Enhancing Autonomy and Self–Management Behaviors Through a Patient–Centered Communication Program for Older Adults with Hypertension: A Randomized Controlled Trial

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Abstract: Autonomy and self-management behaviors are crucial for people living with any chronic disease and need to be enhanced. This randomized control trial tested the effectiveness of the Patient-centered Communication Program for improving autonomy and self-management behaviors among Thai older adults with hypertension. Sixty participants receiving care at a medical out-patient department in a university hospital in Northern Thailand were randomly assigned equally using the permuted block design into an experiment group (n = 30) who received the program and a control group (n = 30) who received only the regular communication care. Data were collected before, immediately after, and three months after the program using the Maastricht Personal Autonomy Questionnaire, and Self-Management Behaviors Questionnaire. Data were analyzed using one-way and two-way repeated measures ANOVA and independent sample t-test.

The findings revealed that the autonomy and self-management behaviors of participants in the experimental group immediately post-intervention and 3 months after were significantly higher than the control group after the intervention. It can be concluded that this patient-centered communication program was beneficial for older adults with hypertension. Although the program needs further testing and possible refinement, it has potential for nurses and other health professionals to implement this program to encourage older adults with hypertension to take an active role in their care and continuously help themselves to control their hypertension.

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Introduction

Hypertension is a major global public health problem and uncontrolled hypertension can cause many negative fatal impacts.[1] Hypertension is likely related to age and people over 60 years comprise the age group with the highest hypertension incidence of 3,446.83 per 100,000 people in Thailand.[2]

Furthermore, the latest survey of Bureau of Policy and Strategy in Thailand showed that the percentage of older adults with hypertension continued to rise from 20.0% in 2002 to 33.6% in 2017 due to continuous growth of older adults.[2] In addition, only 25% of Thai older adults with hypertension could control their disease,[3] but a large number still have improper self-management behaviors.[4] To regularly and properly self-manage their hypertension individuals need intrinsic motivation and autonomy for and responsibility to control their lives,[5] especially in those areas of their lives that they can effect change for the better.

Patient-health care provider communication is a strong predictor for both autonomy and self-management behaviors.[6,7] At present, inadequate patient-health care provider communication in Thailand is still an issue. For example, physicians have limited time to meet patients, for example because of the large number of clients in outpatient departments,[8] and older adults often lack skills necessary to communicate effectively in health care interactions.[9] Therefore, an effective program to increase people's communication skill is needed.

Patient-centered communication (PCC) has been recommended as an effective model for communication between health care providers and people.[10] Generally, health care providers have been prepared for effective communication, while people with illness may not have that experience.[11] Those who have communication problems therefore need some training in this. It is expected that with effective goal-directed communication, patients will gain knowledge and skills for self-management. Due to the lack of knowledge on this problem, this study aimed to test the effectiveness of a patient-centered communication program to enhance autonomy and self-management behaviors in older adults with hypertension. The findings will be beneficial for nurses to plan the program activity so such people can control the disease and live their life with quality.

Conceptual Framework and Review of Literature

This research was based on Creer's perspectives of self-management of chronic illness.[12] Self-management is defined as a procedure where people change some aspects of their own behaviors so they can live with chronic disease and are responsible for day-to-day self-care tasks. Self-management comprises three sets of tasks, medical management, role management, and emotional management, and involves a process of goal selection, information collection, information processing and evaluation, decision-making, action, and self-reaction.[13] To consistently perform self-management effectively, people need skills that consist of problem-solving, decision-making, resource use, self-tailoring, taking action, and building a partnership with a health care provider.[13] Importantly, they need intrinsic motivation to perform self-management behaviors. Based on Self-Determination Theory (SDT), motivation occurs due to the need to satisfy basic psychological needs of autonomy, competence, and relatedness.[5] Autonomy is defined as self-government and responsible control of one's life, and is classified in health care as decisional autonomy (the ability and freedom to have preferences and make informed choices on health care decisions), and executive autonomy (the capacity to carry out recommended behaviors, especially those related to treatment planning and implementation).[14] Literature evidences that supporting autonomy can increase the frequency of blood glucose self-monitoring and improve clinical outcomes.[15,16] Autonomy support is known to relate to behavioral change and its maintenance.[17]

To successfully enhance autonomy and self-management behaviors, nurses should be aware of related factors and be able to properly manipulate them. Factors predicting both autonomy and self-management include knowledge,[18,19] patient-health care provider communication,[6,7] and autonomy support.[20,21] Thus,

patient-health care provider communication is a potential factor that needs to be manipulated to enhance autonomy and self-management behaviors. To achieve autonomy, the individuals need to be able to actively acquire the information needed, feel trusted and respected and certain about their own condition, and feel involved and satisfied with themselves.[10] These feelings can be built through effective communication with health care providers who can enhance people's decisional autonomy by fostering healing relationships, delivering or explaining necessary information to them, showing respect for their views, and giving a positive response to their requests and choices.[10] Similarly, executive autonomy can be enhanced by providing adequate information and training skills for self-management.[14] Furthermore, providing navigational help, guidance and advice on better self-care through communication techniques, and training six core skills of self-management can increase self-management behaviors.[10,13]

Study Aim

To examine the effectiveness of a patient-centered communication program for improving autonomy and self-management behaviors among Thai older adults with hypertension.

Hypothesis

After finishing the program, older adults in the experimental group will have significantly higher mean scores of autonomy and self-management behaviors than immediately after intervention, and higher scores than those of the control group both immediately and three months after the intervention.

Methods

Design: A randomized controlled trial (RCT) with repeated measures was used with 3-time points over an approximate 4-month period.

Sample and Setting: The target population was selected from older adults diagnosed with hypertension and receiving treatment at the general medical clinic of a university hospital in Northern Thailand from September 2018 to April 2020. They were recruited if they met the following inclusion criteria: 1) diagnosed with hypertension for at least 6 months, 2) aged 60-79 years, 3) able to communicate in Thai, 4) able to perform basic daily living activities with a score of the Barthel Index of Activities of Daily Living[22] at least 12 out of 20, and 5) having good consciousness and perception with a score of at least 8 out of 10 evaluated by the Mental Status Questionnaire (MSQ).[23] Exclusion criteria were: 1) having hearing problems, and 2) having severe complications including chronic renal failure, coronary artery disease, and stroke.

The sample size was determined using power analysis with power of .80, alpha .05, and effect size calculated from a previous study as $\eta^2 = 0.13$.[11] To enable one-way analysis of variance, 25 participants per group or a total of 50 participants were needed. Ten extra participants or 20% of the sample were added to compensate for possible participant attrition, giving a total of 60 participants. Permuted block randomization (block size = 6) was used to randomly assign the participants to the experimental group and control group with 30 participants in each group. The single-blind technique was used in this study to conceal assignment results to the research assistants (RAs) who were trained by the primary investigator (PI) to collect data.

The PI screened an initial sample of older adults who received treatment at a general medical clinic of a university hospital in Northern Thailand. A total of 250 eligible participants were initially approached; 190 did not meet the criteria and 19 were unable to participate in all processes of this study. Therefore, 60 participants were randomly assigned either to the experimental or the control group. During the study period, all participants in both groups were able to participate in the study. The final number of participants used for data analyses were 30 in both groups (**Figure 1**).
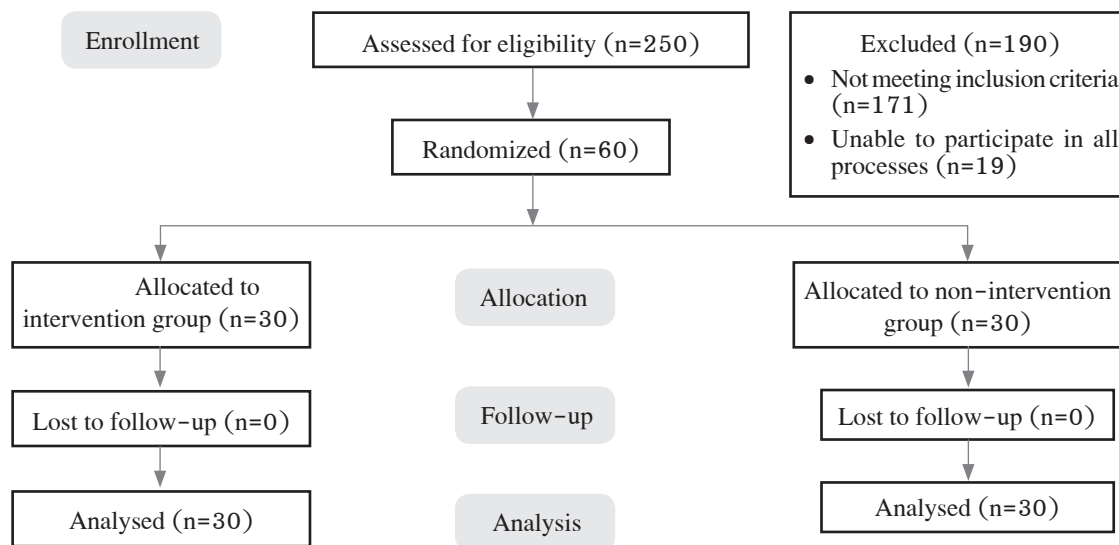
Figure 1 Flow diagram of participants in randomized controlled trial

Ethical Considerations: The research ethics committees of the Faculty of Nursing, Chiang Mai University and the hospital involved approved this study (Research ID: 2019−045: Study Code: 2019−FULL019 and Research ID: 6292 / Study Code: NONE−2562−06296, respectively). All potential participants were informed of the study objectives, research process, benefits and potential risks, time used in the study, their rights to privacy, confidentiality, study withdrawal without losing health care service benefits, and given opportunities to ask questions. Their confidentiality was maintained by keeping completed questionnaires and computer data secured. Study results were reported in an aggregate, non−individual−level format.

Instruments: A questionnaire was administered involving three instruments described below:

A demographic data form was developed by the PI to collect information about gender, age, religion, education level, marital status, current occupation, monthly personal income, sufficiency income, living arrangement, autonomy, duration of having hypertension, comorbid disease, and number of antihypertensive medications.

The *Maastricht Personal Autonomy Questionnaire* (MPAQ), developed by Mars,[24] was used to evaluate patient autonomy in the participants. Because the MPAQ had never been used in Thailand, the PI translated the MPAQ into Thai by using World Health Organization (WHO) guideline,[25] for back−translation after obtaining permission from the original authors. The instrument was then back translated and three bilingual experts identified any discrepancies in the items' translation, and adjustments was undertaken. This 16−item questionnaire consists of three components: degree of autonomy (e.g., "The life I lead now suits the person I am"), decisional autonomy or dilemmas (e.g., "How often do you find it difficult to decide between doing something you like and doing what's best for your health?"), and executive autonomy or working on autonomy (e.g., "I try to find a way do things I like doing within the limitations of my present state of health"). Participants were asked to rate each item on a 4−point Likert scale ranging from 1 (never) to 4 (very often). The range of total scores is 16−64 points with higher scores indicating a higher degree of autonomy. The instrument was tested for its content

validity by six experts: (a cardiologist two nurses specialized in hypertension and self-management, two nurses specialized in care of older people, and a nurse specialized in administration). The results of S-CVI showed that the MPAQ had an S-CVI of 0.92. The internal consistency reliability was tested with 10 participants, who met the same inclusion criteria as the study participants, and this yielded an acceptable Cronbach's alpha coefficient of 0.81 for the pilot sample, and of 0.83 for the study sample.

A Self-Management Behaviors Questionnaire (SMBQ), developed by the PI based on a literature review, was used to evaluate self-management behaviors in older adults with hypertension. This 30-item questionnaire consists of three components: medical management (20 items) (e.g., "You do not stop taking medicine when your blood pressure level is normal); emotional management (3 items) (e.g., "You seek ways to relax when feeling angry, upset, stressed, or anxious such as praying, watching television, listening to radio, reading, growing plants"); and role management (7 items) (e.g., "When you are so sick that you cannot function or do activities as usual, you will ask your family members to do activities for you). Participants were asked to rate each item on 4-point Likert scale ranging from 1 (never perform) to 4 (always perform). The range of total scores is 30-120 points with higher

scores indicating a higher degree of self-management behaviors. The instrument was tested for content validity by same group of MPQA. The results of S-CVI showed that the SMBQ had an S-CVI of 0.96. The internal consistency reliability was tested with 10 participants, who met the same inclusion criteria as the study participants; it yielded the acceptable Cronbach's alpha coefficient of 0.92 from the pilot sample, and the Cronbach's alpha coefficient of 0.85 from the study sample.

The Intervention: The Patient-Centered Communication Program (PCCP)

The PCCP was developed based on the PCC model[10] to guide the enhancing of autonomy and self-management behaviors. It is a 5-week intervention program planned to serve the six key functions of PCC that includes fostering relationship between health care providers and older adults; promoting exchange of information with their health care providers; managing uncertainty in information; managing older adults' emotional problems and uncertainty; assisting older adults to make effective decisions; and enabling older adults' self-management. The program was provided by the PI and its activities included training for older adults to communicate with physicians, manage stress, and manage their daily life when having hypertension, as well as telephone follow-up and counselling. The program and all activities implemented are shown in **Table 1**.

Table 1   Schedule and content of the PCCP

Session/Week	Strategies	Activities
1 (**1**st **week**) (30 mins.)	1. Fostering relationship	**Developing trustful relationship** 1. Encourage sharing of experiences and group discussion about health-related problems, and barriers to self-management behaviors 2. Assess current knowledge, attitude, preferences, and needs for information 3. Increase knowledge and skills for hypertension self-management through group communication and media (i.e., handbook, VDO, Power Point)
(30 mins.)	2. Promoting exchange of information with health care providers and managing uncertainty in information	**Training communication skills** 1. Engage in role-playing exercises with prompt sheet to prepare participants for question-asking and maintaining needs and preferences with guest health care provider as a surrogate health care provider 2. Provide encouragement and feedback on participants' communication 3. Encourage participants to list and prioritize the significance of their own questions in handbook to discuss in the next session or during follow-up with health care providers

Table 1 Schedule and content of the PCCP (Continued)

Session/Week	Strategies	Activities
2 (2nd week) (5-10 mins.)	Telephone follow-up and counselling	Focus on giving counselling on how to report health problems/concern/anxiety with health care providers; increasing competence to ask questions or discuss with health care providers about problem or barriers to self-management behaviors; defining barriers together and helping participants overcome barriers
3 (3rd week) (30 mins.)	1. Enabling older adults' self-management	1. Assist with individual goal setting and writing action plans based on participant's condition, interest, priority, and confidence in their ability to change behaviors 2. Help to identify goal achievement barriers, and motivate to have persistence for achieving goal and overcoming barriers to self-management behaviors
(30 mins.)	2. Assisting older adults to make effective decisions	1. Advise judging and choosing the best available solution using accurate information after seeking, processing, and evaluating information 2. Encourage to follow activities based on decision-making as stated in short-term action plan for realistic goals
(30 mins.)	3. Managing older adults' emotional problems	1. Encourage to identify and express/explain concern /stress /anxiety regarding treatment plan, medication, and lifestyle modification barriers 2. Ask about strategies for relieving stress 3. Perform emotional management using self-relaxation techniques (e.g., deep breathing exercise, muscle relaxation) through group-based training
4 (4th week) (5-10 mins.)	Telephone follow-up and counselling	Focus on counselling and evaluating participants' communication skills with health care providers, attainment of self-management behavior goals, problem-solving skill, and decision-making skill
5 (5th week) (15 mins.) (20 mins.) (40 mins.) (15 mins.)	Review of PCCP	1. Encourage discussion through group communication about benefits of ability to communicate with health care providers effectively to promote confidence in competence to communicate with health care providers 2. Review information from previous sessions, and assess three tasks of self-management behaviors. Share experience to group communication to promote awareness of benefits of self-management behaviors 3. Divide participants into 2 groups (5 members/group) to play Snakes and Ladder Game to Overcome Hypertension Disease for reviewing hypertension knowledge, decision-making skill, goal-setting, and self-management behaviors to promote enjoyment 4. Summarize program and motivate performance of persistent action for achieving goal and overcoming barriers to self-management behaviors

Data Collection: The PI approached the potential participants who met the inclusion criteria, informed the purpose of the study, and informed consent. The participants were asked to respond to three instruments by the RAs who did not know the experimental or control status of participants. Demographic data were recorded for participants in both groups during the first week. The experimental group received a 5-week intervention

composed of three consecutive sessions, and two telephone follow-up and counseling conducted on two separate weeks, whereas the control group received standard care from health care providers at medical out-patient department. Standard care refers to the regular communication pattern between health care providers and older adults with hypertension at the medical out-patient department. The MPAQ and the SMB questionnaires were collected three times (at baseline before program implementation, at the program end (week 5), and three months after the program end (week 17).

Data Analysis: Descriptive statistics were used to analyze the participants' demographic characteristics. The Chi-square, independent t-test, and Fisher's Exact test were used to examine the differences in demographic data between the participants in the experimental group and the control group at baseline. Before analysis, assumptions of the independent t-test and paired t-test including normality distribution and homogeneity of variance were tested. Normality distribution of autonomy

and self-management behaviors were tested with One-Sample Kolmogorov-Smirnov test. The results showed non-significance (p >.05). Homogeneity of variance was tested by Levene's test and showed no significant differences (p >.05) among dependent variables. Therefore, two-way repeated measures ANOVA was used to examine the difference of autonomy and self-management behaviors between the groups. One-way repeated measures ANOVA was used to examine the difference of autonomy, and self-management behaviors between each point of measurement within the groups.

Results

Totally, 60 participants completed the program with 30 participants each in the control and experimental groups. Regarding gender, there was an equal proportion of male and female participants in both groups. All other demographics data were not significantly different between groups (Table 2).

Table 2 Demographic characteristics of the participants in the control and experimental groups

Demographic characteristics	Control (n=30)		Experimental (n=30)		p-value
	N	%	n	%	
Gender					
Female	15	50.0	14	46.7	.796[a]
Male	15	50.0	16	53.3	
Ages (years)					
Range	61-79		60-77		
Mean (SD)	69.48 (4.97)		68.73 (4.14)		.798[t]
60-69	18	60.0	17	56.7	
70-79	12	40.0	13	43.3	
Religion					
Buddhist	30	100.0	30	100.0	1.000[b]
Current occupation					
Unemployed	27	90.0	27	90.0	1.000[a]
Retired government	3	10.0	3	10.0	
Income/month					
< 5,000 baht (< 159.54 US$)	21	70.0	26	86.7	.122[t]
5,000-10,000 baht (159.54-318.98 US$)	0	0.0	0	0.0	
>10,000 baht (> 318.98 US$)	9	30.0	4	13.3	

Note. [t] = t-test, [a] = Chi-square test, [b] = Fisher's Exact test

Table 2 Demographic characteristics of the participants in the control and experimental groups (Continued)

Demographic characteristics	Control (n=30)		Experimental (n=30)		p-value
	N	%	n	%	
Sufficiency of income					
Insufficient	8	26.7	5	16.7	.267[a]
Sufficient but no saving	16	53.3	22	73.3	
Sufficient and saving	6	20.0	3	10.0	
Duration of having HT					
1-10 years	17	56.7	23	76.7	.357[a]
11-20 years	10	33.3	6	20.0	
21-30 years	2	6.7	1	3.3	
>30 years	1	3.3	0	0.0	
Number of antihypertensive medication (types)					
1	3	10.0	3	10.0	.756[a]
2	16	53.3	12	40.0	
3	8	26.7	11	36.7	
4	3	10.0	4	13.3	

Note. [t] = t-test, [a] = Chi-square test, [b] = Fisher's Exact test

Regarding differences in autonomy, two-way repeated measures ANOVA showed that the autonomy score of the experimental group was significantly higher than that of the control group (p =.000). In addition, the time-group interaction was also significant (F = 96.369, p =.000) (**Table 3**). The results from the independent sample t-test showed that the mean score of autonomy was not significantly different between the groups at baseline (p >.05). However, the mean score of autonomy in the experimental group was significantly higher than that in the control group at the program end and at three months after the program end (p < .05) (**Table 4, and Figure 2**). The multiple pairwise comparisons using Bonferroni test between each point of measurement showed that autonomy score of the experimental group increased significantly from baseline to the program end, and baseline to three months after the program end. Conversely, there was no significant change in autonomy score of the control group across the three time measurements (p < .05) (**Table 5**).

Regarding self-management behaviors, two-way repeated measures ANOVA revealed that the score of experimental group was significantly higher than that of the control group (**Table 3**). An independent sample t-test showed the score of self-management behaviors of the experimental group was higher than that of the control group at the program end, and three months later (**Table 4, Figure 3**). Furthermore, there was a significant change in self-management behaviors over time and the time-group interaction was also significant. The multiple pairwise comparisons using the Bonferroni test between each point of measurement showed that self-management behavior score of the experimental group increased significantly from baseline to the program end, and from baseline to three months after the program end (p < .05). On the other hand, there was no significant difference in the self-management behavior score of the control group across the three time measurements (**Table 5**).

Table 3 Two-way repeated measures ANOVA: main effects and interaction effect of the program on autonomy and self-management behaviors (N = 30)

Variables	SS	df	MS	F	p-value	η^2
Autonomy						
Within subject						
Time	4123.911	2	2061.956	107.666	.000	.650
Time x group	3691.200	2	1845.600	96.369	.000	
Error	2221.556	116	19.151			
Between subject						
Group	4205.000	1	4205.000	81.326	.000	
Error	2998.911	58	51.705			
Self-management Behaviors						
Within subject						
Time	7803.878	2	3901.939	72.555	.000	.556
Time x group	9357.078	2	4678.539	86.995	.000	
Error	6238.378	116	53.779			
Between subject						
Group	18341.606	1	18341.606	96.338	.000	
Error	11042.456	58	190.387			

Table 4 Comparisons of autonomy and self-management behaviors between the control and experimental groups at each point of measurement

Variables	Control group (n = 30) x (SD)	Experimental group (n = 30) x (SD)	t	p-value
Autonomy				
Baseline	40.57 (6.41)	37.43 (6.85)	1.830	.072
At the program ended	39.90 (5.20)	56.37 (4.52)	−14.275	.000
At three months after	42.10 (5.63)	57.77 (3.71)	−11.884	.000
Self-management Behaviors				
Baseline	69.07 (9.15)	69.77 (12.57)	−.247	.806
At the program ended	67.93 (8.03)	92.67 (11.33)	−9.757	.000
At three months after	67.60 (9.17)	102.73 (8.79)	−15.146	.000

Note. t = Independent sample t-test

Table 5 Multiple pairwise comparisons of autonomy and self-management behaviors scores over time in both control and experimental groups (N = 30)

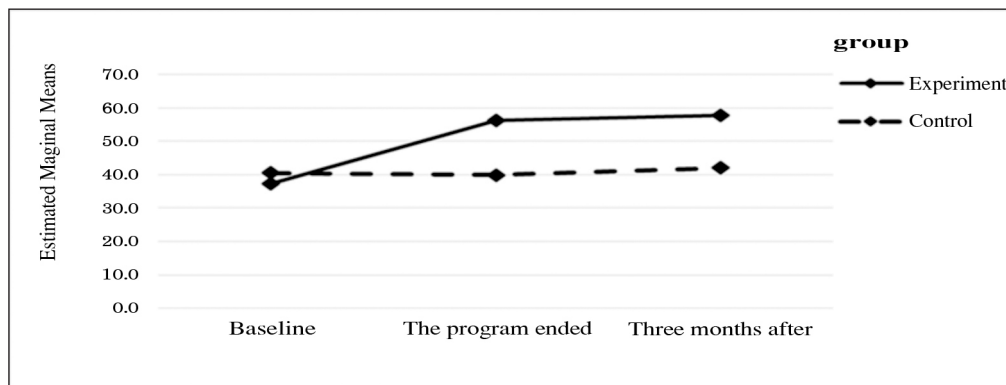| Variables	Baseline (1) x (SD)	At the program ended (2) x (SD)	At three months after (3) x (SD)	p-value (1) VS (2)	(1) VS (3)	(2) VS (3)
Autonomy						
Control group	40.57 (6.41)	39.90 (5.20)	42.10 (5.63)	1.000	.755	.160
Experimental group	37.43 (6.85)	56.37 (4.52)	57.77 (3.71)	.000	.000	.442
Self-management Behaviors						
Control group	69.07 (9.15)	67.93 (8.03)	67.60 (9.17)	.290	.278	1.000
Experimental group	69.77 (12.57)	92.67 (11.33)	102.73 (8.79)	.000	.000	.000

Note. [b] = Bonferroni test

Figure 2 Changes in autonomy of control and experimental groups over time
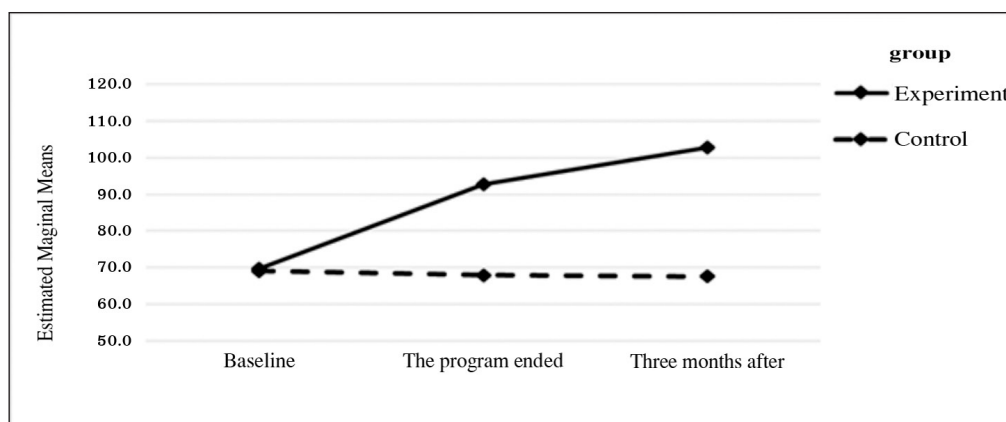

Figure 3 Changes in self-management behaviors of control and experimental groups over time

Discussion

Our study results confirm that enhancing the communication ability of older adults with hypertension using the PCCP can improve autonomy and self-management behaviors. The findings were consistent with the study framework and supported the hypotheses. Realizing that they had to take the major roles in self-management, the participants had to acquire necessary information from various resources, then used this information for decision-making in self-care.

Regarding the effect of the PCCP on autonomy, the program activities based on four key functions of patient-health care provider communication, aiming at increasing autonomy, were performed to develop a trusting relationship, provide adequate health information, and train older adults to communicate with their physician for managing daily life with hypertension. All information necessary for self-care was given to participants so they had sufficient knowledge for making informed decisions, felt trust in the physician and health care system, and felt confident in taking illness role. Moreover, participants were encouraged to demonstrate more active communication behaviors such as asking questions, expressing concerns, being assertive in stating opinions and preferences, introducing topics for discussion, and telling their "health stories." These strategies could build trust, clinician-patient

hypertension agreements and quality of medical decisions, therefore increasing both decisional autonomy and executive autonomy.[10,14,26] Our findings demonstrated that once participants were able to communicate effectively with their health care providers, they could take a more active role in making decisions, managing aspects of their own health care, and controlling disease. This finding is consistent with those of a number of studies on the effectiveness of communication programs to improve autonomy and health outcomes.[14,26,27,28]

Regarding the effects of the PCCP on self-management behaviors, the findings showed that the program could enhance patients' self-management behaviors. In this study, the program activities aimed at enabling participants' self-management knowledge and skill training through communication. Six core self-management skills were trained through group discussion, individual telephone follow-up, and counseling. The PI helped the participants by supporting persuasive communication, and goal setting based on their own context. In addition, they were assisted to identify barriers and solve problems to achieve their goals and were motivated to have persistent action for achieving goals and overcoming barriers to self-management behaviors. These strategies enabled the participants to perform the target behaviors and promote autonomous motivation to achieve self-management behaviors.[20,29,30] The participants were helped to tailor the training to their specific concerns through group participation, peer learning, and sharing experiences. These build confidence and understanding of their ability to perform proper self-management behaviors.[27,29]

Furthermore, the PCCP consisted of telephone follow-up and counselling focusing on addressing participants' problems and reminding them to maintain their health behaviors. These strategies helped participants solve their own problems, anticipate their obstacles, and maintain new behaviors, particularly self-management behaviors.[31,32] Also, participants were encouraged to ask questions of the health care provider to improve

access to resources and skills needed to manage their health effectively.

This study showed that the scores of the experimental group was significantly higher than that of the control group regarding autonomy and self-management behaviors in older adults with hypertension and thus supported the benefits of the PCCP.

Limitations

The procedures of PCCP took a long time, around 90 minutes per session. This may not be appropriate for applying in the rush hour in a medical out-patient department, and thus needs to be refined. The other limitation is that this intervention was only implemented in a tertiary hospital in northern Thailand, thus generalization is limited.

Conclusions and Implications for Nursing Practice

This study was different from previous studies on the topic since it applied communication as a strategy and emphasized autonomy, an internal motivation that can help sustain self-management behaviors and ultimately enable older adults to control their illness.

The findings revealed that the PCCP could enhance autonomy and self-management behaviors among older persons with hypertension. The more effective communication between patients and health care providers helped the participants move from a passive role to a more active role during their medical encounter to manage their daily life involved having hypertension. However, whilst the PCCP needs testing with other samples and in different locations, it is a strategy potentially as a guide for nurses and other health professionals to implement in practice. This should help the development of a trust relationship, assist in providing adequate health information, and train older adults to communicate with health care providers regarding uncertain information and self-care skills

deficits among older adults with chronic illness either in hospitals or community settings.

Further research that nurses can undertake is regarding the investigation of the cost-effectiveness of applying the program in older persons with hypertension, and other chronic diseases. This will assist policy-makers regarding their decisions to invest in this kind of service in the health care system.

Acknowledgements

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การส่งเสริมความเป็นอิสระแห่งตน และพฤติกรรมการจัดการตนเองในผู้สูงอายุโรคความดันโลหิตสูงผ่านการติดต่อสื่อสารโดยเน้นผู้ป่วยเป็นศูนย์กลาง: การวิจัยเชิงทดลองแบบสุ่มชนิดมีกลุ่มควบคุม

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บทคัดย่อ: ความเป็นอิสระแห่งตนและพฤติกรรมการจัดการตนเองเป็นสิ่งสำคัญสำหรับผู้ที่เป็นโรคเรื้อรังที่จำเป็นต้องได้รับการส่งเสริมให้เพิ่มขึ้น การวิจัยเชิงทดลองแบบสุ่มชนิดมีกลุ่มควบคุมนี้เป็นการทดสอบประสิทธิภาพของโปรแกรมการติดต่อสื่อสารโดยเน้นผู้ป่วยเป็นศูนย์กลางในการเพิ่มความเป็นอิสระแห่งตนและพฤติกรรมการจัดการตนเองในผู้สูงอายุไทยโรคความดันโลหิตสูง ผู้เข้าร่วมวิจัยจำนวน 60 คนที่รับบริการในแผนกผู้ป่วยนอกอายุรกรรมของโรงพยาบาลมหาวิทยาลัยแห่งหนึ่งในภาคเหนือของประเทศไทยได้รับการสุ่มอย่างเท่ากันโดยใช้วิธีสุ่มแบบบล็อกเพื่อเป็นกลุ่มทดลอง (n = 30) ที่ได้รับโปรแกรมการติดต่อสื่อสารโดยเน้นผู้ป่วยเป็นศูนย์กลางและกลุ่มควบคุม (n = 30) ที่ได้รับการดูแลโดยใช้การสื่อสารตามปกติเท่านั้น เก็บข้อมูลก่อนเริ่มโปรแกรม หลังโปรแกรมสิ้นสุดทันที และสามเดือนหลังสิ้นสุดโปรแกรมโดยใช้แบบสอบถามความเป็นอิสระส่วนแห่งตนของมาสทริชต์ และแบบสอบถามพฤติกรรมการจัดการตนเอง วิเคราะห์ข้อมูลโดยใช้การทดสอบความแปรปรวนแบบเกี่ยวข้องกันทางเดียวและสองทาง และการเปรียบเทียบความแตกต่างระหว่างตัวแปร 2 ตัวที่เป็นอิสระต่อกัน

ผลการศึกษาพบว่าความเป็นอิสระแห่งตนและพฤติกรรมการจัดการตนเองของผู้เข้าร่วมวิจัยในกลุ่มทดลองหลังจากสิ้นสุดโปรแกรมทันทีและสามเดือนหลังสิ้นสุดโปรแกรมสูงกว่าก่อนได้รับโปรแกรมอย่างมีนัยสำคัญ เมื่อเปรียบเทียบระหว่าง 2 กลุ่มพบว่าความเป็นอิสระแห่งตนและพฤติกรรมการจัดการตนเองของผู้เข้าร่วมวิจัยในกลุ่มทดลองสูงกว่ากลุ่มควบคุมอย่างมีนัยสำคัญทั้งหลังจากโปรแกรมสิ้นสุดทันที และสามเดือนหลังสิ้นสุดโปรแกรม จึงสรุปได้ว่าโปรแกรมการติดต่อสื่อสารโดยเน้นผู้ป่วยเป็นศูนย์กลางมีประสิทธิภาพในการส่งเสริมความเป็นอิสระแห่งตนและพฤติกรรมการจัดการตนเองในผู้สูงอายุโรคความดันโลหิตสูง พยาบาลสามารถใช้โปรแกรมนี้เพื่อส่งเสริมให้ผู้สูงอายุโรคความดันโลหิตสูงมีบทบาทเชิงรุกในการดูแลและจัดการตนเองสำหรับการควบคุมโรคได้อย่างต่อเนื่อง

คำสำคัญ : ความเป็นอิสระแห่งตน โรคความดันโลหิตสูง ผู้สูงอายุ การติดต่อสื่อสารโดยเน้นผู้ป่วยเป็นศูนย์กลาง การวิจัยเชิงทดลองแบบสุ่มชนิดมีกลุ่มควบคุม พฤติกรรมการจัดการตนเอง

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