

# Development of Self-care Potential in the Elderly from Diabetes and Hypertension In Nong-Khon District, Ubon Ratchathani Province

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## Abstract

The purposes of this study were to show the results of the development of self-care potential in elderly from diabetes and hypertension who living in Nong-Khon District, Ubon Ratchathani Province. There were two target groups in community including 1) the core leader group and 2) the elderly group in Nong Lai zone. The procedures of self-care development required twelve steps. These are comprised of 1) investigation of the community context; 2) problems and needs surveying for determining indicators of elderly health conditions; 3) preparing the forum for zone selection and for the processes plan by social capitals; 4) seeking for the core leader group to develop teamwork attitudes, for acting as hospitality volunteers and for providing the knowledge 5) brain storming of the core leader group for preparing information and workshop to elderly ; 6) giving information back to the community and recruit for an elderly volunteers; 7) setting up a workshop to improve knowledge on diabetes and hypertension to each groups; 8) organizing the geminated rice festival and promoting consumption of geminated rice instead of the sticky rice which is widely consumed in Northeast of Thailand; 9) arranging a workshop to improve knowledge on exercise for the core leader group who will be attributing to the elderly group in relation to wisdom local exercise; 10) organizing campaign for changing alcohol consumption behavior; 11) giving a self-care knowledge via village broadcasting as a loop of action for remind and for activate changing health behaviors; and 12) evaluation and give all participatory action results to the community population. The results of this study could lead to potential self-care development by co-operate with various sectors and with mobilize participation from social capitals. In addition, these will be eventually elderly sustainable self-care in health promotions by advisory from the core leaders.

**Keywords:** Diabetes, Hypertension, Elderly, Self-care

## การพัฒนาศักยภาพการดูแลตนเองของผู้สูงอายุจากโรคเบาหวานและความดันโลหิตสูง ตำบลหนองขอน อำเภอเมือง จังหวัดอุบลราชธานี

ภักศจิภรณ์ ชันทอง

สาขาวิชาการแพทย์แผนไทย คณะแพทย์แผนไทยและแพทย์ทางเลือก มหาวิทยาลัยราชภัฏอุบลราชธานี

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### บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาผลของการพัฒนาศักยภาพในการดูแลตนเองของผู้สูงอายุจากโรคเบาหวานและความดันโลหิตสูงในตำบลหนองขอน จังหวัดอุบลราชธานี โดยแบ่งกลุ่มเป้าหมายออกเป็น 2 กลุ่ม คือ กลุ่มที่ 1 เป็นแกนนำอาสาสมัคร และกลุ่มที่ 2 เป็นผู้สูงอายุที่อาศัยอยู่ในบ้านหนองไหล ตำบลหนองขอน จังหวัดอุบลราชธานี

ขั้นตอนการดำเนินงานวิจัยแบบมีส่วนร่วมนี้แบ่งออกเป็น 12 ขั้นตอน โดยเริ่มจากการ 1) สำรวจบริบทชุมชน 2) การสำรวจปัญหาและความต้องการในการแก้ไขปัญหาด้านสุขภาพที่เกิดขึ้นในผู้สูงอายุ 3) จัดเตรียมเวทีประชาคมเพื่อคัดเลือกพื้นที่ในการดำเนินการและการค้นหาทุนทางสังคม 4) ประกาศรับอาสาสมัครที่เป็นผู้นำในชุมชนมาทำงานร่วมกันเพื่อพัฒนาการทำงานเป็นทีมและการมีจิตอาสา รวมถึงการให้ความรู้ที่เกี่ยวข้องในการดูแลตนเอง 5) ระดมสมองแกนนำอาสาสมัครเพื่อจัดเตรียมข้อมูลและการทำกิจกรรมให้ผู้สูงอายุ 6) จัดเวทีประชาคมคืนข้อมูลการสำรวจสุขภาพให้ผู้สูงอายุในชุมชนพร้อมทั้งประกาศรับอาสาสมัครผู้สูงอายุเข้าร่วมโครงการ 7) จัดกิจกรรมการอบรมและให้ความรู้เรื่องโรคเบาหวานและความดันโลหิตสูงให้กลุ่มเป้าหมายทั้ง 2 กลุ่ม 8) รมณรงค์การบริโภคข้างกล้องงอก 9) อบรมการออกกำลังกายที่เหมาะสมสำหรับผู้สูงอายุให้แก่กลุ่มแกนนำอาสาสมัคร แล้วให้กลุ่มแกนนำอาสาสมัครนำไปใช้ในการให้คำแนะนำแก่กลุ่มผู้สูงอายุด้วยการใช้รูปแบบการออกกำลังกายที่ผสมผสานท่ารำในท้องถิ่น 10) รมณรงค์การลด ละ เลิก การดื่มเครื่องดื่มแอลกอฮอล์ 11) ให้ความรู้ในการดูแลตนเองผ่านหอกระจายเสียงในหมู่บ้านเพื่อเป็นการทบทวนวิธีการดูแลตนเองจากโรคเบาหวานและความดันโลหิตสูง 12) ประเมินผลโครงการและให้ข้อมูลการทำวิจัยคืนสู่ชุมชน

จากผลของการพัฒนาศักยภาพการดูแลตนเองของผู้สูงอายุที่ใช้การมีส่วนร่วมจากผู้นำและหน่วยงานในชุมชนให้มีส่วนเกี่ยวข้องนั้น พบว่าสามารถแก้ไขปัญหาที่เกิดขึ้นจากภายในชุมชนและส่งผลให้เกิดความต่อเนื่องเพราะมีผู้นำในพื้นที่ที่มีความรู้และอยู่ในชุมชน สามารถดูแลตนเองและผู้สูงอายุได้อย่างยั่งยืน

**คำสำคัญ:** เบาหวาน, ความดันโลหิตสูง, ผู้สูงอายุ, การดูแลตนเอง

## Rational of research

Nong-Khon district is located in northwest of Ubon Ratchathani province and far from the downtown approximately 18 kilometers. There are 15 villages in 54 square meters or 33,765 rai. There are the highway route number 23 pass through the district. It is an agriculture rural community. Therefore, the main career and income of this district is from being farmer. According to the Tambon Health Promoting Hospital service it is separated into 2 zones with difference in work, lifestyle and livelihood. The west zone, namely Ban Nong Lai, consisted of 7 rural lifestyle villages. This zone is located near downtown. The east zone, Ban Nong-Khon, consisted of 8 semi-urban lifestyle villages. This zone is close to the highway.

The health survey of Nong-Khon district in 2012 by Tambon Health Promoting hospitals found that 12.9% of population was elderly<sup>1-2</sup>. The significant health problems were diabetes mellitus (DM) and hypertension (HT) that occurred in elderly more than other age group people. One out of three of the elderly were suffered from DM and HT, and more than half of the elderly who had the both diseases were afflicted with its complications.

The main problems of the elderly in controlling blood sugar and blood pressure were lifestyle behavior such as poor dietary (salty, sweet and spicy consumption) and lack of physical activity or exercise. Moreover, the working age who was approaching elderly had many health risky behaviors such as drinking alcohol when they gathered in their free time. This resulted in an increase of the ratio of DM and HT in the future.

Self-care procedures of the elderly who were risk having the DM and HT were developed by participation of many sectors in Nong-Khon district for sustainability of long term health promotion and health problem-solving.

## Research objective

The objectives of this research were to develop learning processes and participating in many sectors to improve self-care potential that was suitable to the community and relevant to elderly lifestyles.

## Research methodology

### 1. Theory Underlying

Over the past 15 years, there was increasing of illness and number of patients from DM and HT. Such symptoms made not only the complication in giving treatment but also the death of the patients in Thailand. The essential management of DM and HT were controlling the adequate level of blood sugar and blood pressure.

The blood sugar control in DM patients around the world was ranging between 20-70%<sup>3</sup>. In Thailand, only approximately 30% of DM patients could control their blood sugar and approximately 20% of HT patients could control their blood pressure<sup>4-5</sup>. Both DM and HT cause lost in many

dimensions (including, physical, mental, social and economic). Therefore a proper self-care had better be the best approach for these patients.

Self care theory and participatory action research (PAR) were evident as the important tools to solve the health problems. Self-care theory of Orem consisted of 2 phases. The first phase was evaluation and decision to implement or not. The second phase was action and evaluation the action. The effective self-care agency used PAR for development of self-care potential PAR helped boost self esteem which was the important factor for daily living of the elderly. In addition, they felt confident in implementing self-care because of coaching from core leaders in the community. The self efficacy was prominent after they were healthy.

## **2. Conceptual frame works of research**

The self-care potential of the elderly would achieve through collaboration of residents and their community. Therefore, PAR was used to develop the potential in solving two elderly health problems: DM and HT.

## **3. Data collection and analysis**

Qualitative and quantitative data were collected by many instruments. Qualitative data gained from deep personal or group interviewing, meeting, asking to write the suggestions and observing the community daily living. Quantitative data gained from questionnaires and community sector survey. Data were then triangulation and descriptive statistics were used to analyze the information.

## **4. Case study**

The scope of this case study covered 5 villages in Ban Nong Lai: moo 1, moo 2, moo 4, moo 12 and moo 13

## **5. Populations and sample size**

There were two major groups of population:

**Group 1 was core leader group.** There were 30 volunteers from many sectors such as village headmen, chief of elderly clubs in each village, officers from SAO and Village Health Volunteer (VHV).

**Group 2 was elderly group.** There were 100 elderly who had or had risk from DM or HT.

## **Lifestyle related to diabetes and hypertension in Nong-Khon district**

The results from situation analysis indicated many health problems of DM and HT in the elderly and the residents approaching elderly. The numbers of the DM, HT, or DM and HT in the elderly were 23%, 5%, and 9% respectively. It found that the ratio of these diseases was more than 1 in 3 of the elderly. The main dishes that usually most consumption were sticky rice, preserved fish, and spicy papaya salad (Som Tam). In addition, the tastes that prefer among the elderly were sweet, salty, and oily respectively. These behaviors were the causes of DM and HT in the elderly accordingly. Moreover, they lack the knowledge to cope with their health. Although the elderly club was supported the budget to the group exercise, it was just temporary, no continuation. The next problems were a low level of physical activity or exercise. This was because of the village calendar, especially in farming season. The other cause was the regular drinking alcohol of headmen and the residents who approaching elderly.

In the DM, HT, or DM and HT elderly who had been drinking alcohol, they had difficulty in controlling their blood sugar and blood pressure. Therefore, the campaign of self-care for DM and HT elderly was undertaken using participation of the community under the name “Sao-Lao Kin-Khao-Hang-Ngok Ook-Kam-Lang-Kai”.

## Procedures

The procedures of self-care development required 2 target groups (core group and elderly group) and followed 12 steps:

- 1) Investigated the community context.
- 2) Surveyed Problems and needs for determining indicators of elderly health conditions from people who live in Nong-Khon district. There were many ways for getting the information such as deep interview (in person or group), meeting and accomplishing the forum.
- 3) Reported the health situation and conduct the forum in the selected zone village. Did the operational plan based on the social capitals.
- 4) Seek for the core group on the volunteer basis. The developed teamwork attitudes, for acting as hospital representatives and the knowledge about self-care providers.
- 5) Brain stormed among the core leader group for information and schedule of workshop to elderly. The results from brain storming were folk dancing and role playing about causes and silent danger from DM and HT.
- 6) Gave information back to the community and recruited elderly volunteers
- 7) Set up a workshop to improve knowledge on diabetes and hypertension to each group. The programs consist of giving knowledge of DM and HT, dietary, herbs and germinated rice.
- 8) Cooperated with Sub-district Administration Organization Organization(SAO) and Tambon Health Promoting hospitals to organize the germinated rice festival and promoted the consumption of germinated rice. The loving and sharing calendars were used to monitor their health behavior modification in the elderly.
- 9) Operated the workshop to improve knowledge through such exercises as chair exercise, folk dancing, and laugh therapy for the core group. The core group then conducted these activities for the elderly group.
- 10) Ran the campaign for changing behavior in reducing, temporary omitting, or permanently stopping drinking alcohol at the temple in Ban Nong Lai.
- 11) Provided self-care knowledge via village broadcasting and handbook as a loop of action for remind and for activate health behavior modification.
- 12) Evaluated and reported all the research findings to the community.

## Results and impacts

### 1. Results

**1.1 Core leader group:** The results from the development self-care potential in the core group made them improve the knowledge. Also the community had the health network. The results of developing teamwork were gained through activities in providing coaching the community and preparing themselves to be a healthy aging in the future.

**1.2 Elderly group:** The elderly got the knowledge, handbook, and loving and sharing calendar to learn how to manage their health. They were coached by the core group to remind health behavior modification. More precisely, they could modify health behavior in controlling adequate level blood sugar and blood pressure.

### 2. Impacts

#### 2.1 Direct impacts

For the core group, PAR promoted their self-care potential and the ability to handle health coaching for the elderly in the community.

The elderly group had an opportunity to meet and took part in the group activities in the community area such as in the temple and Village pavilion (Sala Moo Ban).

In terms of the community health, the elderly and the core groups modified their health behavior to prevent the complications and the illnesses from DM and HT. The participants who had DM, HT, or DM and HT could control their blood sugar and blood pressure in an adequate level. The health behavior modification depended on the needs and the lifestyle of each person. What generated the health positive results was a habit of doing arms and legs movement, laugh therapy, other exercises, and a consumption of the germinated rice.

#### 2.2 Indirect impacts

The indirect impacts were evident in 4 different areas as follows.

1) Economic: There were more residents in the community to produce the germinated rice for consumption and distribution.

2) Relationship: The large area, many villages, and highway passing through the district isolated people in each zone. The PAR promoted relationship among the members. People from different zones know each other and also participated other community events.

3) The alcoholic treatment center: The alcoholic treatment center was set up at the temple as a result from the Campaign to change behavior in reducing, temporary omitting, or permanently stopping drinking alcohol at the temple in Ban Nong Lai. The first announcement from the monk at the temple, the temple assisted the residents who wanted to stop drugs and alcohol drinks by using herbs and Buddhism ceremony.

4) Connection: The connection between the community and the Ubon Ratchathani Rajabhat University was strengthened. Nong-Khon district and the university planned to launch many cooperation projects to enhance the well-being of people.

## Conclusion

In this PAR is proven effective to solve the health problems in the community because it helps modify health behavior in daily life. The elderly gradually approach the well-being in physical, psychological, social, and spiritual. Therefore, the new health innovations are generated according to the PAR processes.

## Acknowledgement

This research was supported by the Thai Health Promotion Foundation. Thank to Mr. Sombat Haesakul for advising patiently and suggesting in the processes of the research. Also thank to Ms. Maneerat Mitprasat for coaching community activities. In addition, thank to Ms. Tipavan Saicheur for assisting throughout the research. Many thanks to the faculty of Thai Traditional and Alternative Medicine, Ubon Ratchathani Rajabhat University for supporting and promoting in community. Moreover, the last thank is for the residents in Nong-Khon district for the best interest and the excellent participation in this research.

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