

UNIVERSITI TEKNOLOGI MARA

**DEVELOPMENT AND PILOT
TESTING OF AN EDUCATION
MATERIAL FOR OLDER PEOPLE
ON FALL-RISK-INCREASING
DRUGS USING A MIXED METHODS
APPROACH**

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ABSTRACT

Introduction: Falls among older people are a global public health concern associated with the use of certain prescription drugs known as FRIDs. Despite their high prevalence, awareness of FRIDs among older people is low, making education about them crucial. **Aims:** The study was conducted to; 1) explore the need for and appropriate content of EM for OP concerning FRIDs; 2) explore the content and extent of the information in existing EM for OP concerning FRIDs; 3) perform the content validity of newly developed EM for OP by geriatric patient care and geriatric pharmacy research; 4) investigate the level of perceived knowledge of OP and CGs before and after the EM had been administered and the usability and usefulness of the EM. **Method:** In phase one, a focus group discussion (FGD) was carried out, comprising 21 participants from the geriatrician, geriatric pharmacist, and geriatric nurse domains. The participants were segregated into four groups for the FGD session. Meanwhile, in phase two, a systematic internet search was conducted through the utilization of the Google Search engine. In the phase three, the EM's content was developed and validated through a panel of experts, including geriatricians, community pharmacists, hospital pharmacists, and pharmacy researchers. Following this, the education materials (EM) underwent a pilot testing phase among 50 OP and 50 caregivers (CGs), whereby pre- and post-test surveys were utilized to measure the perceived knowledge, usability, and usefulness of the EM. **Result:** In the first phase of the study, five themes and 22 subthemes were identified during the FGD. The first theme was the awareness of OP regarding FRIDs, followed by the content of the EM on FRIDs, the potential benefits of the EM on FRIDs, concerns and limitations of the EM on FRIDs, and finally, support for the EM on FRIDs. In the second phase, a total of 83 education materials (EMs) were examined and five main contents were identified. The least mentioned content was classes or examples of medications associated with falls, at only 33%. The most frequently mentioned content was medications as a risk factor for falls, appearing in 72% of EMs. In phase 3, the findings showed that both OP and CGs experienced a statistically significant increase in perceived knowledge about falls and FRIDs after the EM had been administered (p -value = < 0.001). In terms of perceived usefulness and usability, the results indicate that the majority of the items scored more than 4.0, which suggests that the EM was both usable and useful. **Conclusion:** The HCPs recognized the need for EMs, and the study identified a content gap in existing materials. A newly developed EM was found to be useful, accepted by the OP and CGs, and improved the perceived knowledge of falls and FRIDs.

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