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SMOKING BEHAVIOUR AMONG ORANG ASLI: PREVALENCE, FACTORS INFLUENCING AND THE EFFECTS OF SMOKING CESSATION COUNSELLING

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ABSTRACT

Introduction: Tobacco use remains a leading preventable cause of death globally, with indigenous populations experiencing disproportionately high smoking rates. Despite this, research on smoking behaviours among the Orang Asli (Indigenous community in Malaysia) remains limited. **Objective:** To explore the smoking prevalence, secondhand smoke exposure, influencing socio-demographic factors, and the effects of smoking cessation interventions among the Orang Asli in Malaysia. **Methods:** This study was conducted in two parts. Part 1 involved a cross-sectional survey among Orang Asli aged ≥15 years, using a multi-stage proportionate sampling method. Data were collected via home visits using a questionnaire adapted from the Global Adult Tobacco Survey (GATS). Socio-demographics, tobacco use, and secondhand smoke (SHS) exposure were assessed. Part 2 comprised a quasi-experimental pilot study among Orang Asli smokers in Selangor, comparing the effectiveness and acceptability of two smoking cessation interventions: the 5As and Very Brief Advice or 3As. Participants were followed up at 1 and 3 months. Smoking outcomes included self-reported tobacco use, expired carbon monoxide levels, and Fagerstrom Test for Nicotine Dependence (FTND). Acceptability was assessed through eligibility, recruitment and retention rates; and structured interviews. **Results:** For part 1, 341 participants were involved from randomly chosen Orang Asli villages in Johor, Pahang, Selangor, and Perak. 30.5% of participants were active tobacco users, with 26.7% being cigarette smokers, 6.8% being e-cigarette users and 2.8% being smokeless tobacco consumers. Multiple logistic regression (MLR) showed men had higher odds of smoking cigarettes (AOR: 8.97; 95% CI: 4.74-17.01), while self-employed workers had higher odds to smoke compared to homemakers, students, and unemployed individuals. For e-cigarette usage, Orang Asli men have higher odds of using e-cigarettes (AOR: 10.93; 95% CI: 3.82-31.28), while those aged 25-44 (AOR: 0.27; 95% CI: 0.08-0.90) and 45-64 (AOR: 0.07; 95% CI: 0.01-0.39) had lower odds compared to the young age group of 15-17. For SHS exposures, 66.0% of Orang Asli households contain active smokers, and 51.6% of non-smokers are exposed to SHS at home. Households that enforce a "No Smoking" policy have 1% lower odds of SHS exposure (95% CI: 0.01–0.04), and those living with smokers have 79% higher odds of having SHS exposure at home (95% CI 21.17, 292.06). The Part 2 study involved 64 Orang Asli with 88.9% response rate. No significant differences were found in the median of smoking outcome measures across both 5As and 3As groups, indicating that both approaches demonstrated equal effectiveness in promoting smoking cessation. Moreover, the eligibility rate was 66.0%, the recruitment rate was 100%, and the retention rate for the three-month follow-up was 71.9%. 20 participants who completed the follow-ups were interviewed, and thematic analysis identified four major themes: i) General acceptability, ii) Reasons to quit smoking, iii) Reasons to continue smoking/vape, and iv) Changes after counselling. **Conclusion**: This study highlights a high prevalence of tobacco use and SHS exposure among the Orang Asli, with significant socio-demographic influences on smoking behaviours. Despite the challenges, both the 5As and 3As smoking cessation interventions were well accepted and showed comparable effectiveness. These findings highlighted the need for culturally tailored tobacco control policies and cessation support programmes to address the unique needs of the Orang Asli community.

TABLE OF CONTENTS

CONFIRMATION BY PANEL OF EXAMINERS ..... **ii**

AUTHOR'S DECLARATION ..... **iii**

ABSTRACT ..... **iv**

ACKNOWLEDGMENT ..... **v**

TABLE OF CONTENTS ..... **vi**

LIST OF TABLES ..... **xii**

LIST OF FIGURES ..... **xiv**

LIST OF ABBREVIATIONS ..... **xv**

CHAPTER 1 INTRODUCTION **1**

1.1 Background of the study 1

1.2 Problem Statements 4

1.3 Research Questions 5

1.4 Research Objectives 5

1.4.1 Main Objective 5

1.4.2 Specific Objectives 5

1.5 Scope of the Study 6

1.6 Conceptual Framework 7

1.6.1 Theoretical Framework: Transtheoretical Model (TTM) 7

1.6.2 Nicotine Dependence and Smoking Behaviour 9

1.6.3 Conceptual Framework for the Study 10

1.7 Significance of the Study 11

CHAPTER 2 LITERATURE REVIEW **12**

CHAPTER 1
INTRODUCTION

1.1 Background of the Study

The Orang Asli, as defined under the Orang Asli Act 1954 (Act 134), refers specifically to "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 and aboriginal customs and beliefs, and includes a descendant through males of such persons" (JAKOA, 2022). They have distinct cultures and lifestyles from other races in mainstream society, such as the Malays, Chinese, and Indians. Since the 1930s, three main groups of Orang Asli have been identified: Senoi, Proto-Malays, and Negrito (Noone, 1972). Typically, Orang Asli communities live in small groups of families, ranging between 80 and 600 individuals (A. T. Ahmad et al., 2021).

Tobacco use has been identified as a risk factor for six of the world's top eight causes of death, and is a significant risk factor for various chronic diseases, including cardiovascular disease, type 2 diabetes, and cancer (CDC, 2010; Maddatu et al., 2017). Globally, Indigenous communities tend to have higher smoking prevalence than non-indigenous populations. For example, disparities are evident in countries like New Zealand, where the smoking prevalence among the Maori is 19.9% compared to 8.0% among non-indigenous New Zealand adults (Ministry of Health New Zealand, 2020). Similarly, in the United States (US), 29.3% of American Indians/Alaska Natives smoke compared to 15.2% of the general adult population (Cornelius et al., 2022). In Australia, 37% of Indigenous Australians smoke compared to 11.6% of the overall adult population (Australian Bureau of Statistics, 2019).

In Malaysia, the National Health and Morbidity Survey (NHMS) 2019 reported that 21.3% of adults aged 15 and older were current smokers (National Institutes of Health Malaysia, 2019). However, the prevalence of smoking among the Orang Asli is not well-documented, and research on this topic remains sparse. A study by Gan among the Indigenous Bajau of Sabah revealed that 74.4% of men smoked compared to 3.3% of women. Interestingly, the prevalence of smokeless tobacco usage was higher among women (77%) than men (4.3%). Local, hand-rolled cigarettes were common, and