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Antimicrobial Effects Of Chlorhexidine Against Cariogenic Bacteria Of Early Childhood Caries: (Literature Study Article)

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ABSTRACT

The prevalence of caries in Indonesia approximately 90% of the population toddler in Indonesia. The most common of primary teeth caries are rampant caries and caries bottle syndrome. Dental plaque is the main source for dental caries. Some literatures show the daily use of an efficient antimicrobial product such as Chlorhexidine can be very beneficial in plaque control and, thus, prevention of caries, but the long-term effects are still being reviewed. This article aims to identification the antimicrobial effects of Chlorhexidine (CHX) against cariogenic bacteria and its relationship with the Early Childhood Caries (ECC). In recent years, new approaches have been considered to control ECC such as topical application of antimicrobial agents on the surface of those teeth that are at risk of or affected by ECC. As an anti caries agent, CHX is used at concentrations ranging from 0.1 to 40 percent in solutions, gels, chewing tablets, and varnishes. A previous meta-analysis of selected studies gave an overall caries inhibiting effect of CHX of around 46 percent. Several studies have used CHX for ECC prevention with varying effectiveness depending on concentration, frequency of application and the age of participants. As an anti caries agent, CHX therapies should be used as adjuncts to a regular caries preventive program for patients at higher risk for caries. Regular tooth brushing and good diets should be used in conjunction with CHX to prevent recolonization of Mutans Streptococci (MS) in children.

Key words: Antimicrobial, Chlorhexidine, Mutans Streptococci, Early Childhood Caries

INTRODUCTION

Prevalence of Early Childhood caries (ECC) reaches high levels in developing countries, the severity increases with age. The prevalence of caries in children 3-5 years old in Indonesia continues to increase. The prevalence of caries in toddlers in Indonesia is approximately 90.05%. Because of the high prevalence of these can affect children's quality of life and higher potential caries risk of primary teeth, the ECC is the most serious