

# EFFECTIVENESS OF HYDROGEN PEROXIDE CONCENTRATIONS ON BLEACHING AND TOOTH SENSITIVITY - A SYSTEMATIC REVIEW

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## Abstract

**ABSTRACT** Objective: In this study, the literature was systematically reviewed to investigate the effect of hydrogen peroxide concentrations on bleaching effect and tooth sensitivity. Data Sources: Electronic databases were screened, and hand searched. Searched electronic databases are PubMed, Scopus, Cochrane Library, Ovid Medline, Elsevier science direct, Wiley online library, Grey literature, Embase. Materials and Methods: A systematic review on controlled clinical trials MeSH terms used are (hydrogen peroxide) AND (bleaching) AND (tooth sensitivity). A trial on the bleaching effect and tooth sensitivity with various hydrogen peroxide concentrations were included. PRISMA guidelines were followed, and the PICO model was used. Cochrane risk assessment tool for randomized controlled trials was used. Results: A total of 5 articles fulfilled the inclusion criteria. The analysis showed that high hydrogen peroxide concentration has a better bleaching effect accompanied by tooth sensitivity. Low hydrogen peroxide concentration also has a bleaching effect slightly minimal from the former, followed by less tooth sensitivity. Conclusion: This study concludes that the hydrogen peroxide with higher concentration is effective in bleaching and with lower concentration is less likely to produce tooth sensitivity **KEYWORDS:** h2o2, bleaching, sensitivity, tooth shade, aesthetic dentistry

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