

COMMUNITY BASED HYPERTENSION COUNSELING TO IMPROVE HEALTH AWARENESS AND LIFESTYLE BEHAVIOR AMONG THE ELDERLY IN AILEU DISTRICT, TIMOR LESTE

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ABSTRACT

Hypertension is one of the most prevalent non-communicable diseases worldwide and a major contributor to cardiovascular morbidity and mortality. In Timor-Leste, particularly in Aileu District, the prevalence of hypertension has become a growing public health concern, especially among the elderly population. This community service program was conducted as part of an academic collaboration between Instituto Superior Cristal (ISC) and local health authorities, aiming to improve knowledge, awareness, and behavioral practices related to hypertension prevention and management. The program implemented several participatory methods, including lectures, group discussions, demonstrations, and the distribution of educational materials. Results showed a significant increase in participants' understanding of hypertension, lifestyle risk factors, and preventive measures. The involvement of ISC not only enhanced the scientific quality of the program but also strengthened community engagement and sustainability. The initiative fostered positive behavioral changes, such as improved dietary habits, increased physical activity, and regular blood pressure monitoring. Overall, the program demonstrated that community-based health education can effectively empower local residents, reduce health risks, and contribute to long-term public health improvements in Timor-Leste.

Keywords: Hypertension, health education, community service, awareness, Timor-Leste, academic partnership

INTRODUCTION

Hypertension, or high blood pressure, is a chronic condition characterized by a persistent elevation in blood pressure levels, typically defined as $\geq 140/90$ mmHg. It remains one of the most common health issues globally, acting as a primary risk factor for cardiovascular diseases, stroke, and kidney failure. According to the World Health Organization, approximately 972 million people suffer from hypertension worldwide, with the number projected to rise in the coming years. In developing countries like Timor-Leste, the burden is substantial, with an estimated 26% prevalence, particularly affecting the elderly population. Physiological changes due to aging, genetic predispositions, and lifestyle factors such as poor diet, lack of physical activity, and stress further exacerbate the condition.

In Timor-Leste, awareness and early detection remain limited, especially in rural areas such as Aioeu District in Baucau. Many elderly individuals have insufficient access to routine health screenings and do not regularly engage in healthy activities. This situation is worsened by a lack of structured health education and preventive programs. Addressing hypertension, therefore, requires not only medical interventions but also community-based education and empowerment. Through collaborative counseling and awareness programs, it is possible to promote early prevention, encourage lifestyle modification, and

build a culture of health consciousness within the community.

METHOD

The hypertension counseling program was designed as a community-based educational initiative focusing on knowledge transfer, behavioral change, and community empowerment. Several structured methods were used to ensure effective learning and participation. The primary method involved interactive lectures, where facilitators used simple language supported by visual aids such as posters and leaflets to explain the causes, symptoms, and complications of hypertension. Group discussions allowed participants to share personal experiences and clarify misconceptions, creating a supportive environment for mutual learning.

Demonstrations were conducted to provide hands-on experience, including proper techniques for measuring blood pressure, light physical exercises suitable for the elderly, and practical guidance on maintaining a low-salt, balanced diet. Educational materials were distributed to reinforce learning and extend awareness to family members. Community engagement played a central role in the program, involving local leaders and caregivers as role models to promote consistency and trust.

Follow-up and monitoring activities were established to assess participants' progress, evaluate

knowledge retention, and encourage continuous behavior change. Instituto Superior Cristal contributed significantly by mobilizing lecturers and students to act as facilitators, preparing educational content, and collaborating with local health offices. This partnership ensured academic rigor, community relevance, and sustainability through ongoing research and documentation.

DISCUSSION

The implementation of the hypertension counseling program yielded several notable impacts on the community. One of the primary outcomes was the improvement in knowledge and awareness regarding hypertension. Before the intervention, many participants—particularly the elderly—had limited understanding of the disease and its complications. After the sessions, there was a clear increase in awareness of the importance of regular blood pressure monitoring and the adoption of healthy lifestyles.

Interactive sessions such as group discussions and demonstrations effectively encouraged participation and learning. Participants not only gained theoretical knowledge but also developed practical skills, such as measuring their own blood pressure and performing light exercises. These methods facilitated active engagement and reinforced self-efficacy among community members. Furthermore, distributing educational materials helped extend the program's impact beyond direct participants, allowing families and neighbors to benefit from the information shared.

The active involvement of Instituto Superior Cristal added substantial value by ensuring the accuracy of health information, building trust with the community, and strengthening academic-community partnerships. The collaboration also provided field experience for students and practical engagement for lecturers, fostering a model of applied learning. Community leaders and caregivers played a crucial role in sustaining the momentum by encouraging elderly participants to maintain the recommended lifestyle changes.

As a result, early behavioral changes were observed. Many participants showed greater motivation to reduce salt consumption, increase physical activity, and attend routine health check-ups. These positive changes represent the first step toward long-term health improvement and hypertension control. Beyond individual behavior, the program also enhanced community capacity, empowering local health actors to continue promoting health education.

From a broader perspective, the initiative contributes to public health objectives by reducing preventable risk factors and potentially lowering hypertension prevalence. The sustainability strategies—such as capacity building, integration with local health services, and continuous monitoring—ensure that the program's benefits extend beyond the initial implementation.

CONCLUSION

The community counseling program on hypertension in Aioeu District, Timor-Leste, successfully addressed key gaps in awareness, prevention, and lifestyle management. The initiative demonstrated that structured health education, supported by participatory methods and academic collaboration, can significantly improve community knowledge and empower individuals to take proactive steps toward better health. The involvement of Instituto Superior Cristal proved instrumental in bridging academic knowledge with community needs, fostering sustainable partnerships and enhancing program credibility.

The counseling activities not only improved understanding but also initiated behavioral changes that contribute to long-term well-being. Participants became more conscious of hypertension risks and more willing to adopt healthier habits. Furthermore, the program strengthened local capacity by involving community leaders, caregivers, and health workers, ensuring that health promotion continues beyond the intervention period.

To sustain these achievements, continuous health education, regular blood pressure screenings, and ongoing collaboration between academic institutions and health authorities are essential. Future programs should also focus on integrating hypertension awareness into broader community health initiatives. Through consistent follow-up and evidence-based strategies, this program serves as an effective model for reducing the burden of non-communicable diseases and improving the overall quality of life in Timor-Leste.

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