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ASSESSMENT OF UNDERSTANDABILITY AND ACTIONABILITY OF A VIDEO-BASED PATIENT EDUCATION MATERIAL (PEM) ON SELF-CARE PRACTICES AMONG HYPERTENSIVE PATIENTS AND THE ASSOCIATED FACTORS WITH ACTIONABILITY IN PRIMARY CARE

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ABSTRACT

Background: Hypertension continues to be a major public health struggle and a leading risk factor for cardiovascular morbidity and mortality. Although self-care practices have been shown to be effective in managing blood pressure, patient engagement remains inadequate. The use of patient education materials (PEMs), especially video-based PEMs, presents a potential strategy to enhance patient involvement in self-management. This study evaluated the understandability and actionability of a validated video-based PEM titled "Self-care Practices for Hypertensive Patients" and explored the factors associated with the level of actionability (treated as a continuous outcome measure) in primary care patients.

Methods: A cross-sectional study was conducted from June 2024 to April 2025 in five primary care clinics in Selangor, Malaysia. Adults aged 18 and above with essential hypertension were recruited using convenience sampling. Participants watched five educational videos and evaluated each using the Malay version of the Patient Education Material Assessment Tool for Audiovisual materials (PEMAT-A/V). Sociodemographic data, clinical characteristics, understandability and actionability scores were analysed. Simple and multiple linear regression were performed to identify the factors associated with good actionability.

Results: A total of 223 patients met the eligibility criteria and consented to participate. All five videos achieved high understandability and actionability scores, with each exceeding the ≥70% benchmark for "good" understandability and actionability. Multiple linear regression revealed that understandability ($\beta = 0.416$, 95% CI: 0.334 to 0.497, $p < 0.001$) and having a tertiary academic qualification ($\beta = -1.216$, 95% CI: –1.913 to –0.519, $p < 0.001$) were independently associated with actionability.

Conclusion: The validated video series on "Self-care Practices for Hypertensive Patients" demonstrated excellent understandability and actionability among hypertensive patients in primary care. The findings emphasized the value of integrating culturally appropriate, theory-based audiovisual tools in health education to increase understandability. Tailoring materials to suit patients' educational backgrounds may further enhance their effectiveness.

Keywords: Hypertension; video-based patient education material, self-care practices, Understandability, Actionability

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CHAPTER ONE: INTRODUCTION

Hypertension remains a major public health burden as it is a well-established risk factor for cardiovascular disease (CVD) (1) and continues to be the leading risk factor for early death globally (2). In Malaysia, the National Health and Morbidity Survey (NHMS) 2023 reported that 29.2% of adults aged 18 years and above were diagnosed with hypertension and of this, only 48% had their blood pressure under control (3). Effective management of hypertension requires a multifaceted approach that incorporates both pharmacological and non-pharmacological strategies. Among these, non-pharmacological interventions such as self-care practices play an essential role in achieving optimal blood pressure control (4).

Self-care practices are skills that may be developed based on an individual's ability to care for themselves (5), thus improving an individual's self-care profile which include dietary modification, weight reduction, increasing physical activity, alcohol reduction, smoking cessation, self-monitoring, and medical adherence. Self-care practices significantly improved blood pressure control (6) and has a substantial impact in the control of hypertension which can be viewed as an alternative with resolutive potential (6).

Self-care practices can be improved through health education using patient education materials (PEM) which include written, audiovisual, or digital resources used to provide health information to patients (7). With the wide use of social media, digital-based PEM such as videos has the potential to reach wider audiences, disseminate virally across regions and promote behaviours more cost-effectively (8). Video education thus represents a promising medium in patient empowerment, particularly for chronic diseases requiring long-term lifestyle modification such as hypertension.

With the wide use of social media, there is an opportunity to spread more health education towards our patients. A study on social media users within the primary care system showed that 44.4% of patients are social media users and 35.7% of them used social media to search for health-related information (9). Another study by Iftikhar et al. found that a substantial proportion of respondents (42.6%) indicated that they had discontinued medical treatment at some point based on advice encountered through social media platforms (10). This showed that social media played an important role in our patients' health education.