

UNIVERSITI TEKNOLOGI MARA

**INVESTIGATING ORAL HEALTH
CARE PROGRAM AND
CAREGIVER EDUCATION IN
GOVERNMENT-BASED
INSTITUTIONS FOR OLDER
ADULTS IN MALAYSIA**

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ABSTRACT

The ageing population has been expanding worldwide, and the number of older adult (OA) population requiring OH care is expected to rise. Since OA often presents with multiple challenges in maintaining OH (e.g. systemic health conditions, side effects of medications and socioeconomic limitation) they are at higher risk of developing oral diseases, and experiencing complications that can negatively impact bodily functions including nutritional intake and speech, as well as overall quality of life. The need for structured OH programs and protocols in residential aged care facilities (RACF), as well as the availability of caregivers with adequate training, knowledge and attitude, is critical to ensure OA living in these facilities receive satisfactory personal and professional OH care. This research was done to review current publications that report factors supporting improvement of OH in RACFs across the world. This is followed by a qualitative study to identify existing 1) OH care programs delivered by dental professionals in government-based RACFs, 2) protocols and guidelines in each government-based RACF pertaining to OH care for its residents, 3) provision of OH care for residents in Malaysian government-based RACFs as well as 4) OH education and training for caregivers. This study will also explore barriers and facilitators to the provision of 1) OH care for the residents and 2) OH education for caregivers. Additionally, this research project includes a quantitative study to identify the level of knowledge and attitude among Malaysian government-based RACF caregivers in providing OH care for OA living in these facilities. Findings from the scoping review noted several factors supporting improvement of OH among institutionalised OA, which are 1) provision of OH care by professionals, 2) education and training of RACF caregivers, and 3) knowledge and attitude of caregivers. Findings from qualitative study found that there are OH programs delivered by the Ministry of Health team, while the OH guideline and protocol in each RACF are not standardised. Supervisors of respective RACF noted barriers in providing OH care for OA living in RACF, which can be categorised into residents, caregivers, and professional factors. Barriers to providing caregiver education in OH care include difficulty in organising training, lack of depth in OH content, no standardisation in teaching content as well as no availability of internal training. RACF supervisors also noted facilitators in provision of OH care to residents, categorised into residents, caregivers, environmental and professional factors. Facilitators in providing caregiver education in OH care include having regular visits from dental professionals, involvement of external agencies, as well as active engagement and cooperation from caregivers. Additionally, it was noted that RACF caregivers can play various roles in OH care, such as 1) providing reminders, encouragement and guidance, 2) arranging for referrals to dentists, and 3) conducting oral examination. Quantitative study involving the RACF caregivers found that more than three quarter (78.9%) provide daily OH care for the residents. They were also found to exhibit high level of attitude in providing OH care for RACF residents, and demonstrated moderate level and adequate OH knowledge. These two elements (knowledge and attitude) were not significantly associated with their current practice in OH provision. In conclusion, findings of this study contribute important information that can be useful for policy makers, authoritative body, stakeholders and interested parties in developing programs, guidelines, educational activity and other initiatives, aimed at improving the OH of OA living in Malaysian government-based RACF.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The first chapter provides an overview of the study. This chapter includes the research background and problem statement, to highlight the study's significance and its potential impact on improving oral health (OH) care for older adults (OA) residing in residential aged care facilities (RACFs). Additionally, it describes the study research questions, objectives, and the study's importance.

1.2 Research Background

The number of OA worldwide is increasing annually, from 1 billion in 2020 to 1.4 billion in 2030 (World Health Organization, 2024). In Malaysia, the individuals aged 65 years old and above has increased to 7.7% of the total population in 2024, from 7.4% in 2023 (Department of Statistics Malaysia, 2025). The growing number of OA worldwide has implications across various sectors, including economic, healthcare, and social systems. This demographic shift poses significant challenges in the management of OH care. According to the World Health Organization (WHO), OA frequently experience multiple health complications that negatively impact their OH and overall wellbeing (World Health Organization, 2024).

In terms of health, OA may present with various conditions. They may have systemic complications such as decrease in bone mass, hypertension and diabetes mellitus, as well as potential sensory or cognitive impairments. These conditions may complicate personal and professional oral health care (POHC), as they are at higher risk of developing OH problems and experience barriers to attain good quality of life (Konstantopoulou & Kossioni, 2021; Lipsky et al., 2024).

In order to support the welfare and healthcare needs of the OA population, the Malaysian government has outlined policies and programs, including in the establishment of RACF (Ministry of Women Family and Community Development,