

Development of Falls Prevention Model for Thai-Elderly in Community

Uraiwan Pantong: BSN.,MSN., Doctoral Nursing student Valencia University, Spain

Asst. Prof. Dr. Urai Jaraeprapal: Dean of Nursing School , Walailak University, Thailand



Uraiwan Pantong

Urai Jaraeprapal

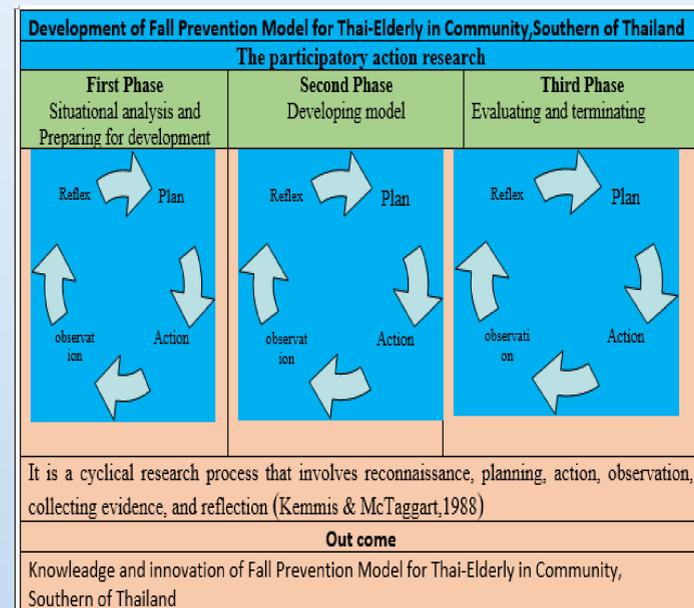
INTRODUCTION

Falls are the second leading cause of unintentional injury-related deaths among the elderly worldwide. Approximately 28-35% of people aged 65 and over fall each year increasing to 32-42% for those over 70 years of age. The frequency of falls increases with age and frailty level. From a health survey of Thai people, it was demonstrated that 18.5% of older adults fall each year, and females had a 1.5 times greater rate of falling than males. In the South of Thailand, the size of the problem, and the procedures for prevention and control of falls and subsequent morbidity and mortality in old age still need to be addressed due to a lack of studies, information, and health system procedures. This study presents the challenges of developing a falls prevention model for the elderly in southern Thailand, especially the elderly who live at home in rural communities that be unable to access fall prevention measures.

OBJECTIVE

- 1.To study incidence of falls and situation of falls prevention measures in the community.
2. To developing the falls prevention model for Thai-elderly in community, Southern of Thailand
3. To assess the effectiveness of the falls prevention model

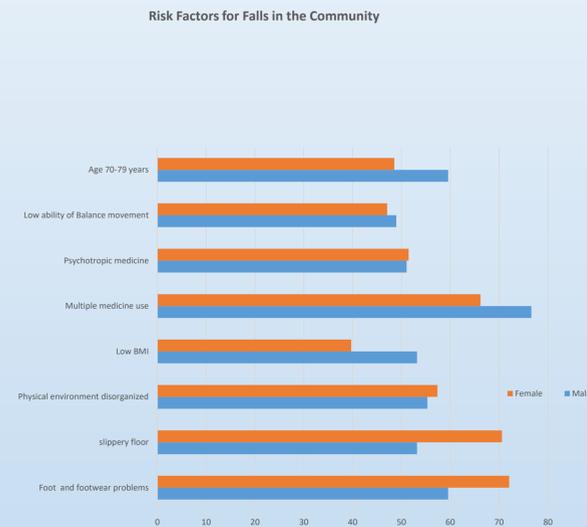
Methods



The participants are elderly aged 60 and above (380), caregivers (25), community leaders (7), village health volunteers (18), and healthcare providers(5). Data will be collected from December 2018 to May 2020 by interviewing with a questionnaire, focus group, physical examination of the elderly, multifactorial intervention, observing environment inside the elderly's house and a home visit. The falls prevention program was developed by focus group and participatory learning group according to Center for Diseases Control and Prevention's fall prevention concept. Quantitative and qualitative data will be analyzed by using descriptive statistics, statistic T-test and content analysis. Triangulation was applied to the validity of the study

Result in the first phase

Incidence of falls among elderly in the past six months was 34.8 percent.



The community potential :

Good cooperation in multidisciplinary work

Problem

- Elderly: 1.Poor knowledge of suitable exercises
2. No perception of need for prevent (in no previous falls)
3. 57% lack of participate activities with elderly club
- Care Giver : Lack of knowledge on falls prevention
- Health volunteer : Lack of skill on falls prevention
- Health provider : lack of fall education and training on fall prevention
- local administrative organizations: lack of strongly policy for fall prevention measures

Contact: upantong@gmail.com

Result in the second Phase

Development of a fall prevention model in second phase by developing village health volunteers and caregivers about their knowledge and skill on fall prevention program. The older people were categorized into 4 groups by risk factors and falls prevention activities were arranged on observed risk factors as follows 1) Elderly in improper environment 2) Elderly with impaired body balance 3) Elderly with impaired visual acuity 4)Elderly using medication with risk to falls and 5) Elderly with impaired cognitive function and mental health.



2nd phase December,2018- October,2019 and ongoing to 3rd phase.

Conclusion

1. The most risk factor which impacts to health and psychosocial of Thai elderly is falls. Risk factors of falls in the elderly are intrinsic factors and extrinsic factors.
2. Guidelines for the prevention of falls consisted of five components which include: 1) education 2) to promote balance training exercise 3) medicine review 4) visual assessment and its management 5) the environment assessment and its management.
3. Nurses are the key persons who care the elderly in communities. Because of the multi-dimensions of risk factors, they should cooperate with the health care teams, the caregivers and the people in community in order to prevent falls incidence.
4. The local administrative organization is the major role in implementing activities for health promotion and preventing falls in the elderly because it is responsible for budget approval from the local health insurance funds.

REFERENCES

1. Choi M, Hector M.(2012). Effectiveness of intervention programs in preventing falls: a systematic review of recent 10 years and meta-analysis. J Am Med Dir Assoc, 13(2):188.e13-21
2. Granacher U, Gollhofer A, Hortobágyi T, Kressig RW, Muehlbauer T.(2013). The importance of trunk muscle strength for balance, functional performance, and fall prevention in seniors: a systematic review. Sports Med,43(7):627-41.
3. Gillespie LD, Robertson MC, Gillespie WJ, et al. (2012). Interventions for preventing falls in older people living in the community. Cochrane Database Syst Rev, 9, CD007146.
4. Hill KD, Suttanon P, Lin S-L, et al. (2018). What works in falls prevention in Asia: a systematic review and meta-analysis of randomized controlled trials. BMC Geriatrics, 18:3.
5. Hopewell S, Adedire O, Copsley BJ, Boniface GJ, Sherrington C, Clemson L, Close JC, Lamb SE.(2018).Multifactorial and multiple component interventions for preventing falls in older people living in the community.Cochrane Database Syst Rev,23 (7) .site by https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012221.pub2/full#CD012221-abs-0004.
6. Kemmis, S., &McTaggart, R. (1988). The Action Research Planner (3rded). Geelong Australia: Deakin University Press.
7. Kim WJ, Chang M, An DH (2014). Effects of a community-based fall prevention exercise program on activity participation. J Phys Ther Sci, 26, 651-653.
8. Kittipimpanon K, Annatsatsue K, Kerdmongkol P, Maruo S, Nityasudhi D. (2018). Development and Evaluation of a Community-based Fall Prevention Program for Elderly Thais. Pacific Rim International Journal of Nursing Research, 16(3),222-35.
9. Laverack, G. (2007). Health promotion practice: building empowered communities. UK: McGraw-Hill Education.
10. McMahon S, Talley KM, Wyman JF. (2011).Older people's perspectives on fall risk and fall prevention programs: a literature review. Int Journal Older People Nurs, 6(4), 289-98.
11. Moyer VA. (2012). Prevention of falls in community-dwelling older adults: U.S. Preventive Services Task Force recommendation statement. Ann Intern Med, 157, 197-204
12. National Institute on Aging and the World Health Organization. Global Health and Aging. NIH Publication No. 11-7737 (2011). Available from: http://www.who.int/ageing/publications/global_health.pdf?ua=1
13. Otago Medical School. (2003). Otago exercise program to prevent falls in older adults. Otago, New Zealand: University of Otago.
14. Rimland JM, Abraha I, Dell' Aquila G, et al. (2016). Effectiveness of Non-Pharmacological Interventions to Prevent Falls in Older People: A Systematic Overview. The SENATOR Project ONTOP Series. Laks J, ed. PLoS ONE,11(8):e0161579.
15. Ronnarithivicha Ch, Thaweeboon Th, Petchansri R, Boonchan N, Kridiborworn Ch. (2009).The Evaluation of Physical Fitness Before and After 9-square-table Aerobic Exercise and Rubber Ring Stretching of Elders in the Health Promotion Program for the Elderly, Faculty of Nursing, Mahidol University. Journal of Nursing Science, 27 (3),68-76. (in Thai)
16. Thiamwong L, Thamarpit J, Meneesriwongkul W, Jitapunkul S. (2008).Thai falls risk assessment test (Thai-FRAT) developed for community-dwelling Thai elderly. J Med Assoc Thai, 9: 1823-32.

Acknowledgements

Funded by the Thai Health Promotion Foundation

