

UNIVERSITI TEKNOLOGI MARA

**RELATIONSHIP BETWEEN
DENTAL ANXIETY, DENTAL
UTILISATION, ORAL HEALTH-
RELATED QUALITY OF LIFE AND
ORAL HEALTHCARE DELIVERY
AMONG MALAYSIAN YOUNG
ADULTS IN SELANGOR**

AZIZI BINTI AB MALEK

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ABSTRACT

Introduction: Low rates of dental utilisation among Malaysian young adults may be attributed to dental anxiety, a psychological barrier that discourages patients from obtaining necessary dental care. This study aims to explore the prevalence of dental anxiety, dental utilisation, Oral Health-Related Quality of Life (OHRQoL), and their potential implications for the provision of future oral healthcare delivery services in reducing dental anxiety among Malaysian young adults in Selangor. Objectives: 1) To systematically review the status and relationship between dental anxiety, dental utilisation and OHRQoL among adult groups and summarise the available evidence; 2) To measure the current level of dental anxiety and dental utilisation in relation to barriers and facilitating factors; and OHRQoL among Malaysian young adults in Selangor; 3) To assess the association of dental anxiety and dental utilisation; and its relationship with OHRQoL among Malaysian young adults in Selangor; 4) To explore the best and recommended provision of oral healthcare delivery service in reducing dental anxiety among Malaysian young adults from the perspective of young adults, dentists, psychologists and psychiatrists. **Methods:** This research employed a sequential explanatory mixed-methods approach, starting with a systematic review (Part 1) to gather evidence on dental anxiety, utilisation of dental services, and OHRQoL in adults. The findings from the review informed the conceptual framework and guided the quantitative study (Part 2) by selecting validated tools, such as the Modified Dental Anxiety Scale (MDAS), short form Malaysian Oral Health Impact Profile [S-OHIP(M)], and measures of dental utilisation, thereby ensuring that the quantitative phase was firmly rooted in evidence-based practices. Insights from Parts 1 and 2 were later applied to the qualitative study design in Part 3 in crafting the semi-structured interview guide. Additionally, Part 3 explored tailored oral healthcare delivery, enhancing the conceptual framework and providing specific insights into how healthcare service design affects dental anxiety and utilisation behaviours. Part 1: a systematic review involving eight databases was conducted with data collection spanned 6 months, from 1 July to 31 December 2023. Only cross-sectional (CS) studies with adult participants aged 15–64 years, conducted globally, published in English, and available as full-text articles by 31 December 2023, were included. Two reviewers screened the titles and abstracts and assessed the full-text articles. The risk of bias was evaluated using the Joanna Briggs Institute's Critical Appraisal Checklist for Analytical CS studies. The quality of evidence for each measured factor was assessed using the Grading of Recommendations Assessment, Development, and Evaluation methodology. Part 2: A total of 601 participants were recruited using convenience sampling from shopping malls across all nine districts in Selangor. A pilot study involving 29 participants was conducted at the Urban Transformation Centre (UTC). Data were collected using a structured self-administered questionnaire divided into four sections: Socio-demographic details, the MDAS, the S-OHIP(M), and dental utilisation. The internal consistency of the psychometric tools used was explored during the pilot testing, and Cronbach's alpha values of the tools were 0.847 for MDAS and 0.889 for S-OHIP(M), thus indicating good to excellent reliability. A qualitative research approach, which includes Focus Group Discussions (FGD) and In-Depth Interviews (IDIs), was used to collect data from dentists, psychologists, psychiatrists and young adult groups. The FGDs were conducted with 18 dentists from the Ministry of Health,

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CHAPTER 1

INTRODUCTION

1.1 Research Setting: Malaysia

This study focuses on state of Selangor located in Malaysia. The country, which is part of Southeast Asian countries comprised of other thirteen states and three federals' territories distributed across both Peninsular Malaysia (West Malaysia) and East Malaysia. Selangor is one of Malaysia's thirteen states, located in Peninsular Malaysia. It is divided into nine districts. It is a state in Peninsular Malaysia's central region located on the west coast of Malaysia and encircles the capital city of Kuala Lumpur. Selangor is one of Malaysia's most developed and populous states, with the capital city of Shah Alam. It is bounded on three sides by other Malaysian states: Perak to the north, Pahang to the east, and Negeri Sembilan to the south. Selangor is located in west coast of Peninsular Malaysia and encircles the capital city of Kuala Lumpur. It is bounded on three sides by other Malaysian states: Perak to the north, Pahang to the east, and Negeri Sembilan to the south. It is divided into nine districts and the capital city is Shah Alam. It is one of the Malaysia's most developed and populous states.

1.1.1 Demography Profile

In 2021, the total population in Malaysia was estimated at 32.7 million, with 91.8% (30.0 million) comprising citizens and 8.2 per cent (2.7 million) non-citizens (DOSM, 2021). Selangor is known for having a diverse population, which could provide an opportunity to study how young adults from various ethnic and cultural backgrounds experience and navigate their lives. Selangor is Malaysia's most populous state, with 7.04 million people, with young adults constituting a significant portion of the population (DOSM, 2021). This could make it an attractive location for studying the experiences of this age group. According to the Department of Statistics Malaysia (DOSM) data, there were 988,7000 young adults aged 15-24 in 2021 in Selangor