

Oral Health and Hospital Infections: A Scope Review of the Performance of Dentists in Intensive Care Units



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PRISMA CHECKLIST

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			ORAL HEALTH AND HOSPITAL INFECTIONS: A SCOPE REVIEW OF THE PERFORMANCE OF DENTISTS IN INTENSIVE CARE U
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Objective: To evaluate the role of dentists in ICUs and their relationship with hospital-acquired infection prevention. Methods: Scoping review of PubMed, SciELO, and Google Scholar databases. Selection: Flowchart shows the final inclusion of 10 studies. Results: Qualitatively described (reduction in ventilator-associated pneumonia, decreased mortality, importance of oral hygiene). Conclusion: Highlights the relevance of dental work in ICUs and recommends public policies for integration.
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Described in the introduction: relevance of oral health and prevention of hospital infections.

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Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Explicit objective: to evaluate the role of the dentist in the ICU and its relationship with the prevention/reduction of hospital infections.
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Defined: inclusion of studies on oral health and prevention of hospital infections in hospitalized/ICU patients; exclusion of studies not directly related to dental practice.
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Databases: PubMed (n=82), Scielo (n=54), Google Scholar (n=39). Last search in 2025 (Figure 1).
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Detailed strategy in the methods section (description of terms/operators, if applicable).
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Two reviewers performed title/abstract screening (n=112), full-text reading (n=48), and final inclusion (n=10) — represented in Figure 1.
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Data extracted for Tables 1 and 2 (authors, year, type of study, population, objective, main findings and interventions).
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (<i>e.g.</i> for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Oral changes, hospital infections (<i>e.g.</i> , ventilator-associated pneumonia), mortality, length of hospital stay.
	10b	List and define all other variables for which data were sought (<i>e.g.</i> participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Sample characteristics (country, type of ICU, age), type of study, related public policies.
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	No formal assessment of risk of bias was performed (limitation to be reported in the Discussion).
Effect measures	12	Specify for each outcome the effect measure(s) (<i>e.g.</i> risk ratio, mean difference) used in the synthesis or presentation of results.	Qualitative results (reduction in pneumonia, impact on mortality, prevalence of oral changes).
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (<i>e.g.</i> tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Results organized in Tables 1 and 2, in narrative form (no meta-analysis was performed).
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	It has not been formally evaluated.
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Not performed (study limitation).
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (<i>e.g.</i> subgroup analysis, meta-regression).	.
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	It has not been formally evaluated.
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Process described in Figure 1.
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Figure 1: Exclusion of 64 studies after reading titles/abstracts; exclusion of 38 after reading full text.
Study characteristics	17	Cite each included study and present its characteristics.	Presented in Table 1.

Section and Topic	Item #	Checklist item	Location where item is reported
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Not formally evaluated.
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (<i>e.g.</i> confidence/credible interval), ideally using structured tables or plots.	Summaries presented in Table 1.
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Summarized in Table 2 (interventions, impact and policies).
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (<i>e.g.</i> confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Not applicable (scoping review, no meta-analysis).
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Not evaluated.
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Not evaluated.
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Not evaluated.
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Not evaluated.
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Discussion integrates the findings with the literature.
	23b	Discuss any limitations of the evidence included in the review.	Mentioned (<i>e.g.</i> , heterogeneity of studies, absence of robust clinical trials).
	23c	Discuss any limitations of the review processes used.	Absence of assessment of risk of bias and certainty of evidence (to be emphasized).
	23d	Discuss implications of the results for practice, policy, and future research.	Highlighted importance of dentists in ICUs, recommendations for public policies (Table 2).
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Not registered in PROSPERO/OSF (please inform explicitly).
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Not registered in PROSPERO/OSF (please inform explicitly).
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	Not registered in PROSPERO/OSF (please inform explicitly).
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Declare absence or existence.
Competing interests	26	Declare any competing interests of review authors.	
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Indicate whether tables, spreadsheets and flowcharts are available upon request or in a repository.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, *et al.* The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

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