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Accidents Prevention and Severity Reduction in Older People by the Community

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***Abstract*—** *Accidents are major causes of morbidities and mortalities commonly found in older adults. Thus, accidents in older adults are considered important problems that lead to physical loses and losses of belongings, particularly morbidities and mortalities. The present focused ethnography aimed at investigating accidents prevention and severity reduction in older people by the community that suited the sociocultural contexts of the community. The data were collected from 48 primary elderly informants and family members. The data collection instruments included an in-depth interview guideline, a group discussion guideline, and a participatory observation guideline. The text data were analyzed by content analysis. The findings revealed that accidents in older people can be divided into six categories: (1) traffic accidents, (2) general accidents, (3) accidents caused by risk behaviors, (4) emergency-related accidents, (5) accidents in older people with a chronic illness, and (6) accidents in disabled older adults. After the accidents have taken place, there are two guidelines on accident prevention and severity reduction, which are (1) self-care to prevent accidents and reduce severity by older people and family caregivers and (2) accidents prevention and severity reduction by the community including three major organizations—local administration organizations, community groups, and healthcare service providers. The findings of the present study have led to a new body of knowledge which is significant for community nurse practitioners and related persons who constitute a continuous driving force behind accidents prevention and severity reduction in older people by the community.*

***Keywords*—** *Accident prevention, accident severity reduction, older people, community, focused ethnography.*

I. INTRODUCTION

In the year 2018, older people accounted for 16.1% of the total population in Thailand. It has been estimated that in the next three years, the proportion of the Thai people who are older than 60 years of age will rise to 20%, making Thailand become a completely aged society (Department of Public Administration, 2018; Foundation of Thai Gerontology Research and Development Institute, 2017). When individuals undergo physical deterioration caused by ageing, they have to endure various problems and needs including those caused by chronic illnesses and risk behaviors that cause functioning of different bodily organs to decline (Anuruang, 2017; Bureau of Non Communicable Disease, 2016). In addition, if older people live alone, live with a spouse who is also an elderly person, or live with young children, they will lack caregivers, become neglected, or live with poverty and debts. It has also been documented that some older people have to live in an inappropriate environment with their house and environment not suitable for the lifestyles of older people (Jarutach, 2018).

When considering problems and needs of older people, it can be seen that accidents are among common problems faced by older people. In fact, accidents constitute major causes of injuries and disabilities in older people, including hemiplegia and paralysis, which make older people become bedridden, hence sudden dependence and possibly death (Wei Xu et al., 2015; Phelan et al., 2015). The incidence of falls in older people ranks second among unintentional injuries, and half of older people who have history of falls become chronically disabled or die within one year. In addition, between 2013 and 2018, the number of request for emergency medical services for older people rose to more than 50,000 times per year or more than 140 times per day on average (Ponsen. et al., 2016). All over the world, the numbers of older who die from falls is approximately 1,160 per day (WHO, 2016). As for Thailand, the number of older people who are dead because of fall accidents is three per day on average (Tanuchit et al, 2019). Besides this, about one in four older people aged 60 years and older suffer from accident-related morbidities, and the incidence of falls rises every year with age, by as much as 11.9% (Gra et al., 2013). Likewise, it has been reported overseas that accident-related injuries rank fifth among major causes of deaths in older people, particularly among those who are older than the age of 65 (Aschkenasy, Rothenhaus, 2006). On the overall, older people make up 40% of accidents (Dienna, 2010). As older people have deteriorated health condition, the accidents they suffer tend to be more severe. Moreover, older adults are less likely to fully recover, hence permanent disability and even death. Also, accidents in older people result in an increase in medical care costs, and injuries and disabilities caused by accidents lead to both temporary and permanent dependence on caregivers, who can lose income due to their caregiving duties.

Accidents in older people constitute major problems that adversely affect quality of life of older people. Therefore, accident prevention and severity reduction in older people are considered vital to reduce risk factors or possible complications that affect their quality of life. A review of related literature and research has shown that accident prevention and severity reduction tend to focus on the working-age group and adolescents and studies on accidents in older people place an emphasis on individuals rather than management by family and community. Furthermore, most of

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the studies involve a universal design in accordance with the minimum standard, without taking into account variations in sociocultural contexts of older people and the community (Parra, 2010). Therefore, the researchers were interested in investigating accident prevention and severity reduction in older people by the community to promote quality of life and prolong life of older people.

II. Objectives

The present study aimed at investigating accident prevention and severity reduction in older people by the community that suited the sociocultural context of older people.

III. Methodology

The present focused ethnography aimed at generating understanding of specific issues of people who shared similar cultural characteristics. Data were collected between November 2017 and April 2019, totaling 17 months.

The study setting was a Tambon in Mae Hong Sorn Province where 32.1% of the population were older than 60 years old. This proportion was higher than the national proportion. In addition, the people living in the area differed in terms of ethnicity and cultural heritages. The area contained complex mountain ranges. There were 156 social costs that had the potential to help take care of older people to both directly and indirectly prevent accidents, with support from local administration organizations, community leaders, healthcare providers, and related agencies. This Tambon was considered a prototype of community facility provision and volunteering efforts to develop a care system for older people in the local area in the province, particularly when it came to accident prevention and reduction in older people.

The researcher gained access to the study participants via gatekeepers. Purposive sampling was employed. The main informants were 48 older people and family caregivers who had experience with problems, situations, factors, and guidelines on accident prevention in older people. The general informants were 56 individuals who were involved in accident prevention and severity reduction in older people who were able to provide useful information and who were accessible to the researchers. The total number of informants in this study was 104.

The instruments used in this study included the in-depth interview guideline developed based on a review of literature on problems and needs in accident prevention and reduction as well as conditional factors facilitating accident prevention and reduction in older people by the community, the group discussion guideline, and the participatory and non-participatory observation guideline. Generally, qualitative researchers are considered major instruments that significantly affect reliability of the data. The researchers of the present study learned the theoretical concepts and practiced qualitative research skills in the doctoral of nursing degree program at Khon Kaen University.

In the present study, data collection was conducted as follows: First, the researcher submitted a letter asking for permission to collect data from the municipality, community leaders, and hospital directors. Secondly, the researcher explained the study objective and asked for cooperation to take part in the study from the prospective informants. The researchers strictly adhered to the ethical codes of conduct and assured the prospective informants that they were able to withdraw from the study any time if they wished. Thirdly, the study was divided into three phases. The first phased involved exploration of the community contexts and situations as well as problems and needs regarding accident prevention and severity reduction in older people in the community. In the second phase, the guidelines and situational factors related to accident prevention and severity reduction in older people by the community were examined. Finally, in the last phase, a new body of knowledge was synthesized and recommendations were made on accident prevention and severity reduction in older people by the community. Data were collected from general informants by means of group discussion on accident prevention and severity reduction in older people by the community four times, totaling 36 informants, each lasting 60 minutes. Also, 48 older people who had history of accidents and their family caregivers who had experienced effects of accidents were interviewed based on the in-depth interview guideline, with each interview lasting 45 to 60 minutes, until the data were saturated. In addition to this, in-depth interviews were carried out with 56 general informants, and relevant data were also analyzed.

The data collected from the informants were organized, and content analysis was undertaken to reveal all of the components of the data. The data were also compared and contrasted. Moreover, the phenomena were categorized, and the emerging themes and subthemes were identified to reflect all issues related to accident prevention and severity reduction. The reliability and credibility of the data were also examined. After first entering the study setting, the researchers left the setting intermittently to analyze data and examine the correctness of data collection procedures by consulting the advisor so as to reduce the bias blind spot. The triangulation method was also utilized to ensure the trustworthiness of the data.

The present study was approved by the Institutional Review Board on Research Involving Human Subjects of Khon Kaen University, with the approval code no. HE602281. All through the research process, the researchers adhered to the ethical codes of conduct and respected the integrity and value of all study informants.

IV. Results

According to the study findings, accidents in older people can be divided into six categories: (1) traffic accidents, (2) general accidents, (3) accidents caused by risk behaviors, (4) emergency-related accidents, (5) accidents in older people with a chronic illness, and (6) accidents in disabled older adults. After the accidents have taken place, the severity of the injuries can be divided into three types as follows: (1) mild injuries including bruises, blacks and blues, and mild pain; (2) moderate injuries such as open wounds, bleedings, chest pain, and broken limbs; and (3) severe injuries which could further be divided into two types: (1) severe injuries affecting

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consciousness or resulting cardiac arrest, and (2) severe injuries to the bodily organs such as severe injuries caused by a car crash resulting in broken or twisted bones. As regards accident prevention and severity reduction, there are two guidelines on accident prevention and severity reduction, which are (1) self-care to prevent accidents and reduce severity by older people and family caregivers and (2) accident prevention and severity reduction by the community including three major organizations—local administration organizations, community groups, and healthcare service providers, which can further be explained as follows:

1. Accident prevention and severity reduction in older people by older people and family, which can be divided into three levels:

1.1 Self-care to prevent and monitor accidents included (1) practice of self-care skills and movements that are suitable with physical conditions and health status such as walking and exercising by doing local dances and long stick exercises, practicing traffic safety by crossing the street using the zebra crossing or using safety prevention gears when riding a motorcycle, adhering to medication intake; having appropriate food intake, taking sufficient rest, avoiding risk behaviors, dressing properly, and having a regular health examination; (2) arrangement of internal and external home environment by adjusting the surrounding environment, keeping the house tidy and clean, using non-slippery flooring materials, having elderly people live on the ground floor of the house, installing a rail in the bathroom, using a sitting toilet, getting rid of a door threshold, having sufficient lighting inside the house, keeping the areas around the house clean and tidy, and installing lighting in the hallway and walkway, as could be seen in one of the excerpts below:

"…I once fell down inside the bathroom, but it was not serious. However, I have to be more careful when I am walking now. If I feel that I cannot do it, I will use a walking aid. I have to assess what and how much I can do. I am afraid I will fall down again. If I fall down and I am seriously injured, I will be a burden for my children and grandchildren, so I have to take the best care of myself..." (A 65-year-old woman with a history of fall in the bathroom)

1.2 Self-care to reduce accident severity included (1) doing self-assessment after being injured. For example, after suffering a mild injury, some older people did not do anything. Others bought medicines or ointment for home use or performed self-care based on their personal beliefs such as by using herbal message or oil massage, seeking treatment from a traditional healer, or taking herbal medicines, etc.; (2) some older adults had first-aid care in accordance with the type of injuries as follows. First, they cleaned the wounds based on their experiences or knowledge. If the wounds do not heal or they experienced some kind of abnormality, they would seek medical care services at a clinic or hospital close to their home. It is worth noting that most of the older people and their family had self-care knowledge and skills to conduct first-aid care from the training they previously attended. Second, they performed a ceremony based on their personal beliefs. For instance, when they had an accident, they conducted a ceremony to uplift their spirit by inviting the spirit of the injured older people that may have lingered at the scene of the accident back to the house or the hospital where the injured older people were recovering. If someone died at the scene of the accident, they would perform a religious ceremony so that the spirit of the dead people would be reborn in a new world. They may perform a ceremony in case of an unusual death as well. One informant described her experience:

"…last year I slipped and fell down. I banged my head on the ground in front of my house, and I had a gap on the head. It was bleeding, so I quickly grabbed a piece of cloth and used it to cover the wound. I was so shocked that it was bleeding badly, and I thought the wound was big. The ice delivery guy came across me, and he used a piece of towel I hung on the rail to cover the wound and sent me to the hospital. I received two stiches and got some medicines…" (An 84-year-old women with a history of fall resulting in a wound on the head).

1.3 Self-care for rehabilitation by older people and their family included (1) physical rehabilitation by exercising muscles and joints at home with homemade equipment or equipment available in the community such as a walking rail, a reel for muscle and joint exercise, etc., participating in exercise groups, increasing body movements, taking medication regularly, keeping the doctor's appointments for physical check-ups, and avoiding exercises that put them at risk of accidents; (2) having physical rehabilitation by adjusting the environment of home to suit the lifestyle of older people such as rearranging the bedroom and bathroom; and (3) having physical rehabilitation by practicing skills needed for activities of daily living such as eating, swallowing, walking, sitting down, standing up, preventing stiff joints, having herbal massage, seeking medical examinations, and seeking medical care including wound-dressing and injection, as can be seen in one of the excerpts below:

"…Once I returned home, my children made sure I exercised every morning. They installed a rail for me to practice walking. They also redid the bathroom. At the beginning, they hired a masseuse and send my grandchildren to sleep with me. Now I can walk, but I still need to use a walking cane…" (A 72-year-old woman with a history of fall resulting in a broken hip).

2. Accident prevention and severity reduction in older people by the community consisted of three main key players who are local administration organizations, community organizations, and healthcare service providers. The activities could be divided into three types including accident prevention and monitoring, assistance in time of the accident, and post-accident rehabilitation, which can be explained as follows:

2.1 Accident prevention and severity reduction by local administration organizations can be divided into four aspects. First, environment-related services were done by surveying the environment or risk points in the community, creating a map of risky points, adjusting the home environment including the bathroom and the surrounding area, adjusting public space to facilitate older people, adjusting and repairing basic infrastructures such as road lighting**,** and specifying community measures such as prohibition of alcohol drinking at a temple or during a funeral, and restricting the time during

which alcohol could be bought. Secondly, social services could be done by providing welfare for older people, establishing a center for public disaster prevention and mitigation, providing services to ensure that older people kept the doctors' appointments, offering a 24-hour emergency transportation system, establishing a community database such as putting up an orange flag in front of a house of bedridden older people or older people who needed assistance in case of emergencies or accidents, founding a school to help older adults develop self-care skills, organizing activities to promote self-esteem of older people, and developing potential of family volunteers through training. Thirdly, as for healthcare services, assistance was provided when older people had an accident by devising a guideline on how to notify related healthcare personnel; providing first-aid care before sending older people to the hospital; preparing a resuscitation kit and emergency care kit including a sprint, a wound-dressing kit, a heartbeat diagnosis kit, etc.; developing family caregivers' skills for care of bedridden older people including moving, feeding, monitoring abnormal signs and symptoms; recruiting volunteers and healthcare personnel to sufficiently serve needs of older people in the community; devising a care plan for older people affected by accidents or emergency illness; organizing a homecare team for rehabilitation; joining the home visit team with the community hospital or other agencies such as provincial social workers; providing long-term care in the community; establishing a health rehabilitation service center; offering equipment for movement and rehabilitation such as air mattresses, wheelchairs, walkers, etc.; providing support of the home adjustment volunteer team; and installing equipment to facilitate older people to exercise muscles and joints at home. Finally, economic services were provided by means of the following: arranging pension for older people and disabled people, promoting occupational skill training, establishing funds and findings sources of loans for occupation, promoting savings, and findings community markets, as one of the informants described:

"…As for prevention of accidents in the community, we have collaborated with local networks including Buddhist, Christian and Islamic organizations and the police to prevent and reduce traffic accidents during the New Year holidays, Thai New Year festivals, and other festivals. We also set up light signals and vinyl signs to warn people of risky points or dangerous points, both in Thai and in English, in the areas where accidents can take place. We have announcements regarding traffic safety measures for organizations and agencies to strictly follow. As for traffic and use of roads, we have the '4 Don'ts and 3 Dos' measure which don't drive over speed limits, don't drink and drive, don't use cell phones while driving, and don't drive while feeling sleep, as well as wear a safety helmet while riding a motorcycle, buckle up while traveling by car, and drive only after having a driver's license. Everyone is also encouraged to be considerate of other people who share the roads to sustainably ensure road safety…" (Group discussion of administrators of local administration organization).

"…The municipality plays a role to take care of well-being of all groups of population, including providing budgets for different operations of the community. We work to facilitate different organizations to ensure good health of the people. As for care of older people when they have an accident or an emergency, the municipality has organized a public disaster prevention and mitigation center for local people such as having a vehicle of the municipality for transfer of older people in cases of accidents or emergencies to ensure timely access to medical care and treatment at the hospital…" (Group discussion of administrators of local administration organization).

2.2 Accident prevention and severity reduction by the community included the following. First, the elderly school conducted initial screening; organizing training on self-care skills, cooking, exercising, and prevention and reduction of accidental risks in older people; occupational skill training; devising a public policy; establishing a fund for the elderly students; and visiting elderly students who were sick or had an accident or an emergency. Secondly, an elderly club was established to organize activities including paying a visit to chronic patients and bedridden patients and offering welfare in sickness. Thirdly, village health volunteers worked by compiling data on households with older people, conducting training on first-aid care and resuscitation, conducting health screening, rearranging household environments to suit the lifestyle of older people, doing house cleaning, conducting home visits, helping older people with accidents to carry out activities of daily living, doing wound dressing, conducting training on basic physical therapy; and coordinating to apply for a disability card. Fourthly, heads of the village surveyed the risky environment and coordinated with related agencies for improvement and repair, did public relations activities and publicized news and information on accident prevention, and devised community measures. Fifthly, rescue volunteers surveyed points with high risks of accidents and disasters and devised a plan to work in collaboration with other organizations in the community to adjust the environments, repair housing, arrange transportation for older people who needed to go to the doctor's appointment, and participated in community activities. In addition, they assessed the conditions of older people who had an accident, did resuscitation and first-aid care, coordinated transfers of older people to healthcare settings, offered post-accident assistance, donated basic necessities, and coordinated with related agencies to ensure that older people who had an accident received the welfare they were entitled to. Moreover, civilian safety volunteers worked to adjust the community environments, repaired housing, conducted training on public disaster prevention and mitigation, facilitated community members, devised an emergency drill in case of accidents and public disasters, and conducted training to disseminate knowledge among older people and their family. Finally, community funds promoted savings among older people and their family and donated money to help establish funding and community welfare for illnesses and deaths of community members.

"…*The elderly school is a starting point for collaboration to conduct activities related to older people in the community. It provides support to organizations and agencies in the community to acquire resources and budget for administration*

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of the school including paying for speakers, offering consultancy, and organizing activities for older people in the community on a regular basis, at least twice a month, such as giving advice on healthcare, exercise, recreation, as well as long-term activities for older people such as paying a visit to bedridden older people at home, offering monetary support to hospitalized older people and bedridden older people. Thus, the elderly school is a major mechanism that is a driving force behind community participation…" (A group discussion of community leaders).

"…We are volunteers who help with rehabilitation, treatment follow-up, and healthcare in cases of abnormalities such as older people who are unable to walk, have a catheter, or have a wound. We measure their blood pressure levels, teach them how to do stretching or how to use the equipment donated by the municipality, and find ways for them to earn income by giving them occupational training. If they are disabled, we will notify the municipality so that the disabled older people will receive the payment they are entitled to…" (Head of the village health volunteers).

"…The campaign on accidents in the area is conducted continuously every year because it is a policy that requires the municipality to work with the local police to set up a checkpoint during festivals such as the New Year and the Thai New Year Festivals because the number of tourists will increase during those times and most of them use a car or a motorcycle to go places. During the festivals, there are also a lot of drunk people and they drive very fast, so people in the community have to help monitor them. Accidents are related to safety and happiness of the community, directly related to the head of the village, community leaders, and the municipality. We use the public announcement system to publicize knowledge on traffic, including how to drive safely, particularly older people who have to use the roads with other groups of people…" (A representative of heads of villages).

2.3 Accident prevention and severity reduction by healthcare providers were done by community hospitals, provincial hospitals, and general hospitals, as follows:

(1) Accident prevention and monitoring: This included conducting training to increase self-care skills of older people to prevent accidents such as muscle stretching and balancing to prevent falls. A health examination was also conducted in the community to screen older people at risks of accidents by collaborating with the municipality, village health volunteers, etc. In addition, a database of older people in the community was established, and a first-aid care guideline was compiled in cases of accidents, emergencies, or public disasters for older people and their family. Healthcare providers also worked to reduce accidents among older people by taking part in safety campaigns such as a 'no drinking and driving' campaign or a 'safety helmet' campaign. In addition to treatment and care provided to older people with accidents, healthcare providers participated in an accident drill, conducted training on resuscitation and life support, and provided information on transfers of older people who had an accident and emergency to minimize disability and deaths. On a more sophisticated level, healthcare providers supported academics who disseminate knowledge on healthcare among older people, their family caregivers, and volunteers on various topics including prevention of falls, exercises, and risk assessment, to name a few.

(2) Severity reduction: Healthcare providers worked by providing treatment and care 24 hours a day, conducting assessments, providing life support and resuscitation, offering on-the-scene treatment and care, transferring patients for diagnoses and treatments, and observing patients to make sure that they were safe. In cases the older people who had an accident did not need to be admitted into the hospital, healthcare providers send them home for continuous care. If they had to be hospitalized, healthcare providers adjusted the treatment plan to make sure that they would receive appropriate treatments and care until they were ready for discharge. If there were severe abnormalities that were beyond the capacity of the community hospital, they referred the patients to provincial hospitals with staffs with a higher level of expertise for necessary therapy, treatment, or surgery with more advanced equipment and tools.

"…In cases of accidents in older people such as broken bones caused by a car crash, a broken arm caused by a fall, or a diabetic shock, older people will immediately receive necessary treatment as soon as they get to the hospital. Tambon rescue volunteers coordinate with the hospital to get the patients who already receive treatment during the transfer by volunteers, allowing time for the hospital to be ready. If the injury is too severe for the hospital to handle, we will send the patients to a provincial hospital or a university hospital…" (A Tambon rescue volunteer).

(3) Rehabilitation after the accident: Healthcare providers offered services including loans of medical equipment and tools such as oxygen tanks, air mattresses, wheelchairs, walking canes, walkers, etc. Traditional medicines and alternative medicines are also available for rehabilitation of the patients. Patients' data were also sent to the municipality, village health volunteers, and related personnel to assess their safety at home, offer life skill training, and conduct physical rehabilitation activities. Moreover, long-term care was also provided by interviewing older people and putting up an orange flag in front of their house and assigning caregivers. Coordination with related organizations was also done to ensure that older people received the welfare they were entitled to. Finally, long-term services of rehabilitation and referrals were also given, as can be seen in the excerpt below:

"…As for the services provided by the hospital, physicians and nurses offer assistance to prevent accidents in older people with diabetes mellitus and hypertension. We teach older people with a chronic illness how to take care of themselves to make sure that they are safe and if an accident happens, what they should do and what the hospital will do for them. If they become disabled after an accident or an emergency, we will teach them how to live their life happily and how to minimize their dependence on their children and grandchildren. When it comes to prevention of accidents and emergencies in older people, the hospital staffs go to the community to disseminate knowledge and conduct health screening together with village health volunteers and the municipality. If the older people have disability, we offer them

the same kind of care we offer patients with a chronic illness. The team of physicians pays them a visit at home and conduct physical therapy as well as other long-term care…" (A community nurse practitioner).

V. Discussions

There were two guidelines on accident prevention and severity reduction in older people by the community. First, self-care for accident prevention and severity reduction by older people and their family could be divided into three levels: 1) self-care to prevent and monitor accidents, 2) self-care for accident-related therapy and severity reduction, and 3) self-care for rehabilitation by older people and their family. Such practices are consistent with a health promotion guideline which emphasizes development of individuals' personal skills for behavioral modification and arrangement of the environment to facilitate health. They are also in line with the 20-year national strategy which places its emphasis on promotion of self-care ability and health of older people by making sure that older people receive care necessary care under the environment that promotes sustainable good health status (Vipavanich, 2015; Kaeodumkoeng & Thummakul, 2015; Nuntaboot et al, 2015). In fact, self-care to prevent accidents and reduce severity in older people should be done when the older people are still in good health. Once an accident takes place, the severity of the accidents can be minimized and health can be restored to prevent possible complications or disability that may occur. Older people who have an accident should be provided with healthcare services that include rehabilitation disability prevention. The findings of the present study has revealed that self-care of older people and their family to prevent accidents and reduce their severity depend on past experiences of accidents and injuries, which enable older people and their family to become more careful. In fact, in order for self-care to become effective, support from others is required including community organizations, local administration organizations, and related agencies that coordinate with one another continuously and sustainably until it become a common practice of the community.

Accident prevention and severity reduction in older people by the community could be done by three major organizations—local administration organization, community organizations, and healthcare service providers. The activities were divided into three types—accident prevention and monitoring, provision of assistance in time of accidents, and post-accident rehabilitation. First, accident prevention and severity reduction by local administration organizations included environmental services, social services, health services, and economic services. Second, accident prevention and severity reduction could be done by community organizations including the elderly school, the elderly club, and village health volunteers, heads of villages, rescue volunteers, civilian volunteers, and community funds. Thirdly, accident prevention and severity reduction by healthcare service providers included community hospitals, provincial hospitals, and general hospitals which encompassed accident prevention and monitoring, treatment for severity reduction, and post-accident rehabilitation. Such findings were in congruence with the concept of community participation to prevent accidents in older people which emphasizes community participation as a driving force in accident prevention involving acquisition of information, acquisition of funding, establishment of participation, promotion of learning, development of leaders, organization of campaigns, specification of rules, communication, and organization of infrastructures (Chompunth, 2015; Nuntaboot, 2018). The findings also yielded support to the implementation of the guideline on care of older people in the local community which consists of six measures as follows: 1) development of potential of older people and related persons, 2) adjustment of the environment to suit the lifestyle of older people, 3) development of a service system for older people, 4) establishment of funding for welfare of older people, 5) development of a database and use of information to care for older people, and 6) development of rules and regulations to support implementation of activities to strengthen the local community. Cooperation and collaboration among the three major organizations in the community is considered the main driving force behind accident prevention and severity reduction in older people by the community. Therefore, the present study helps shed light on the significance of promotion of participation of all related organizations to strengthen the local community, which, in turn, should lead to good quality of life of older people. It should also lead to establishment of a localized care system especially for older people, thus a systematic health promotion efforts for the whole community can eventually be achieved as a result.

VI. Conclusion

The present study reflects accident prevention and severity reduction in older people by the community including rearrangement of the home environment to suit the lifestyle of older people, health promotion and rehabilitation**,** practice of skills to prolong physical deterioration, monitoring of emergencies and accidents, promotion of participation of family members and volunteers to timely and effectively assist older people, and establishment of funding to offer emergency assistance. As such, community nurse practitioners have to play an important role by coordinating with local administration organizations and community organizations to prevent accidents and reduce severity of accidents. Nurses, therefore, need to develop skills, knowledge, and cultural sensitivity to understand behaviors and actions of related individuals to prevent accidents and reduce severity of accidents in older people, so as to eventually devise an accident prevention and severity reduction in older people guideline that suits specific sociocultural contexts, as well as problems and needs, of older people. Furthermore, as accident prevention and monitoring in older people can be done on individual, family, and community levels, community nurse practitioners need to be aware of the significance of participation from all related parties that should lead to an integrated effort to prevent accidents, promote safety, enhance longevity, and minimize accident-related morbidity and mortality in older people.

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REFERENCES

[1] Department of Public Administration. Statistics of the number of elderly people in Thailand in 2018 by Power Bi System. Bangkok: Department of Provincial Administration, Ministry of Interior, 2018. (in Thai)
[2] Foundation of Thai Gerontology Research and Development Institute. Situation of the Thai Elderly 2016. Bangkok: Amarin Printing & Publishing Public Company Limited, 2017. (in Thai)
[3] Anuruang S. Multimorbidity in Older Persons: Situation, Challenge Issues, and Care Management. Journal of Nursing Science Chulalongkorn University 2017, 29(2), 1-14.
[4] Bureau of Non Communicable Disease, Ministry of Public Health. Annual Report 2015 Bureau of Non Communicable Disease. Nonthaburi: he War Veterans Organization of Thailand Under Royal Patronage of His majesty the King, 2016. (in Thai)
[5] Jarutach T. Universal Design. Bangkok: Faculty of Architecture, Chulalongkorn University, 2018. (in Thai)
[6] Wei Xu, Da-Wei Chen, Yan-Bin Jin, Zhen-Jun Dong, Wei-Jiang Zhang, Jin-Wen Chen, et al. Incidence and related clinical factors falls among older Chinese veterans in military communities: a prospective study. J. Phys Ther. Sci 2015, 27 (2), 331 - 9.
[7] Phelan EA, Mahoney JE, Voit JC, Stevens JA. Assessment and management of fall risk in primary care settings. Med Clin North Am 2015, 99(2), 281-93.
[8] Ponsen K, Wachiradilok P, Sirisamutr T, et al. The situation and the factors that affect the use of emergency medical services at the emergency department of patient emergency in Thailand. Nonthaburi: National Institute for Emergency Medicine, 2016. (in Thai)
[9] WHO. Violence and Injury Prevention: Falls. 2016. [cited 2017 June 20]. Available:http://www.who.int/violence_injury_prevention/other_injury/falls/en/
[10] Tanuchit S, Chinnacom D, Malathong N, et al. The Situations of Emergency Medical Services Associated with Elderly Falls in Thailand: Policy Recommendation. Journal of Professional Routine to Research 2019, 6, 57-68.
[11] Gra R, Pattaravanich U, Chamchan C, Suwan Noppakao R. New Concept of Older Persons: The Psycho–Social and Health Perspective. Nakhon Pathom: Institute for Population and Social Research, Mahidol University, 2013.
[12] Aschkenasy MT, Rothenhaus TC. Trauma and falls in the elderly. Emerg Med Clin North Am 2006, 24(2), 413-32.
[13] Dienna T. Characteristics of elderly trauma. United Stated: Marry Medical Center, 2010.
[14] Parra D. Perceived and objective neighborhood environment attributes and health related quality of life among the elderly in Bogota Colombia. Social Science & Medicine 2010, 70, 1070 – 1076.
[15] Vipavanich, S. The model development of health promotion based on the philosophy of sufficiency economy for community well-being. Doctor of Philosophy Program in Development Education Department of Education Foundations Graduate School, Silpakorn University, 2015.
[16] Kaeodumkoeng K., Thummakul D. Health literacy promoting in aging population. JHR 2015, 9(2), 1-8. (in Thai)
[17] Nuntaboot K., Shokebumroong K., Theerasopon P. Competency levels and role implementation of professional nurses in health promotion. Journal of Nursing Science & Health 2015, 38(2), 103-14. (in Thai)
[18] Chompunth C. A Review of Public Participation Concept in "The Public Participation Handbook: Making Better Decisions through Citizen Involvement" in Thai Context. School of Social and Environmental Development National Institute of Development Administration. Journal of Nursing Science & Health 2015, 38(2), 103-14. (in Thai)
[19] Nuntaboot K. Development of Elderly Care by community and local government. Bangkok: Thai Health Promotion Foundation, 2018. (in Thai)