*Supplementary Table 1. Search strategy for PubMed and INAHTA databases*

|  |  |  |  |
| --- | --- | --- | --- |
| **Search Terms** | **PubMed** | **Search Terms\*** | **INAHTA** |
| "Technology Assessment, Biomedical\*"[Mesh] AND "Dentistry"[TW] | 20 | “Dentistry” | 15 |
| ‘‘Health Technology Assessment’’[TW] AND "Dentistry"[Mesh] | 24 | "Dentistry"[mh] | 13 |
| "Technology Assessment, Biomedical\*"[Mesh] AND "Dentistry"[Mesh] | 76 | “Dental” | 113 |
| "Technology Assessment, Biomedical\*"[Mesh] AND "Oral Health"[TW] | 7 | “Oral health”  | 259 |
| "Technology Assessment, Biomedical\*"[Mesh] AND "Oral Health"[Mesh] | 2 | “Oral health” [mh] | 21 |
| ‘‘Health Technology Assessment’’[TW] AND "Oral Health"[Mesh] | 5 |
| ‘‘Health Technology Assessment’’[TW] AND "Mouth Diseases"[Mesh] | 10 | "Mouth Diseases"[mh] | 2 |
| "Technology Assessment, Biomedical\*"[Mesh] AND "Mouth Diseases"[Mesh] | 13 |
| "Technology Assessment, Biomedical\*"[Mesh] AND "Dental Caries” [Mesh] | 4 | "Dental Caries"[mh] | 35 |
| "Technology Assessment, Biomedical\*"[Mesh] AND " Periodontal Diseases” [Mesh] | 7 | "Periodontal Diseases"[mh] | 2 |
| **TOTAL** | **163** |  | **460** |

*Supplementary Table 2. Summary of HTA reports according to their title, methodology, key findings and limitations/recommendations*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S No. | Study,Country,Year | Title | Methodology | Key findings | Limitations/Recommendations |
|  | **ORAL MEDICINE & DIAGNOSIS** |
| 1 | CADTH,Canada,2013 | Antibiotic Prophylaxis for Patients with Cardiac or Orthopedic Implants undergoing Dental Procedures: A Review of the Clinical Effectiveness and Guidelines | Limited literature search;Critical appraisal: AMSTAR, AGREE II, Downs and Black Checklist | Benefits must be weighed against risks of lethal toxicity, allergy, and development, selection, and transmission of microbial resistance | Lack of evidence.No recent Canadian guidelines were identified. |
| 2 | CADTH, Canada, 2014 | Ketorolac for Pain Management: A Review | Limited literature search;Critical appraisal: SIGN50 | Effectiveness is similar to other NSAIDs for dental, non-dental and non-cancer pain. | Literature is of poor methodological quality.Evidence on clinical effectiveness is limited.No evidence on long-term effects.Not generalizable to Canadian population. |
| 3 | Häggman-Henrikson B et al, SBU, Sweden, 2017 | Pharmacological treatment of orofacial pain – Health Technology Assessment | Systematic review with network meta-analysis; Risk of bias: SBU tool Critical appraisal: GRADE | NSAIDs as well as corticosteroid- and hyaluronate injections are effective treatments of TMD-joint pain. | Lack of evidence |
| 4 | Adelaide Health Technology Assessment, Australia, 2010 | Velscope® for oral cancer screening | Limited literature searchCritical appraisal: Not reported | Good potential to identify abnormal oral tissue and allow better planning of surgical resection of known tumors. | Lack of evidence.Need for higher quality data to demonstrate better patient outcomes. |
| 5 | DAHTA, DMDI,Germany,2010 | Dental indications for the instrumental functional analysis in additional consideration of health-economic aspects | Systematic literature searchCritical appraisal: Not reported | No study was included | Evaluated studies are not relevant enough.Need for economically efficient guidelines for craniomandibular dysfunctions diagnostics. |
|  | **ORAL RADIOLOGY** |
| 6 | MaHTAS,Malaysia, 2014 | Cone Beam Computed Tomography (CBCT)  | Systematic literature search; Critical appraisal: CASP | CBCT can improve dental diagnosis and treatment plan compared to conventional radiography. | Selection of studies was done by one reviewer and reviewed by another reviewer.Only English full text articles were included. |
| 7 | CADTH,Canada,2012 | Dental X-rays and Cancer: A Review of the Evidence on Safety | Limited literature search;Critical appraisal: JAMA User’s Guide for harm | Some evidence of an association between exposure to dental x-rays and meningioma, thyroid cancer or breast cancer in absence of lead apron. | Bias present in studies.Self-reported information in the studies.Inconsistent dose response gradient in some studies.Positive association is not proof of cause and effect. |
|  | **ORAL AND MAXILLOFACIAL SURGERY** |
| 8 | CADTH, Canada, 2015 | Transoral Robotic Surgery: A Review of Clinical and Cost-Effectiveness | Systematic literature search;Critical appraisal: AMSTAR, Newcastle-Ottawa Scale, Drummond Checklist | No mortality benefits No reduction in bleeding complications Reduces duration of hospitalization | No evidence for clinical- and cost-effectiveness analysis.Limited to studies with case-series design.Bias present in studies.Not generalizable to Canadian population. |
| 9 | IHE, Canada, 2013 | Total prosthetic replacement of the temporomandibular joint: A rapid evidence assessment and economic analysis | Systematic literature search; Critical appraisal: IHE’s quality assessment checklist | Improvement in incisal opening, jaw and diet function, and reduced pain for at least up to 2 years. | Lack of evidence.Lack of independent assessment of potential sources of bias.Not generalizable to population of Alberta, Canada |
|  | **PROSTHODONTICS & DENTAL IMPLANTS** |
| 10 | CADTH, Canada, 2015 | Porcelain-Fused-to-Metal Crowns versus All-ceramic Crowns: A Review of the Clinical and Cost-Effectiveness | Limited literature search;Critical appraisal: AMSTAR, Downs and Black Checklist, Drummond checklist | Porcelain-fused-to-metal crowns become more cost-effective than all-ceramic crowns after 10 years of use. | Most studies were non-randomized.Limited number of direct comparative studies.Heterogeneity in defining crown failure across studies.Cost analysis not representative of Canada. |
| 11 | CADTH, Canada, 2013 | Metal-Ceramic versus All-Ceramic Dental Crowns: A Review of the Clinical andCost-Effectiveness | Limited literature search;Critical appraisal: AMSTAR, SIGN50 | Short term survival of all-ceramic crowns is comparable to PFM.All-ceramic was more cost-effective than PFM. | No conclusions can be made on long-term survival.Cost analysis not representative of Canada. |
| 12 | Ramamoorthi M and Esfandiari S, 2016 | Screw- vs. Cement-retained Implant supported Prosthesis in Partially Edentulous Patients: An Oral HealthTechnology Assessment Report | Systematic literature search;Critical appraisal: Effective Public Health Practice Project Quality Assessment Tool | No statistical clinical difference Cement retention is more cost-effectiveNo ethical, social, socio-political and legal issues were identified | Economic analysis did not consider all aspects.Cost-effectiveness analysis uses limited data to predictlong-term outcome |
| 13 | CADTH, Canada, 2015 | Immediate Osseointegrated Implants for Cancer Patients: A Review of Clinical and Cost-Effectiveness | Limited literature search; Critical appraisal: Downs and Black checklist | Delayed and immediate osseointegrated implant protocols have similar survival rate at 5 years. | Limited evidence.No literature for cost-effective analysis. |
| 14 | CADTH, Canada, 2013 | The Use of Dental Crowns for Vital and Endodontically Treated Teeth: A Review of the Clinical and Cost-Effectiveness and Guidelines | Limited literature search;Critical appraisal: AMSTAR, SIGN50 | Short term survival of crowns for vital teeth depended on the materials used and for post-core-crown restorations, it depended on the remaining tooth structure. | Limited evidence to evaluate long-term efficacyNo clinical practice guidance or cost-effectiveness information was identified. |
|  | **OPERATIVE DENTISTRY & ENDODONTICS** |
| 15 | Yazdani S et al, Iran, 2013 | Health Technology Assessment of Calcium Enriched Mixture (CEM) Pulpotomy in Permanent Molars with Irreversible Pulpitis | Systematic literature search;Critical appraisal: CONSORT | Feasible and acceptable.More successful, accessible, affordable, available and safer as compared to conventional Root Canal Treatment | - |
| 16 | CADTH, Canada, 2019 | Vital Pulp Therapy (VPT) for Endodontic Treatment of Mature Teeth: A Review of Clinical effectiveness, Cost-Effectiveness, and Guidelines | Limited literature search;Critical appraisal: AMSTAR, Downs and Black Checklist, Drummond Checklist | Clinical success was not significantly different between groupsDirect Pulp Therapy id more cost-effective than VPT | Low quality of evidenceLow generalizability to the Canadian contextLack of evidence for some types of VPT |
|  | **ORTHODONTICS** |
| 17 | Sharples L et al, NIHR HTA UK, 2014 | Clinical effectiveness and cost-effectiveness results from the RCT of Oral Mandibular Advancement Devices (TOMADO) for Obstructive sleep apnea–hypopnea (OSAH) and long-term economic analysis of oral devices and continuous positive airway pressure | Open-label, four-treatment, four-period, randomized crossover trial comparing three types of MAD;Sensitivity analysis for health economic evaluation;Critical appraisal: Jadad score | Clinically and cost effective in mild to moderate OSAH  | Study population has limited generalizabilityJadad score used for quality assessment is less sensitiveSensitivity Analysis: Few studies to allow robust subgroup analyses |
| 18 | Kapila S, Conley RS and Harrell Jr WE, USA, 2011 | The current status of cone beam computed tomography imaging in orthodontics | Systematic literature searchCritical appraisal: Not reported | Use of this technology is recommended in select cases in which conventional radiography cannot supply satisfactory diagnostic information. | - |
| 19 | Riley P et al, NIHR HTA, UK, 2020 | Oral splints for patients with TMD or bruxism: a systematic review and economic evaluation | Systematic Literature Search;Critical appraisal: GRADE | Did not demonstrate that splints reduced pain in TMD | Low-quality and limited evidenceNo data regarding long-term effectiveness of splints  |
|  | **PEDIATRIC DENTISTRY** |
| 20 | Neusser S, Krauth C, Hussein R, Bitzer EM, DMDI, Germany, 2014 | Clinical effectiveness and cost-effectiveness of fissure sealants in children and adolescents with a high caries risk | Systematic literature searchCritical appraisal: Not reported | Medical evaluation: Protective effect of pit and fissure sealants, particularly for children and adolescents at high caries risk.Economic evaluation: Cost savingsEthical, social and legal implications: None  | Risk of bias in favor of pit and fissure sealing No study addressed relevant aspects regarding ethical, social and legal implicationsLimited transferability to the German health care system.  |
| 21 | MaHTAs, Malaysia, 2012 | Sippy Cup | Systematic literature searchCritical appraisal: USPSTF Quality Criteria | No evidence on the safety of using Sippy Cup among infants.  | No evidenceOnly English full text articles includedDone by one reviewer |
| 22 | Chou R et al, USPSTF, USA, 2014 | Prevention of Dental Caries in Children Younger Than 5 Years Old: Systematic Review to Update the USPSTF Recommendation | Systematic literature search;Critical appraisal: USPSTF Quality Criteria (Self-tool) | Oral fluoride supplementation and professionally applied fluoride varnish were effective at reducing caries incidence in children younger than age 5 years.  | Limited evidence from randomized trialsNonrandomized trials were included Limited applicability to the United States |
| 23 | Maguire A et al, NIHR HTA, UK, 2020 | Best-practice prevention alone or with conventional or biological caries management for 3- to 7-year-olds: the FiCTION three-arm RCT | Multicenter, three-arm, parallel-group, participant-RCT with three treatment approaches.Critical appraisal: Self-tool | No evidence of an overall difference between 3 treatment approaches Prevention alone was least costly treatment, but also the least effective. | Participants, parents and dental professionals were not blinded.Recruitment challenges were overcome to achieve the target sample size. |
| 24 | Chestnutt IG et al, NIHR HTA, UK, 2017 | Seal or Varnish? A RCT to determine the relative cost and effectiveness of pit and fissure sealant (FS) and fluoride varnish (FV) in preventing dental decay | Randomized controlled, assessor-blinded clinical trial with two parallel arms Critical appraisal: Self-tool | FV and FS show similar results in community oral health settingsFV is more cost-effective as compared with FS Both are acceptable to children and parents | Methodological issues in child interviewsBudget impact analysis is needed |
|  | **PERIODONTICS** |
| 25 | CADTH, Canada, 2013 | Photo-Activated Disinfection Therapy for Dental Surgery: Review of the Clinical Effectiveness | Limited literature search;Critical appraisal: SIGN50 | Did not improve patient outcomes compared to conventional surgical periodontal treatment alone. | Limited evidence  |
| 26 | Ramsay CR et al, NIHR HTA, UK, 2018 | Improving the Quality of Dentistry (IQuaD): a cluster factorial RCT comparing the effectiveness and cost–benefit of oral hygiene advice (OHA) and/or periodontal instrumentation (PI) with routine care for the prevention and management of periodontal disease in dentate adults attending dental primary care | Multicenter, pragmatic split-plot, randomized open trial with a cluster factorial design and blinded outcome evaluation with 3 years' follow-up and a within-trial cost-benefit analysis. Critical appraisal: Self-tool | No additional benefit from scheduling 6-monthly or 12-monthly PIs over not providing this treatment unless recommended.Patients and are willing to pay for,both interventions, with greater financial value placed on PI than on OHA | Limitations of a pragmatic trial- patients were not denied PI in no-PI groupLifetime decision model was not conducted |
| 27 | CADTH, Canada, 2010 | Treatment of Periodontal Disease in Patients with Diabetes: A Review of Clinical and Cost-Effectiveness | Limited literature searchCritical appraisal: Not reported | Effect is statistically significant but is lower than other interventions | Inconclusive findings Included systematic reviews had different inclusion criteria, methods of critical appraisal, and approach to pooling dataFailure to address confounding factorsNot generalizable to Canadian population |
|  | **DENTAL PUBLIC HEALTH & PREVENTIVE DENTISTRY** |
| 28 | Werner H et al, Region Västra Götaland, HTA-centrum, Sweden, 2014 | Psychological interventions to improve poor oral health in adults and adolescents | Systematic literature search;Critical appraisal: GRADE | Psychological interventions have little or no difference regarding periodontal outcomes, gingivitis, dental plaque, oral health behavior, or oral health beliefs. | Low certainty of evidenceLong-term effects are unknown.  |
| 29 | Clarkson JE, NIHR HTA UK, 2020 | Risk-based, 6-monthly and 24-monthly dental check-ups for adults: the INTERVAL (Investigation of NICE Technologies for Enabling Risk-Variable-Adjusted-Length) three-arm RCT | Multi-centre, parallel-group, pragmatic RCT with blinded clinical outcome assessment over a 4-year period Critical appraisal: Self-tool | Not detrimental to oral health and is acceptable to patients and dentists with potential for cost savings. No difference in oral health for patient participants allocated to a 6-month or a variable risk-based recall interval group | Recruitment challengesData retrieval challenges due to absence of such systemChoice of primary outcome – calibration not possibleHigh drop-out rateDifferent payment systems within various regions |
| 30 | CADTH, Canada, 2014 | Periodic Dental Examinations for Oral Health: A Review of Clinical Effectiveness, Cost Effectiveness, and Guidelines | Limited Literature Search;Critical appraisal: Downs and Black Checklist | Those at high risk for periodontal disease may benefit from more frequent (2 year) dental exams compared to those at low risk More frequent recall may result in increased tooth retention. | No cost-effectiveness evidence or evidence-based guidelines were identified. None of the studies were completed in Canada. |
|  | **DENTAL MATERIALS** |
| 31 | CADTH, Canada,2012 | Composite Resin and Amalgam Dental Filling Materials: A Review of Safety, Clinical Effectiveness and Cost-effectiveness | Limited literature search;Critical appraisal: SIGN50 | Safety: Strong evidenceEfficacy: Amalgam has a longer longevity than composite materials Cost-effectiveness: Amalgam seems to be more cost-effective | Limited evidence to evaluate potential harms caused by composite.Cost analysis not representative to Canada |
| 32 | CADTH,Canada,2018 | Composite Resin Versus Amalgam for Dental Restorations: A Health Technology Assessment | Limited literature search;Critical appraisal: GRADE | Amalgam restorations appear to be more clinically efficacious, safe, cost-effective as compared to composite resin | Need for studies that focus on broader populations and pursue longer-term follow-upStudies with evidence of causality neededNeed for higher quality economic dataNeed for population-based analysis |
| 33 | Mobinizadeh M et al, Iran, 2014 | Health Technology Assessment of CAD/CAM in Dentistry | Systematic literature search for studies that compared CAD/CAM with conventional restorative methods in terms of safety, efficacy and cost- effectiveness.Critical appraisal: Not reported | Favorable results Safe and effective | Economic evaluation of technology in Iran is recommended |
|  | **SPECIAL CARE DENTISTRY** |
| 34 | CADTH, Canada, 2012 | Dental Treatment to Correct Dental Caries in Patients Undergoing Surgery: A Review of Clinical Evidence on Safety | Limited literature search;Critical appraisal: Downs and Black checklist | Similar risk of mortality and infective endocarditis with or without treatment | Bias related to cohort studies.No studies which included only patients with small dental cavities. |
| 35 | CADTH, Canada, 2012 | Routine Dental Care Programs in Long Term Care (LTC): A Review of the Clinical Effectiveness and Guidelines | Limited literature search;Critical appraisal: AGREE, SIGN50 | Professional dental care may improve nutritional status, quality of life, and general oral health of elder LTC residents.  | No definite definition of a professional routine dental careNot all contextual aspects assessed |
|  | **DENTAL ANESTHESIA** |
| 36 | Verma V, Ramamoorthi M, Morris M, Siddiqui F, and Esfandiari S, 2016 | The Effect of Phentolamine on Reversing Soft Tissue Anesthesia: An Oral Health Technology Assessment Report | Systematic literature search; Meta-analysis Critical appraisal: Jadad toolRisk of bias: Cochrane Tool | Clinically effectiveNo serious adverse eventsCost-effectiveNo socioeconomic literature was identified for ethical, legal and social aspects | Lack of evidenceLimited generalizability Economic analysis did not consider all aspects and is applicable to the US only |

**Abbreviations:** CADTH – Canadian Agency for Drugs and Technologies in Health; SBU - Swedish Agency for Health Technology Assessment and Assessment of Social Services; DAHTA - Deutsche Agentur für Health Technology Assessment; DIMDI - Deutsches Institut für Medizinische Dokumentation und Information; MaHTAS - Malaysian Health Technology Assessment Section; IHE - Institute of Health Economics; NIHR HTA – National Institute of Health Research Health Technology Assessment; RCT – Randomized Control Trial; CASP - Critical Appraisal Skills Programme, , GRADE - Grading of Recommendations, Assessment, Development and Evaluations, AGREE - Appraisal of Guidelines Research and Evaluation–Recommendations Excellence, AMSTAR - Assessing the Methodological Quality of Systematic Reviews, SIGN50 - Scottish Intercollegiate Guidelines Network (publication no. 50), PFM - Porcelain fused to metal; NSAID – Non-Steroidal Anti-inflammatory Drug, TMD - Temporomandibular disorders, JAMA - Journal of the American Medical Association, MAD - Mandibular Advancement Device, USPSTF - United States Preventive Services Task Force

*Supplementary Table 3. Checklist for methodological characteristics of HTA reports*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S No.\* | Author | Efficacy/effectiveness | Safety Issues | Cost-effectiveness/ Health economic analysis | Organizational impact | (Medico-) legal Implications | Ethical implications | Social implications | Other contextual aspects | Type of HTA (F/M/R/O) |
| 1. | CADTH, Canada, 2013 | ✓ | ✓ |  |  |  |  | ✓ | ✓ | R |
| 2. | CADTH, Canada, 2014 | ✓ | ✓ |  |  |  |  |  |  | R |
| 3. | Häggman-Henrikson B et al, SBU, Sweden, 2017 | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ |  | F |
| 4. | Adelaide Health Technology Assessment, Australia, 2010 | ✓ | ✓ | ✓ | ✓ |  | ✓ |  | ✓ | F |
| 5. | DAHTA, DMDI, Germany, 2010 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  | F |
| 6. | MaHTAS, Malaysia, 2014 | ✓ | ✓ | ✓ |  |  |  |  |  | M |
| 7. | CADTH, Canada, 2012 | ✓ | ✓ |  |  |  |  |  |  | R |
| 8. | CADTH, Canada, 2015 | ✓ | ✓ | ✓ |  |  |  |  |  | M |
| 9. | IHE, Canada, 2013 | ✓ | ✓ | ✓ | ✓ |  |  |  | ✓ | F |
| 10. | CADTH, Canada, 2015 | ✓ | ✓ | ✓ |  |  |  |  | ✓ | M |
| 11. | CADTH, Canada, 2013 | ✓ |  | ✓ |  |  |  |  | ✓ | M |
| 12. | Ramamoorthi M and Esfandiari S, 2016 | ✓ | ✓ | ✓ |  | ✓ | ✓ |  |  | M |
| 13. | CADTH, Canada, 2015 | ✓ | ✓ | ✓ |  |  |  | ✓ |  | M |
| 14. | CADTH, Canada, 2013 | ✓ |  | ✓ |  |  |  |  | ✓ | M |
| 15. | Yazdani S et al, Iran, 2013 | ✓ | ✓ | ✓ | ✓ |  |  | ✓ | ✓ | F |
| 16. | CADTH, Canada, 2019 | ✓ | ✓ | ✓ | ✓ |  |  |  | ✓ | F |
| 17. | Sharples L et al, NIHR HTA UK, 2014 | ✓ | ✓ | ✓ | ✓ |  |  |  | ✓ | F |
| 18. | Kapila S, Conley RS and Harrell Jr WE, USA, 2011 | ✓ | ✓ |  |  |  |  |  | ✓ | R |
| 19. | Riley P et al, NIHR HTA, UK, 2020 | ✓ | ✓ | ✓ | ✓ |  |  | ✓ | ✓ | F |
| 20. | Neusser S, Krauth C, Hussein R, Bitzer EM, DMDI, Germany, 2014 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  | F |
| 21. | MaHTAs, Malaysia, 2012 | ✓ | ✓ | ✓ |  |  |  |  |  | M |
| 22. | Chou R et al, USPSTF, USA, 2014 | ✓ | ✓ | ✓ | ✓ |  |  |  | ✓ | F |
| 23. | Maguire A et al, NIHR HTA, UK, 2020 | ✓ | ✓ | ✓ | ✓ |  |  | ✓ | ✓ | F |
| 24. | Chestnutt IG et al, NIHR HTA, UK, 2017 | ✓ | ✓ | ✓ | ✓ |  |  | ✓ | ✓ | F |
| 25. | CADTH, Canada, 2013 | ✓ | ✓ |  |  |  |  |  |  | R |
| 26. | Ramsay CR et al, NIHR HTA, UK, 2018 | ✓ | ✓ | ✓ | ✓ |  |  |  | ✓ | F |
| 27. | CADTH, Canada, 2010 | ✓ |  | ✓ |  |  |  |  |  | O |
| 28. | Werner H et al, Region Västra Götaland, HTA-centrum, Sweden, 2014 | ✓ | ✓ | ✓ | ✓ |  | ✓ |  | ✓ | F |
| 29. | Clarkson JE, NIHR HTA UK, 2020 | ✓ | ✓ | ✓ | ✓ |  |  |  | ✓ | F |
| 30. | CADTH, Canada, 2014 | ✓ | ✓ | ✓ |  |  |  |  | ✓ | M |
| 31. | CADTH, Canada, 2012 | ✓ | ✓ | ✓ |  |  |  |  |  | M |
| 32. | CADTH, Canada, 2018 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | F |
| 33. | Mobinizadeh M et al, Iran, 2014 | ✓ | ✓ | ✓ |  |  |  |  |  | M |
| 34. | CADTH, Canada, 2012 | ✓ | ✓ |  |  |  |  |  |  | R |
| 35. | CADTH, Canada, 2012 | ✓ | ✓ |  |  |  |  |  | ✓ | R |
| 36. | Verma V, Ramamoorthi M, Morris M, Siddiqui F, and Esfandiari S, 2016 | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ | M |

\* Serial Number of the studies is the same as mentioned in Supplementary Table 1

\*Type of HTA Report – F-full/M-Mini/R-Rapid/O-Others

*Supplementary Table 4. Compare and contrast of results from the current study and study by R. Bassani et al (2019)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Criterion** | **Characteristics** | **R Bassani et al (2019) (N=495)** | **Current study (N=36)** |
| **Epidemiological characteristics** |
| 1. | Country of corresponding author | Top 7 countries mentioned | Brazil 117 (23.6%)USA 53 (10.7%)Australia 27 (5.4%)China 26 (5.2%)Spain 24 (4.5%)Germany 22 (4.4%)Iran 22 (4.4%) | Canada 19 (52.7%)United Kingdom 6 (16.7%)Malaysia 2 (5.6%)Sweden 2 (5.6%)Germany 2 (5.6%)Iran 2 (5.6%)USA 2 (5.6%) |
| 2.  | Dental specialties | Oral and Maxillofacial SurgeryOral Medicine and DiagnosisOral Radiology Prosthodontics and Dental ImplantsPeriodonticsOrthodontics Operative Dentistry & EndodonticsPediatric Dentistry Dental Public Health Others | 75 (15.1%)71 (14.3%)13 (2.6%)87 (17.5%)53 (10.7%)42 (8.5%)78 (15.7 %)34 (6.9%)30 (6.1%)12 (2.4%) | 2 (5.6%)5 (13.9%)2 (5.6%)5 (13.9%)3 (8.3%)3 (8.3%)2 (5.6%)5 (13.9%)3 (8.3%)6 (16.7%) |
| **Methodological characteristics** |
| 3. | Databases searched | More than one database searchedOnly one database searched | 459/490 (93.7%)31/490 (6.33%) | 36 (100%)0 (0%) |
| 4. | Years of coverage | ReportedNot reported | 435 (87.8%)60 (12.2%) | 28 (77.8%)8 (22.2%) |
| 5. | Search terms | ReportedNot reported | 463 (93.5%)32 (6.5%) | 28 (77.8%)8 (22.2%) |
| 6. | Economics | ConsideredNot considered | 18/321 (5.6%)303/321 (94.4%) | 29 (80.6%)7 (19.4%) |
| 7. | Safety | ReportedNot reported | 22/206 (10.7 %)184/206 (89.3%) | 32 (88.8%)4 (11.2%) |
| 9.  | Empty reviews | SRs/HTAs with no eligible studies | 1 (4.9%) | 2 (5.6%) |
| 10. | Eligible study designs | Randomized controlled trials Observational – cohort/ case-control/cross-sectional/case report/case series studiesNon-randomized controlled trials OthersUnclear/Not stated  | 236 (47.7%)249 (49.9%)22(4.4%)154 (31.1%)137 (27.7%) | 26 (72.2%)\*16 (44.4%)\*9 (25%)\*16 (44.4%)\*#3 (8.3%)\* |
| 11. | Study risk of bias/quality  | AssessedNot assessed/Not reported | 365 (73.7%)130 (26.3%) | 30 (83.3%)6 (16.7%) |
| 12. | Risk of bias/quality tool used | Cochrane risk of bias toolCochrane risk of bias tool and otherJadad ScaleNewcastle-Ottawa ScaleQUADAS-2Self-developed toolOtherNot reported | 117/365 (48.2%)19/365 (5.1%)12/365 (3.3%)42/365 (1.4%)9/365 (2.5%)6/365 (1.6%)102/365 (27.9%)25/365 (6.8%) | 1 (2.7%)0 (0%)2 (5.6%)1 (2.7%)0 (0%)5 (13.8%)21 (58.3%)6 (16.7%) |
| **Outcome characteristics** |
| 13. | Favourability ofintervention effect estimates forprimary outcome | FavourableUnfavourableUnclear | 108/151 (71.5%)31/151 (20.5%)12/151 (7.9%) | 24 (66.7%)0 (0%)12 (33.3%) |
| **Limitations characteristics** |
| 14. | Limitations reported | ReportedNot reported | 296 (59.8%)199 (40.2%) | 35 (97.3%)1 (2.7%) |

\*- A single HTA can have multiple study designs included

#- Others include HTAs, SRs, Meta-analysis