

APPRAISAL OF GUIDELINES IN DENTISTRY USING THE AGREE INSTRUMENT.

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Introduction

The number of practice guidelines in Medicine and Dentistry has increased dramatically during the last two decades (Fig 1). The FDI World Dental Federation maintains on their website a database of guidelines in Dentistry⁽¹⁾. The database contains currently about 450 guidelines. Concern has been raised that some of these are not evidence-based or reflect best practice. Different systems for appraisal of clinical guidelines have emerged, to facilitate the identification of the differences between evidence based guidelines, good practice guidelines by consensus, guidelines produced by individual experts, and standards. The aim of this study was to critically appraise the quality of clinical guidelines in dentistry

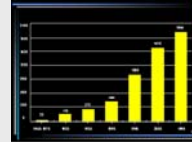


Fig 1. Practice guidelines in dentistry identified in Medline

Materials & Methods

20 clinical guidelines were randomly selected from the FDI World Dental Federation database of guidelines⁽¹⁾. The guidelines were appraised according to the AGREE Appraisal Instrument⁽²⁾ by a single appraiser.

AGREE APPRAISAL INSTRUMENT

SCOPE AND PURPOSE

1. The overall objective(s) of the guideline is (are) specifically described.
2. The clinical question(s) covered by the guideline is (are) specifically described.
3. The patients to whom the guideline is meant to apply are specifically described.

STAKEHOLDER INVOLVEMENT

4. The guideline development group includes individuals from all the relevant professional groups.
5. The patients' views and preferences have been sought.
6. The target users of the guideline are clearly defined.
7. The guideline has been piloted among target users.

RIGOUR OF DEVELOPMENT

8. Systematic methods were used to search for evidence.
9. The criteria for selecting the evidence are clearly described.
10. The methods used for formulating the recommendations are clearly described.
11. The health benefits, side effects and risks have been considered in formulating the recommendations.
12. There is an explicit link between the recommendations and the supporting evidence.
13. The guideline has been externally reviewed by experts prior to its publication.
14. A procedure for updating the guideline is provided.

CLARITY AND PRESENTATION

15. The recommendations are specific and unambiguous.
16. The different options for management of the condition are clearly presented.
17. Key recommendations are easily identifiable
18. The guideline is supported with tools for application.

APPLICABILITY

19. The potential organisational barriers in applying the recommendations have been discussed.
20. The potential cost implications of applying the recommendations have been considered.
21. The guideline presents key review criteria for monitoring and/or audit purposes.

EDITORIAL INDEPENDENCE

22. The guideline is editorially independent from the funding body.
23. Conflicts of interest of guideline development members have been recorded.

Strongly Agree 4 3 2 1 Strongly Disagree

OVERALL ASSESSMENT

Would you recommend these guidelines for use in practice?

- Strongly recommend
- Recommend (with provisos or alterations)
- Would not recommend
- Unsure



Results

	SCOPE AND PURPOSE	STAKEHOLDER INVOLVEMENT	RIGOUR OF DEVELOPMENT	CLARITY AND PRESENTATION	APPLICABILITY	EDIT. INDEP.	SCORE SUM																		
	1. Objective stated	2. Clinical question	3. Target population	4. Outcome domains	5. Target users	6. Patient views sought	7. Final	8. Systematic search method	9. Evidence synthesis clear	10. Formulating method clear	11. Benefits & risks	12. Explicit link to evidence	13. External review	14. Update procedure	15. Specific & unambiguous	16. Different options	17. Easily identifiable	18. Supported with tools	19. Potential barriers	20. Cost implications	21. Conflicts for monitoring	22. Editorial independence	23. Conflicts of interest		
2003	Diagnosis and management of dentin hypersensitivity	2	2	4	2	1	3	1	4	1	1	1	2	1	1	1	1	1	1	1	1	1	1	38	
2002	Pericoronitis: diagnostic at treatment	2	4	4	4	1	4	1	1	1	1	1	2	4	1	4	1	4	1	1	1	1	1	1	48
2002	Guideline for Hand Hygiene in Healthcare Settings	4	4	4	3	2	4	4	1	1	1	1	4	4	4	4	3	4	4	1	4	4	1	1	68
2002	Einsatz von Antibiotika in der Zahnärztlichen Praxis	1	1	3	1	1	3	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	28
2001	Use of amalgam in paediatric dentistry	2	4	4	2	1	4	1	1	1	1	1	3	3	1	3	2	1	4	1	1	1	1	1	44
2001	Guideline on management of acute dental trauma	4	4	4	1	1	1	1	1	1	1	1	3	1	3	1	4	4	1	1	1	1	1	1	42
2001	Guidance Notes on the Safe Use of X-ray	4	4	4	3	2	4	4	3	3	3	3	3	3	3	4	4	3	2	4	1	1	1	1	70
2001	Guidelines to prevent and control Dental Caries in USA	4	4	4	3	1	4	4	3	4	4	4	4	4	4	3	4	4	3	2	4	1	1	1	78
2001	Methodische Empfehlungen, oralen Epidemologie	4	4	4	1	1	4	1	1	1	1	2	1	1	1	2	1	2	1	1	1	1	1	1	38
2001	Pessure Caries	4	4	4	2	1	4	1	1	1	1	2	1	3	1	3	1	3	1	1	1	1	1	1	41
2001	Recycling Amalgam Waste	4	4	4	1	1	4	1	1	1	1	1	1	1	1	3	4	1	1	1	1	1	1	1	42
2000	Oral Health Care for Long-stay Patients and Residents	4	3	4	1	1	3	1	1	1	1	1	2	1	1	4	4	3	4	1	1	1	1	1	45
2000	Infection control in dentistry	4	4	4	2	4	4	1	1	1	1	2	3	1	1	4	4	4	3	1	3	1	1	1	57
2000	Opportunistic Oral Cancer Screening	4	4	4	3	2	4	3	3	4	4	4	4	3	4	3	4	4	4	2	3	1	1	1	74
1999	Amalgames dentaires	1	3	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	30
1999	Oral manifestations of HIV infection and AIDS	4	3	4	3	3	3	1	1	1	1	1	2	3	1	3	3	3	3	2	1	1	1	1	48
1998	An update of mechanical oral hygiene practices	4	4	4	3	1	4	3	4	4	4	4	4	4	4	3	4	4	3	2	3	1	1	1	75
1997	Postexposure chemoprophylaxis for occupational exposure to HIV	4	4	4	3	2	4	1	1	1	1	1	2	3	2	3	3	4	1	1	1	1	1	1	52
1997	Hygiene codes in the dental office	4	4	4	1	1	1	1	1	1	1	1	1	1	1	4	4	4	1	1	1	1	1	1	45
1997	Guide d'achat des produits et matériels d'hygiène	4	4	4	1	2	1	1	1	1	1	1	1	1	1	4	4	4	4	1	1	1	1	1	38

- High scores were obtained for the domains: Scope and purpose & Clarity and presentation
- Mediocre scores were obtained for the domains: Stakeholder involvement & Rigour of development
- Low scores were obtained for: Applicability and Editorial independence
- Four of the evaluated guidelines could be strongly recommended for use, three could be recommended and as many as 13 should not be recommended.
- Particularly the criteria lack of independence from sponsoring body and conflict of interest scored low.
- Very few of the guidelines contained explicit links to the scientific evidence.
- The strength of recommendations were seldom presented

Discussion

- It is recommended that at least two assessors appraise guidelines independently to increase the reliability of the evaluation. It is acknowledged that this introduce a risk of bias into the appraisal.
- Several other systems for appraising guidelines exists. SIGN (Scotland), EBM (Sackett et al.), New Zealand Guidelines Group and the Guidelines International.net. These systems would not necessarily have given the same evaluation outcomes as with the AGREE criteria. The AGREE is an appraisal instrument for clinical guidelines to be developed and tested internationally. It is translated into 7 European languages & Japanese and is formally recommended by the Council of Europe and adopted by WHO to assess their guidelines.
- The need to focus on independency from funding body and conflict of interest issues amongst guidelines developers need to be addressed in guideline developments. This applies both to commercial and to governmental interests.

Conclusion

1. Many existing clinical guidelines in dentistry are inadequate according to current consensus on the optimal quality of clinical practice guidelines.
2. Practitioners should be guided towards good, well-designed guidelines by national or international bodies, such as the FDI World Dental Federation.

References

1. FDI World Dental Federation. Database of Guidelines. www.fdiworldental.org/guidelines.
2. AGREE Instrument (Appraisal of Guidelines for REsearch & Evaluation) www.agreecollaboration.org