DOI: https://doi.org/10.66206/eduheart.ijnhha.248

Effectiveness of the Sambu (Strong Actions Make Better U) Program in Enhancing the Health Perception and Lifestyle Practices of Hypertensive Adult Outpatients in a Level 1 Government Hospital in Jolu, Sulu

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ABSTRACT

This study evaluated the effectiveness of the Strong Actions Make Better U (SAMBU) Program in improving the health perception, lifestyle practices, and blood pressure control of hypertensive adult outpatients in a Level 1 Government Hospital in Jolo, Sulu. Guided by Pender's Health Promotion Model and the Health Belief Model, the study employed a quantitative one-group pretest–posttest pre-experimental design involving 30 purposively selected participants. The four-week intervention included structured hypertension education, behavioral reinforcement, lifestyle modification, blood pressure self-monitoring, medication adherence counseling, and weekly follow-up sessions. Data were collected using a calibrated digital sphygmomanometer and researcher-developed, content-validated Health Perception and Lifestyle Practices questionnaires. Descriptive statistics, paired-samples t-tests, and Cohen's d were used to analyze the data. Results showed significant improvements after the intervention. Mean systolic blood pressure decreased from 136.83 mmHg to 123.97 mmHg, while mean diastolic blood pressure decreased from 85.93 mmHg to 79.73 mmHg ($p < 0.001$). Health perception scores increased from 31.47 to 40.93, and lifestyle practice scores improved from 29.83 to 41.20; both changes were statistically significant ($p < 0.001$). The study was limited by its small sample size, one-group design, and reliance on self-reported measures. Future research should use randomized controlled trials with larger, more diverse populations. The findings demonstrate that the SAMBU Program is an effective community-based health promotion intervention that can enhance hypertension self-management, promote healthier lifestyle behaviors, strengthen patient engagement, improve blood pressure control, and support healthcare providers and public health practitioners in underserved communities through sustainable, culturally appropriate health education initiatives for long-term sustainability.

Keywords: *Hypertension, SAMBU Program, Health Perception, Lifestyle Practices, Blood Pressure Control, Health Promotion*

INTRODUCTION

Hypertension is a leading cause of preventable morbidity and mortality worldwide. Despite effective treatment, many individuals have poor blood pressure control due to inadequate health knowledge, unhealthy lifestyles, poor medication adherence, and limited self-management, particularly in underserved communities like Jolo, Sulu. Although community-based educational and behavioral interventions improve hypertension management, culturally appropriate programs for geographically isolated areas remain limited. This study evaluated the effectiveness of the Strong Actions Make Better U (SAMBU) Program in improving blood pressure, health perception, and lifestyle practices among hypertensive adult outpatients in a Level 1 Government Hospital in Jolo, Sulu. The name **SAMBU**, a Tausug word meaning **"health,"** reflects the program's culturally relevant approach and aligns with its goal of promoting healthier behaviors and empowering patients to effectively manage

hypertension through education, self-management, and lifestyle modification, guided by the Health Belief Model and Pender's Health Promotion Model.

Statement of the Problem

1. What is the level of the participants' indicators before and after the implementation of the SAMBU Program in terms of:
   1.1 Blood Pressure;
   1.2 Health Perception; and
   1.3 Lifestyle Practice
1. Is there a significant difference between the pretest and posttest scores of the participants after the implementation of the SAMBU Program in terms of:
   2.1 Blood Pressure;
   2.2 Health Perception; and
   2.3 Lifestyle Practices?
2. What is the effect of the SAMBU Program on:
   3.1 Blood Pressure
   3.2 Health Perception
   3.3 Lifestyle Practices

Scope and Delimitation

This study evaluated the effectiveness of the Strong Actions Make Better U (SAMBU) Program in improving blood pressure, health perception, and lifestyle practices among 30 hypertensive adult outpatients in a Level 1 Government Hospital in Jolo, Sulu using a one-group pretest–posttest design. The four-week intervention included health education, lifestyle modification, behavioral reinforcement, blood pressure self-monitoring, and weekly follow-up. Findings are limited by the absence of a control group and the use of self-reported measures.

Review of Related Literature

Hypertension is a leading global cause of cardiovascular disease, stroke, kidney disease, and premature mortality. Although effective medications are available, optimal blood pressure control also depends on patient education, lifestyle modification, and self-management (World Health Organization [WHO], 2023; Whelton et al., 2018). Evidence shows that educational and behavioral interventions improve medication adherence, health literacy, self-care behaviors, and blood pressure control, particularly when combined with community-based follow-up (Gutierrez & Sakulbumrungsil, 2021; Mbuthia et al., 2022). Guided by the Health Belief Model (Rosenstock, 1974) and Pender's Health Promotion Model (Pender et al., 2015), this study addresses the limited evidence on culturally appropriate hypertension interventions in geographically isolated communities by evaluating the effectiveness of the Strong Actions Make Better U (SAMBU) Program among hypertensive adult outpatients in Jolo, Sulu

Theoretical Framework

This study is guided by the Health Belief Model (Rosenstock, 1974) and Pender's Health Promotion Model (Pender et al., 2015), which emphasize that health education, self-efficacy, and behavioral support promote healthy lifestyle practices and adherence to hypertension management. Based on these models, the Strong Actions Make Better U (SAMBU) Program provides structured health education, lifestyle modification, self-monitoring, medication adherence counseling, and regular follow-up.

Conceptual Framework

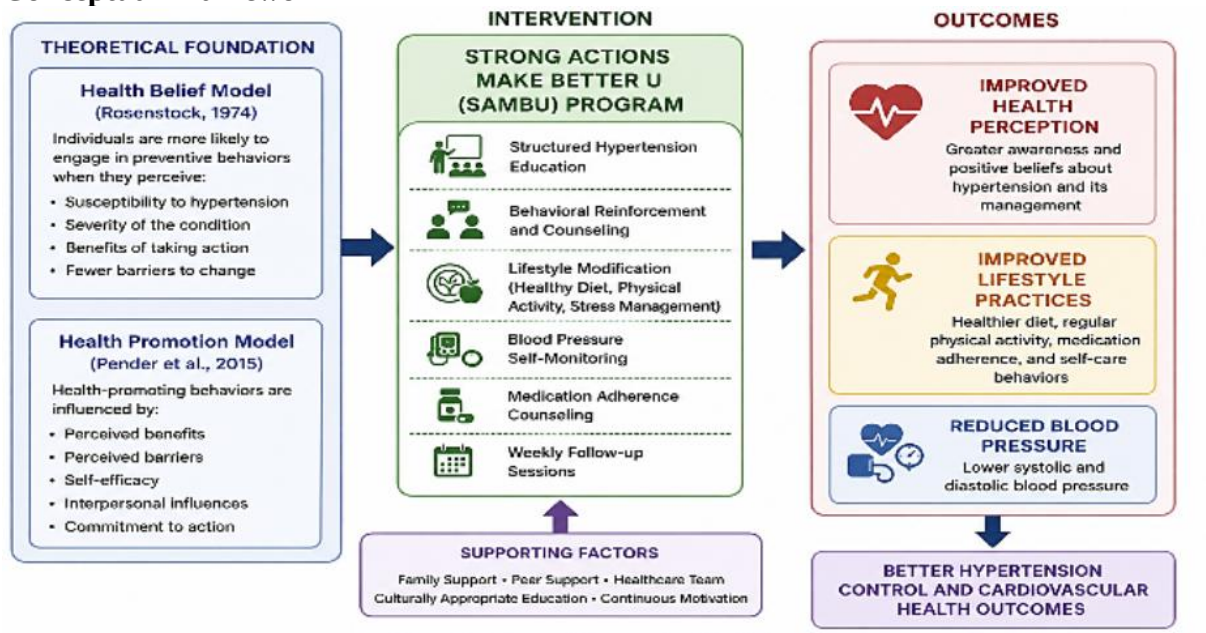

Figure 1. Conceptual Framework of the Study

RESEARCH METHODOLOGY

This study employed a quantitative one-group pretest–posttest pre-experimental design to evaluate the effectiveness of the Strong Actions Make Better U (SAMBU) Program among hypertensive adult outpatients in a Level 1 Government Hospital in Jolo, Sulu.

Research Design

This study employed a quantitative one-group pretest–posttest pre-experimental design to evaluate the effectiveness of the Strong Actions Make Better U (SAMBU) Program among hypertensive adult outpatients in a Level 1 Government Hospital in Jolo, Sulu. Blood pressure, health perception, and lifestyle practices were assessed before and after the four-week intervention. Data were analyzed using descriptive statistics, paired-samples t-test, and Cohen's d. The absence of a control group and randomization limits causal inference.

Research Steps

The study was conducted in four phases: (1) obtaining ethical approval, recruiting participants through purposive sampling, and collecting baseline data; (2) implementing the four-week Strong Actions Make Better U (SAMBU) Program; (3) conducting posttest assessments using the same instruments; and (4) analyzing the data using descriptive statistics, paired-samples *t*-test, and Cohen's *d* effect size to determine the effectiveness of the intervention.

Data Collection and Sample Selection

The study involved 30 purposively selected hypertensive adult outpatients from a Level 1 Government Hospital in Jolo, Sulu. Eligible participants with physician-confirmed hypertension completed baseline and posttest assessments using a calibrated digital sphygmomanometer and validated Health Perception and Lifestyle Practices questionnaires before and after the four-week SAMBU Program. Data were coded and analyzed statistically.

Data Analysis Methods

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 29.0. Descriptive statistics (frequency, percentage, mean, and standard deviation) summarized participant characteristics and pretest–posttest scores, while paired-samples t-tests assessed differences in blood pressure, health perception, and lifestyle practices ($p < 0.05$). Cohen's d was calculated to determine effect size.

Research Hypotheses and Validation

The study hypothesized that the Strong Actions Make Better U (SAMBU) Program would significantly improve blood pressure, health perception, and lifestyle practices among hypertensive adult outpatients. The hypothesis was tested by comparing participants' pretest and posttest scores using paired-samples *t*-tests and Cohen's *d* effect size. Significant improvements in all outcomes supported the program's effectiveness in promoting hypertension self-management.

Study Limitations and Ethical Considerations

The study was limited by its one-group pretest–posttest design, small sample size, and single-hospital setting, which may limit the generalizability of the findings. Ethical approval and institutional permission were obtained before data collection. Written informed consent was secured from all participants, and confidentiality, voluntary participation, and participants' rights were maintained throughout the study.

RESULTS AND DISCUSSION

SOP 1. The SAMBU Program improved all outcome variables. Mean systolic blood pressure decreased from **136.83 ± 8.72 mmHg** to **123.97 ± 6.41 mmHg**, and diastolic blood pressure from **85.93 ± 6.11 mmHg** to **79.73 ± 5.24 mmHg**. Health perception increased from **31.47 to 40.93**, while lifestyle practices improved from **29.83 to 41.20**, indicating better hypertension awareness and healthier behaviors.

SOP 2. Paired-samples t-test results showed **significant improvements in all outcome variables ($p < 0.001$)**, confirming the effectiveness of the SAMBU Program in improving blood pressure, health perception, lifestyle practices, and hypertension self-management.

SOP 3. Cohen's *d* analysis showed **large effect sizes** across all outcome variables, demonstrating the SAMBU Program's substantial practical effectiveness.

SOP 4. The findings indicate that the SAMBU Program effectively enhanced hypertension self-management through **health education, behavioral reinforcement, lifestyle modification, self-monitoring, and regular follow-up**, supporting its implementation in underserved communities.

SUMMARY

The SAMBU Program effectively improved blood pressure, health perception, and lifestyle practices among hypertensive adult outpatients in a Level 1 Government Hospital in Jolo, Sulu. Following the four-week intervention, participants showed significant reductions in blood pressure and improvements in health perception and healthy lifestyle practices, supporting the program's potential to strengthen hypertension self-management in underserved communities.

CONCLUSIONS

- The SAMBU Program effectively improved blood pressure, health perception, and lifestyle practices among hypertensive adult outpatients. These findings support its

integration into community-based hypertension management, particularly in underserved settings.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are suggested:

- Healthcare providers should integrate the SAMBU Program into routine hypertension management to improve blood pressure control and self-management.
- Hospital administrators and public health agencies should strengthen community-based hypertension education and follow-up, particularly in underserved communities
- Future studies should conduct larger randomized studies with longer follow-up to further validate the program's effectiveness and generalizability.

ACKNOWLEDGMENT

The researchers sincerely thank the administrators and healthcare professionals of the Level 1 Government Hospital in Jolo, Sulu, the hypertensive adult outpatients who participated in the study, and their research adviser, faculty members, colleagues, friends, and families for their invaluable guidance, cooperation, encouragement, and unwavering support throughout the completion of this research.

AI DECLARATION

Artificial intelligence (AI) was used only for language editing, grammar correction, and formatting. It was not used in the study design, data collection, analysis, interpretation, or conclusions. All scientific decisions and academic responsibility remain with the authors.

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