UNIVERSITI TEKNOLOGI MARA

DEVELOPMENT, VALIDATION, AND EVALUATION OF AN ONLINE ELDER ABUSE AND NEGLECT MODULE (E-MEAN) FOR EMERGENCY DEPARTMENT HEALTHCARE PROFESSIONALS IN PERAK

MUHAMMAD ABBAS MOHD FIRDAUS SUGUMAR

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ABSTRACT

Elder abuse and neglect (EAN) remains under-recognised in Malaysia's emergency departments (EDs), where older adults often present with injuries or clinical cues that may indicate abuse or neglect. Existing training resources for healthcare professionals are limited, largely adapted from high-income settings and not tailored to Malaysia's legal frameworks, cultural context, or ED workflows. To address this gap, this study developed and evaluated the Electronic Module on Elderly Abuse and Neglect (e-MEAN), the first Malay-language online EAN training module specifically designed for ED healthcare personnel in Perak. A multi-phase study was conducted. Phase I focused on module development, beginning with a literature review and expert consultations involving clinicians, academicians, and EAN researchers. Content was adapted from two comprehensive Malaysian training manuals originally developed by the Prevention of Elder Abuse and Neglect in the Community and Elder Care Settings Team. The content was refined by a Bahasa Malaysia language expert and underwent content validation, face validation, user acceptance testing, and usability testing. The expert panel participated through email review and face-to-face interviews. Phase II involved implementation among emergency physicians, medical officers, assistant medical officers, and nurses at *Hospital Raja Permaisuri Bainun*, Perak. Participants were invited via WhatsApp, registered for individual accounts on the module website, completed a pre-test, accessed five modules comprising 21 submodules, and completed a post-test. Outcomes were measured using a validated Malay-language instrument, the ElderAbuSE Questionnaire which assesses knowledge, attitudes, and confidence to intervene in suspected EAN cases. The development process produced a comprehensive online module consisting of five modules and 21 submodules. Content validation demonstrated excellent results (S-CVI/Ave for relevance = 0.99; clarity = 0.98; simplicity = 0.98; ambiguity = 0.98). Face validity was high (S-FVI/Ave = 1.0; S-FVI/UA = 1.0). Usability testing yielded a mean System Usability Scale score of 70.5, indicating good usability. Participants showed improvement across all measured domains. Knowledge scores increased from 4.05 (SD = 1.73) to 5.94 (SD = 1.95), attitude scores improved from 20.7 (SD = 4.37) to 22.0 (SD = 4.45), and confidence to intervene rose from 18.13 (SD = 3.40) to 19.25 (SD = 3.18), with all pre–post differences reaching statistical significance ($p < 0.05$). This study successfully developed and evaluated the e-MEAN, a locally relevant and linguistically appropriate online EAN training module for emergency department healthcare professionals. The module demonstrated high content and face validity, strong usability, and produced significant improvements in knowledge, attitudes, and confidence to intervene. As the first ED-focused Malay-language EAN training platform in Malaysia, e-MEAN addresses critical gaps in clinical preparedness and offers a scalable, feasible solution for broader implementation. These findings support its potential integration into ED training programmes and wider policy efforts to strengthen national responses to elder abuse and neglect.

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I am reminded of the profound guidance from Surah Al-Isra', Verse 23:

"**For your Lord has decreed that you worship none but Him. And honour your parents. If one or both of them reach old age in your care, never say to them even 'ugh,' nor yell at them. Rather, address them respectfully**."

This verse highlights compassion, responsibility, and respect for elders; values that lie at the heart of this research. Elder abuse and neglect is a challenge that has persisted across communities throughout time, from the past and continuing into the future. It reminds us that this responsibility remains with every generation, and this Qur'anic reminder inspires us to address the issue both professionally and personally, with sincerity and integrity.

May Allah accept this work as a small effort towards safeguarding the dignity and wellbeing of our elderly, and may Allah guide us to uphold justice, compassion, and ihsan in all that we do.

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CHAPTER ONE
INTRODUCTION

1.1 Research Background

Elder abuse and neglect (EAN) is a long-standing global public health concern that continues to affect older adults across different cultures and societies (Li et al., 2024). The World Health Organization (WHO) defines EAN as "a single or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust, which causes harm or distress to an older person (World Health Organization, 2021). Five commonly recognised subtypes are physical, financial, sexual, psychological, and neglect (CDC, 2021). A major systematic review involving 52 studies from 28 countries estimated that 15.7% of older adults worldwide experience some form of EAN each year which is equivalent to about 141 million individuals aged 60 and above (Yon et al., 2017). Psychological abuse (11.6%) is the most frequently reported subtype, followed by financial abuse (6.8%), neglect (4.2%), physical abuse (2.6%), and sexual abuse (0.9%) (Yon et al., 2017).

The COVID-19 pandemic exacerbated the situation. Restrictions such as lockdowns and movement controls intensified many risk factors for abuse, leading to a rise in EAN globally (The Lancet Healthy Longevity, 2021). Underreporting remains a major challenge. EAN is often described as a "tip of the iceberg" phenomenon, as only a small proportion of cases come to official attention (Li & Dong, 2021). This pattern is observed even in countries with mandatory reporting laws (Yunus, 2021b). For example, only 7.1% of cases in the United States are reported, while WHO estimates that worldwide, only 4.2% of cases reach the authorities (National Research Council, 2003; World Health Organization, 2021). These results demonstrate that EAN is more widespread than currently recognised and reported, with particularly limited data available for developing countries. In Malaysia, nearly one in four (28.5%) older adults who experienced abuse did not report it to any department or authority (IPH, 2019).

EAN affects victims physically, emotionally, socially, and economically. Its health consequences can be severe, leading to functional decline, increasing dependency, feelings of helplessness, social withdrawal, worsening psychological health, and overall poor quality of life (Dong, 2005). Malaysian studies have also