UNIVERSITI TEKNOLOGI MARA

FAMILY COHESION AND ORAL HEALTH STATUS OF ORANG ASLI CHILDREN IN WEST MALAYSIA

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ABSTRACT

Background: Orang Asli (OA) are the Indigenous people of Malaysia, known for being marginalised in terms of economy and health. Research shows that OA children had poor oral health status. Despite this, research investigating oral health status is scarce.

Objectives: This study investigates the association between family cohesion and oral health status of OA children in West Malaysia by investigating the prevalence of caries, periodontal disease, enamel fluorosis, and oral hygiene status.

Methods: This cross-sectional study examined 171 OA children aged 5 to 12 and their parents orally. Caries status, periodontal status, oral hygiene status, enamel fluorosis and potential oral mucosal lesions were recorded. The Family Adaptability and Cohesion Evaluation Scale (FACES-III) was used to determine the family cohesion level. Questionnaires were used to determine the parents' oral health knowledge, attitude, practice, dental attendance pattern and cariogenic diet habits. Ethics approval was obtained from Universiti Teknologi MARA and the Department of Orang Asli Development Malaysia. The structural equation method was used to model the effect of family cohesion on OA children's caries-free status.

Results: 24.0% of OA children aged 5 to 12 were caries-free. 70.9% of the children had primary tooth caries (mean dft=3.37), 40.5% had permanent tooth caries (mean DMFT=0.81), 68.4% had periodontal disease, and 1.8% had fluorosis. Among OA parents, 87.7% had caries (mean DMFT=5.70), 88.9% had periodontal diseases, 63.7% had poor oral hygiene, and 5.3% had fluorosis. For family cohesion, 36.3% of OA families were categorised as "enmeshed", connected (26.3%), "separated" (30.4%) and only 7.0% as "disengaged".

Conclusion: Higher level of family cohesion is associated with an increased likelihood of Orang Asli children being caries-free.

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CHAPTER ONE
INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Orang Asli (OA) is defined by the Malaysian Aboriginal Peoples Act 1954 (Act 134) as any person whose male parent is or was a member of an aboriginal ethnic group, who speaks an aboriginal language and habitually follows an aboriginal way of life, aboriginal customs and beliefs and includes a descendant of such persons through males (Mahmud et al., 2022). They remain economically and socially marginalised despite government efforts to reduce poverty and enhance their standard of living (Khor & Shariff, 2019; Masron et al., 2013). In Peninsular Malaysia, the OA population has been shown to have a lower health status than the general population (Mahmud et al., 2022; Masron et al., 2013). The children have a higher prevalence of anaemia (Ab Aziz et al., 2024) and a double burden of malnutrition (C. Y. Wong et al., 2015) compared to the general population. Despite this problem, there needs to be more research on oral health among the OA people (Othman, Ithnin, Wan Abdul Aziz, et al., 2021). Several studies have found that indigenous cultures have a worldwide prevalence of chronic illnesses compared to the general population (Masron et al., 2013).

The most significant worldwide oral health burdens are dental caries and periodontal disease (Petersen et al., 2005). Dental caries has been identified as the most prevalent oral disease that negatively impacts daily activities in Asia. Moreover, it is comparatively highest among children (Petersen et al., 2020). It is known that environmental variables affect the development of tooth decay, including the child's environment, which influences the child's growth and oral health habits (Wigen & Wang, 2012). Another common, widespread oral disease that affects humans is periodontal disease, which could be periodontitis or gingivitis (Tonetti et al., 2017). It consists of both destructive and non-destructive chronic inflammatory disorders that affect the periodontal supporting tissues of the teeth (Albandar, 2005). Many factors contribute to the development of oral diseases. The World Health Organisation (WHO) (2022) mentioned that oral diseases are caused by a variety of modifiable risk factors that are common to many non-communicable diseases (NCDs), such as sugar intake,