tiab] Sort by: Most Recent	136,796

a. Evidence quality: Not applicable since the included reviews did not include any completed studies.

b. Alternative agents: Since there are on-going studies on the agents of interest, we recommend the completion of such studies rather than suggesting alternative agents.

Reviewers: Prof P.S. Nyasulu (Stellenbosch University), Dr O Adetokunboh (Stellenbosch University), Ms V Nghah (Stellenbosch University), Dr M. McCaul (Stellenbosch University)

Declaration of interests: PSN, OA, VN and MM have no interests to declare in respect of infection control in dentistry.

References

1. Bajaj N, Granwehr BP, Hanna EY, Chambers MS. Salivary detection of SARS-CoV-2 (COVID-19) and implications for oral health-care providers. *Head Neck*. 2020 Jul; 42(7):1543-1547. doi: 10.1002/hed.26322.
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Evidence to decision framework

	JUDGEMENT	EVIDENCE & ADDITIONAL CONSIDERATIONS
QUALITY OF EVIDENCE OF BENEFIT	<p>What is the certainty/quality of evidence? N/a</p> <p>High Moderate Low Very low Not applicable</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/></p> <p><i>High quality:</i> confident in the evidence <i>Moderate quality:</i> mostly confident, but further research may change the effect <i>Low quality:</i> some confidence, further research likely to change the effect <i>Very low quality:</i> findings indicate uncertain effect</p>	No evidence base to answer this PICO question.
EVIDENCE OF BENEFIT	<p>What is the size of the effect for beneficial outcomes?N/a</p> <p>Large Moderate Small None</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	No evidence base to answer this PICO question.
QUALITY OF EVIDENCE OF HARM	<p>What is the certainty/quality of evidence? n/a</p> <p>High Moderate Low Very low</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p><i>High quality:</i> confident in the evidence <i>Moderate quality:</i> mostly confident, but further research may change the effect <i>Low quality:</i> some confidence, further research likely to change the effect <i>Very low quality:</i> findings indicate uncertain effect</p>	No evidence base to answer this PICO question.
EVIDENCE OF HARMS	<p>What is the size of the effect for harmful outcomes? n/a</p> <p>Large Moderate Small None</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	No evidence base to answer this PICO question.
BENEFITS & HARMS	<p>Do the desirable effects outweigh the undesirable harms?</p> <p>Favours intervention Favours control Intervention = Control or Uncertain</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	No evidence base to answer this PICO question.
THERAPEUTIC INTERCHANGE	<p>Therapeutic alternatives available: n/a</p> <p>Yes No</p> <p><input type="checkbox"/> <input type="checkbox"/></p> <p>List the members of the group. List specific exclusion from the group:</p>	<p>Rationale for therapeutic alternatives included: n/a</p> <p>References: n/a</p> <p>Rationale for exclusion from the group: n/a</p> <p>References: n/a</p>
FEASIBILITY	<p>Is implementation of this recommendation feasible?</p> <p>Yes No Uncertain</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	
RESOURCE USE	<p>How large are the resource requirements?</p> <p>More intensive Less intensive Uncertain</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	<p>Price of medicines: Wide implementation would be costly.</p> <p>Other resources: n/a</p>

VALUES, PREFERENCES, ACCEPTABILITY	<p>Is there important uncertainty or variability about how much people value the options?</p> <p>Minor <input type="checkbox"/> Major <input type="checkbox"/> Uncertain <input type="checkbox"/></p> <p>Is the option acceptable to key stakeholders?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain <input checked="" type="checkbox"/></p>	There is no survey date to inform this judgement, but the Committee was of the opinion that dental practitioners and patients would find this practice acceptable.
EQUITY	<p>Would there be an impact on health inequity?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain <input checked="" type="checkbox"/></p>	

Version	Date	Reviewer(s)	Recommendation and Rationale
1.0	20 May 2021	PSN, OA, VN, MM	Dental rinses not be used for prevention of COVID-19 transmission during dental procedures as there is currently insufficient evidence of efficacy and harms.