ABSTRACT

Integrating Hypertension Screening and Pocketbook-Based Health Education: A Community-Based Pre–Post Intervention Study in Rural East Kalimantan, Indonesia

Rahmi Susanti, Tri Murti, Lisa Wahidatul Oktaviani, Naura Nuristia Maulida,
Dea Amalia, Putri Asprilia Nur, Fidia Nur Rahma, Dhifa Nur Al'ahya

Correspondence E-mail : rahmi.susanti@fkm.unmul.ac.id

Background : Hypertension remains a major public health challenge, particularly in rural communities where limited awareness and irregular blood pressure monitoring may hinder early detection and disease management. Community-based interventions integrating hypertension screening with accessible health education offer a practical approach to addressing these gaps.

Objective : This study aimed to identify abnormal blood pressure findings and evaluate changes in hypertension-related knowledge following a community-based educational intervention using a specially developed hypertension pocketbook.

Research Methods/ Implementation Methods : A single-group pre-test–post-test intervention study was conducted on July 24, 2026, in Bangun Rejo Village, East Kalimantan, Indonesia, involving 25 members of a community heart health group. Hypertension was identified as a priority health concern through community assessment and the Urgency, Seriousness, and Growth (USG) prioritization method. The intervention integrated digital blood pressure screening, a five-item knowledge questionnaire, interactive health education supported by the Making Peace with High Blood Pressure pocketbook, and post-intervention assessment. Descriptive statistics and the Wilcoxon signed-rank test were used to evaluate changes in knowledge scores.

Results : Of the 25 participants, 22 (88%) had blood pressure readings classified as abnormal during screening, while three (12%) had normal readings. All participants completed the intervention and both assessments. Mean knowledge scores increased from 77.60 (SD = 16.65) before the intervention to 88.80 (SD = 14.24) afterward, representing an 11.20-point improvement. The Wilcoxon signed-rank test indicated a statistically significant difference between pre-test and post-test scores ($Z = -2.401$; $p = 0.016$). Participants with abnormal blood pressure readings were advised to seek further assessment at healthcare facilities.

Conclusion/Lesson Learned : Integrating community-based blood pressure screening with pocketbook-supported health education was associated with a significant immediate improvement in hypertension-related knowledge while facilitating the identification of individuals requiring further clinical assessment. This small-scale intervention demonstrates a feasible approach to community health promotion and early detection in rural settings. Larger controlled studies with longer follow-up periods are needed to evaluate sustained behavioral changes and blood pressure outcomes.

Keyword : Hypertension; Community-Based Intervention; Blood Pressure Screening; Health Education; Health Literacy