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บทคัดย่อ

วัตถุประสงค์: เพื่อศึกษาผลของการใช้กลุ่มช่วยเหลือตนเองต่อความวิตกกังวลของผู้สูงอายุที่เจ็บป่วยด้วยโรคเรื้อรัง **วิธีการศึกษา:** การวิจัยกึ่งทดลอง กลุ่มตัวอย่างคือ ผู้ที่มีอายุ 60-79 ปี ทั้งเพศชายและหญิง ได้รับการตรวจวินิจฉัยจากแพทย์ว่าเป็นโรคความดันโลหิตสูงและ/หรือโรคเบาหวานที่มีความรู้สึกเหงาตั้งแต่ระดับปานกลางขึ้นไป ที่มารับบริการที่แผนกผู้ป่วยนอกอายุรกรรม โรงพยาบาลมหาวิทยาลัยบูรพา จังหวัดชลบุรี และมีคุณสมบัติตามเกณฑ์ที่กำหนด จำนวน 24 คน สุ่มตัวอย่างแบบง่ายเข้ากลุ่มทดลอง และกลุ่มควบคุม กลุ่มละ 12 คน กลุ่มทดลองได้รับการเข้าร่วมกลุ่มช่วยเหลือตนเอง ส่วนกลุ่มควบคุมได้รับการพยาบาลตามปกติ เก็บรวบรวมข้อมูลในระยะก่อนการทดลอง ระยะหลังการทดลอง และระยะติดตามผล 2 สัปดาห์ โดยใช้แบบประเมินความเหงาที่มีค่าความเชื่อมั่นเท่ากับ 0.87 วิเคราะห์ข้อมูลด้วยสถิติเชิงพรรณนา และสถิติวิเคราะห์ความแปรปรวนแบบวัดซ้ำประเภทหนึ่งตัวแปรระหว่างกลุ่ม และหนึ่งตัวแปรภายในกลุ่มเปรียบเทียบเชิงพหุคูณแบบรายคู่ตามวิธีของบอนเฟอร์รอนี **ผลการศึกษา:** คะแนนเฉลี่ยความเหงาของผู้สูงอายุในกลุ่มทดลองในระยะหลังการทดลองและระยะติดตามผลน้อยกว่าระยะก่อนการทดลอง และกลุ่มควบคุมอย่างมีนัยสำคัญทางสถิติ ($P < 0.001$) ในระยะติดตามผลกลุ่มทดลองมีคะแนนเฉลี่ยความเหงาไม่แตกต่างจากรยะหลังการทดลอง และพบว่าไม่มีปฏิสัมพันธ์ระหว่างวิธีการทดลองกับระยะเวลาของการทดลองต่อคะแนนเฉลี่ยความเหงา ($P < 0.001$) **สรุป:** กลุ่มช่วยเหลือตนเองสามารถทำให้ผู้สูงอายุมีความรู้สึกเหงาที่ลดลงได้ ดังนั้น พยาบาลและบุคลากรทางสุขภาพที่ปฏิบัติงานทั้งในโรงพยาบาลและชุมชนจึงควรนำแนวทางในการจัดกลุ่มช่วยเหลือตนเองไปประยุกต์เพื่อช่วยลดความวิตกกังวลของผู้สูงอายุที่เจ็บป่วยด้วยโรคเรื้อรัง

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Abstract

Objective: To study the effects of self-help groups on loneliness in elderly people with chronic diseases. **Method:** In this quasi-experimental research, we recruited 24 Thai elderly people whose ages were 60 to 79 years, both men and women, and diagnosed with hypertension and/or diabetes, with medium to high levels of loneliness. The subjects were recruited from the medicine out-patient department in Burapha University hospital, Chonburi. Twelve patients were randomly assigned to the experimental and control groups equally. The sample in the experimental group joined the self-help group session while the control group received routine care. Data were collected from both groups at pre-test, post-test and a two-week follow-up, using the Loneliness Scale with an acceptable reliability (Cronbach's alpha of 0.87). Data were analyzed by using descriptive statistics and a repeated measures analysis of variance with a one between- and one within-subject variable, and Bonferroni's adjustment for multiple comparisons. **Results:** The average score of loneliness in the experimental group was significantly improved over time, and different from the control group ($P < 0.001$) at the post-test and follow-up. The loneliness at follow-up in the experimental group was not significantly different from that at post-test. There were significant interactions between the intervention method and time on the average score of loneliness ($P < 0.001$). **Conclusion:** This self-help groups could decrease loneliness in the elderly with chronic diseases. Nurses and health professionals should implement self-help groups to reduce loneliness among elderly with chronic diseases.

Keywords: elderly, chronic diseases, self-help group, loneliness

Introduction

As one of the major public health problems, chronic diseases in the elderly have been increasing in the past two decades. Among the elderly with chronic diseases, 80% of them have at least one chronic illness.¹ In terms of incidents of health problems, one-third have hypertension, one-fourth are with heart disease, and almost one-tenth have diabetes.² Among the Thai elderly, the most frequently found chronic illnesses have been hypertension (31.7%), followed by diabetes (13.3%), heart disease (7.0%), stroke (2.5%), ischemic cerebrovascular disease (1.6%), and cancer (0.5%).³ For the elderly, chronic diseases are more likely to cause

more detrimental consequences than in younger individuals. With the incurable nature of these illnesses, long-term treatment is needed, which in turn leads to a decrease in the elderly capability of daily activity, living and self-care, an increase in dependence on and help from others, and a greater need for social support. While the elderly with chronic illnesses face more limits in keeping the existing social interaction, seeking new social interaction is more difficult. This ultimately leads to loneliness among the elderly with chronic diseases.⁴

Loneliness in the elderly causes powerlessness, which further leads to avoidance of social activities, social isolation, and decreased self-esteem. The worthlessness among these elderly people further diminishes their well-being. The ultimate mental states attributable to chronic illnesses could be depression and suicidal ideation.⁴ Previous studies show that loneliness is a mental problem frequently found in the elderly. It was found that 60% of Nepalese older adults, 70 years or older, had loneliness.⁵ A study by Bernard (2013) shows that 10% of the elderly, 65 years or older, in North Yorkshire, UK, faced loneliness.⁶ A study in Scandinavia by Kvaal et al.⁷ also shows that 75% of the elderly had loneliness. Among those with loneliness, 54% lived alone and 18% were more likely to be depressed.⁷

In Thailand, a study in community-dwelling elderly in Ratburana district of Bangkok found that they had experienced a high level of loneliness.⁸ This result was found as a part of the intervention study using Buddhism's Yonisomanasikara concept to help alleviate loneliness. Another study in Thailand by Chaweewan Pirochom found that a large number of the elderly (48.1%) faced a moderate level of loneliness.⁹

With widespread chronic illnesses and loneliness among the elderly worldwide, interventions to help cope with loneliness have been tested. Chiang et al found that reminiscence therapy program helped reduce depression and loneliness among the institutionalized elderly at the end of the program and 3-month follow-up.¹⁰ To reach a conclusion on effective interventions to prevent social isolation and loneliness among the elderly, a systematic review found that the most effective promoting interventions were group activity interventions to provide knowledge and support, for instance, support groups, caregiver groups, self-care groups, exercise groups, and counseling groups.¹¹ As suggested by Windle et al., various interventions to help cope with loneliness and social isolation may include relationship improvement, counseling, community leader establishment, and having social support groups.¹²

In Thailand, a study used self-help groups among the elderly aged 60 – 65 years, affiliated with the Bangkok Metropolitan Health Service Office No. 24, in Bangkhaen district.¹³ It was worth noting that the majority of these elderly (75%) had no chronic illnesses. The results showed that at the end of the experiment, the elderly receiving the self-help group intervention had the loneliness level significantly lower than that at the beginning, and lower than that in the control

group receiving only usual care ($P < 0.01$ for both comparisons). Another study in Ratburana district of Bangkok was conducted in those attending the elderly club using Yonisomanasikara-based program.⁸ A large portion of the participants (42%) had chronic illnesses but otherwise healthy; while 38.7% did not have any chronic illnesses. At the end of the program, loneliness level was reduced significantly at a P value of 0.05. Up to date, there have been limited studies on self-help group interventions to help alleviate or cope with loneliness in Thai elderly people with chronic illnesses. The existing studies were also subject to limited generalization to those with multiple chronic diseases, since mainly those with no or very few chronic illnesses were included as study participants.

With the need to determine whether self-help group intervention was effective in helping the elderly with chronic illnesses to cope with loneliness, we conducted this present study. As suggested by Robinson¹⁴, we defined self-help groups as the one that individuals with similar problems join voluntarily, and utilize their own individual experiences to help each other. All activities were carried out by and for the members of the group. To suit the elderly with chronic diseases, these self-help group activities offered ways to exchange information regarding health problems and self-care, and to share thoughts and feelings that bring about loneliness. Such exchange and sharing could facilitate helping each other solve their problems, especially the shared recommendations on problem-solving options. Since given by their own self-help group members with similar problems, such recommendations were more acceptable and more likely to implement. More favorable perceptions and coping mechanisms toward problems were more likely to develop. We expected that the results learned from this study could apply in developing a guideline for setting up a self-help group to help solve and prevent loneliness among the elderly with chronic illnesses in the long run.

In this study, we **hypothesized** that, first, the elderly with chronic diseases participating in the self-help group (the experimental group) had an average loneliness score lower than that of those not participating in the self-help group (control group) after experiment (post-test) and two-week follow-up (hypothesis 1). Second, the experimental group had an average loneliness score at post-test and follow-up lower than that at pre-test (hypothesis 2).

Materials and Methods

This quasi-experimental study used a repeated measures design with two-group comparisons, and no randomization. Study population was Thai elderly people aged 60 – 79 years with chronic illnesses. This population was also encountering various life crises, for instance, retirement, and losses of spouse and close friends, income, and social status.¹⁵ Potential participants were those 587 elderly diagnosed for hypertension and/or diabetes, at the outpatient department of Burapha University hospital, Chonburi, Thailand, in May, 2015. Once categorized by age groups, individuals in early and middle old age had hypertension and diabetes in a considerably high proportion. In addition, based on a survey on 200 community-dwelling elderly in Saensook municipality area where the Burapha University hospital is located, the most frequently found chronic illnesses were hypertension (34.5%) followed by diabetes (14.0%).¹⁶ Study sample was 24 elderly people selected by a simple random sampling. Subjects were eligible according to the inclusion criteria of having chronic disease for six months or longer, being able to communicate, having no dementia, having a moderate level of loneliness, and being willing to participate in the entire study process. A sample size of 12 participants in each of the two groups was determined using G* Power 3 software based on a pre-determined test power of 0.80, an effect size of 0.60, and a type I error (alpha) of 0.05. To prevent information contamination, data collection was done on Wednesday for the control group, and Friday for the experimental group, from May to July, 2015.

Instruments

The instruments included a screening tool, data collection tools, and experiment tools. Details of these instruments are as follows.

1. Screening tool

To screen for the participants' mental health, we used Chula Mental Test (CMT) developed by Suthichai Jitapunkul as a tool to determine cognitive function of Thai elderly.¹⁷ CMT was tested as valid and reliable with high sensitivity (83 - 100%) and specificity (90 – 94%). CMT was further tested for criterion validity in screening for dementia in various populations including the elderly in nursing home, hospital and community. With a possible range of scores of 0 to 19,

cognitive function statuses based on CMT cutoff criteria are “possible cognitive impairment” (≤ 15) and “intact cognitive function” (≥ 15).

2. Data collection tools

We used a demographic information questionnaire and the Elderly Loneliness questionnaire for data collection. The demographic information questionnaire comprised 11 multiple-choice and open-ended questions acquiring the participant's age, gender, religion, education level, marital status, housing, source and adequacy of income, status and duration of chronic illnesses, and social activity participation. In this study, we defined the elderly loneliness with chronic illness as their perceived psychological distresses (negative subjective feelings) which were a result of the mismatch between the elderly's need to have social interaction and the actual interaction they have. As a subjective feeling, this mismatch is also thought of as a lack of social relationship regardless of being alone or around people.

The elderly loneliness was assessed using the University of California at Los Angeles (UCLA) Loneliness Scale developed by Russell, Peplau and Cutrona.¹⁸ This questionnaire was translated and modified into Thai language by Supanee Nanthachai.¹⁹ UCLA Loneliness Scale comprised 15 positive and 5 negative items with a 4-point Likert-type rating response scale ranging from, for example, 1-all the time (all or most), 2-sometimes (some), 3-rarely (few), and 4-never (none), for positive statements, and with an opposite direction for negative statements. With a possible range of the total score of 20 – 80 where higher scores indicate higher levels of loneliness, high (61 – 80), moderate (41 – 60), and low (20 – 40) levels of loneliness are suggested.¹⁹ An example of a positive statement was “I feel that people understand me” with responses of 1-most people, 2-some people, 3-few people, and 4-no one. On the other hand, a negative statement was “Do you feel like being alone?” with responses of 4-all the time, 3-some of the time, 2-rarely, and 1-never. We tested the loneliness questionnaire with 30 individuals comparable to the study sample who attained the out-patient department clinic of Burapha University hospital. The loneliness questionnaire was found to have an acceptable internal consistency reliability with a Cronbach's alpha coefficient of 0.87.

3. Experiment tools

Two tools were used in the experiment, a protocol for self-help group management for elderly with chronic illnesses and a manual for chronic disease management in the elderly. In each of the eight weekly sessions indicated by the protocol, participants were guided on objectives of the session, activities and related theoretical reasons, session time, and the needed materials. The activities were based mainly on the three most predictive factors on the elderly loneliness including family relationships, self-esteem, and perceived health status. This structure of activities was guided by the concept of Perlman and Peplau⁴ of which loneliness is brought about by a lack of social skill, deprived self-esteem, social isolation, illness, poor perceived health status, detrimental change in social life, and a decrease in family relationships.

Each of the eight weekly self-help group sessions lasted an hour to an hour and a half. Activities in each weekly session included group member relationship build-up (week 1), sharing information, knowledge and experience on chronic illnesses (week 2), promoting perceived health status relating to the chronic illnesses (week 3), sharing life experience, proud moments and accomplishments, and exploring own actual behaviors (week 4), realizing the value, self-improvement, and social esteem in the elderly (week 5), sharing experiences regarding family relationships (week 6), promoting family relationships for the elderly (week 7), and summarizing group experiences, and direction/guidance to help the elderly alleviate or cope with loneliness (week 8). For the manual of chronic disease management in the elderly, two diseases, hypertension and diabetes, were included. In each disease, the manual covered definition, causes, signs and symptoms, complications, and self-care. All experiment tools were examined for content validity by five experts consisting of an internal medicine physician, three nursing faculty members two of which specialized in geriatric care and one in group activity, and a nurse specializing in geriatric care and self-help group.

This study was approved by the Ethical Approval Committee, Faculty of Nursing, Burapha University, Thailand (IRB No. 07-03-2558, issue date of April 20, 2015).

Preparation of research assistant

To avoid confounding relating to the research bias, a research assistant, a nurse with a geriatric care experience, was utilized. The research assistant used the loneliness

questionnaire to collect data at pre- and post-test and at follow-up, both in experimental and control groups in a blinded fashion. To prepare the research assistant, the researchers informed and discussed the study objectives, design, and data collection, including questionnaires completion and note-taking. Data from five individuals comparable to the study subjects were taken using all forms and questionnaires, both by the researchers and research assistant, and compared to ensure adequate data collection skill of the assistant.

Study interventions

Experimental group

Before the experiment, the research assistant collected the participant's demographic data and had the participants complete the loneliness questionnaire (pre-test). The research assistant made an appointment for the first session of the self-help group for the participants. During the experiment period, researchers held the weekly eight self-help group sessions. Each session took place at a conference room of Burapha University hospital, and lasted an hour, to an hour and a half. Activities in each session were detailed previously. During the experiment period, participants in the experimental group also received usual care, in addition to the self-help group. After the end of the experiment, the research assistant had the participants complete the loneliness questionnaire (post-test) at the hospital. The participants were given an appointment in the next two weeks for a follow-up home visit. At the home visit by the researcher team, the research assistant had the participants complete the loneliness questionnaire. In addition to the protocol for self-help group management for elderly people with chronic illnesses and the manual for chronic disease management in the elderly given to the participants in the experimental groups at the start of the program, a guide and a diary made by the researchers based on the information shared among all participants along the eight sessions were also given out at the end of the program. They also used this guide and diary to help them remain focused on coping and managing loneliness.

Control group

All procedures applied to the participants in the experimental group were also applicable to their counterparts in the control group, except the eight weekly self-help group sessions. The participants in the control group received only

usual care. The pre-test, post-test and follow-up data collections were done similarly to the experimental group. They also received the manual to help reduce feelings of loneliness for the elderly at the follow-up home visit.

Data analysis

Demographic data was presented as descriptive statistics including frequency and percentage, and tested for statistical difference using Chi-square test. Difference in average loneliness scores between study and the control groups at pre-test was tested using independent t-test. Significance levels for all tests were set at $P < 0.05$. A repeated measure analysis of variance was conducted to examine the differences of loneliness scores between the two groups at pre-test, post-test, and follow-up. Bonferroni's method to adjust for multiple comparisons was used.

Results

Of 12 participants in the experimental group, most were 70 – 79 years old, female (66.7%), Buddhist (100.0%), primary education (50.0%), married (83.3%), residing with spouse (66.7%), earning income from jobs (66.7%), having adequate income (50.0%), having hypertension and diabetes (58.3%), with chronic illnesses for 1 – 10 years (75.0%), and not participating in social activities (75.0%). Demographic profiles of 12 participants in the control group were considerably similar to those in the experimental group. Most of them were in their 70 – 79 years old (75.0%), female (58.3%), Buddhist (100.0%), primary education (41.7%) followed by post graduate degree (33.3%), married (75.0%), residing with spouse (50.0%), earning income from jobs (58.3%), having adequate income (83.3%), having hypertension and diabetes (66.7%), with chronic illnesses for 1 – 10 years (66.7%), and not participating social activities (66.7%). There was no significant statistical difference for each of the demographic characteristics between the two groups.

Difference in loneliness score

After pre-test, the average scores of loneliness in the experimental group decreased at post-test and follow-up (49.92 ± 5.43 , 43.00 ± 2.89 , and 42.58 ± 2.87 , respectively) (Table 1). The average scores in the control group also decreased (50.42 ± 6.92 , 50.50 ± 6.88 , and 50.50 ± 6.30 , respectively). At pre-test, the average loneliness scores in the two groups were not statistically different ($P = 0.35$) (Table 1).

Based on repeated measure ANOVA, overall average score of the loneliness in the experimental group was significantly lower in the control group when scores from three periods were considered simultaneously ($F_{1, 22} = 6.00$, $P = 0.023$) (Table 1). Over time, the average loneliness scores of the two groups considered together simultaneously decreased significantly ($F_{2, 44} = 32.30$, $P < 0.001$). With significant difference between the two groups and significant difference over time of the loneliness scores, the interaction term considering these two aspects of difference was also significant ($F_{2, 44} = 33.84$, $P < 0.001$). This suggests that while loneliness scores in the experimental group decreased, the ones in the control group did not (Table 1).

Table 1 Mean (\pm standard deviation) of loneliness scores in the elderly with chronic diseases in experimental and control groups at pre-test, post-test and follow-up.

Group	Study period	Loneliness score		Statistics and P-value
		Mean	SD	
Experimental group (n = 12)	Pre-test	49.92	5.43	$t = 0.88$, $P = 0.35^*$
	Post-test	43.00	2.89	
	Follow-up	42.58	2.87	
Control group (n = 12)	Pre-test	50.42	6.92	
	Post-test	50.50	6.88	
	Follow-up	50.50	6.30	
Repeated measure ANOVA	Difference in average loneliness scores			
	- between the two groups (between-subjects difference)			$F_{1, 22} = 6.00$, $P = 0.023$
	- between study periods (i.e., pre-test, post-test, follow-up) (within-subjects difference)			$F_{2, 44} = 32.30$, $P < 0.001$
- between study periods (i.e., pre-test, post-test, follow-up) and the two study groups, as an interaction term, (within-subjects difference)			$F_{2, 44} = 33.84$, $P < 0.001$	

* Loneliness scores at pre-test between the two groups, independent t-test

In terms of loneliness score difference between study periods among participants in the experimental group, the score at pre-test differed significantly to those at post-treatment and at follow-up (Table 2). The scores at post-treatment and follow-up were not different.

Table 2 Comparisons of mean (\pm standard error)* of loneliness scores in the elderly with chronic diseases in the experimental group at pre-test, post-test and follow-up.

Study time-points	Mean difference	Standard error	P-value
Pre-test – Post-test	3.41	0.59	0.001
Pre-test – Follow-up	3.62	0.62	0.001
Post-test – Follow-up	0.20	0.16	0.68

* Repeated measure ANOVA with Bonferroni's method to adjust for multiple comparisons.

In addition to quantitative findings, the participants in the experimental group shared their opinions on participating in the self-help group. The opinions are summarized as follows. First, the group offered knowledge and understanding on their own health status and how to self-care. Second, friendship and bonding among the participants were founded. This allowed for understanding each other's problems. Third, confidence was built or augmented upon the participation. Fourth, helping each other with similar problems brought about pride. Fifth, more participation with their own family members as suggested by self-help group participants led to a better family relationship. Sixth, group activities were fun and relaxing.

Discussions and Conclusion

Our results indicated that the elderly with chronic disease, undergoing the eight weekly self-help group sessions had the loneliness scores at the end of the program and follow-up significantly lower than those not participating in the program ($P < 0.05$) as proposed in our first hypothesis. Among those participating in the self-help group, loneliness scores after completion of the program and at follow-up were significantly lower than that before the sessions ($P < 0.001$) as we expected in the second hypothesis.

The content of the self-help group activities for the elderly with chronic illness in this study was guided by Robinson's concept of self-help group suggesting that the effective self-help group should include the elderly with similar experiences and/or problems.¹⁴ In our study, most participants were 70 – 79 years old, which is the age to experience various kinds of life crisis's, including loss of spouse, close friends, social recognition, and income, for instance.¹⁵ If unable to adjust to or cope with these life crisis's, the elderly would feel disappointed. Since they could not correct their past, the elderly would feel worthless and that leads to social isolation, and further develops loneliness. Previous studies show that as people age, they experience more loneliness.²⁰ In addition, most elderly not participating in social activities and having hypertension and diabetes have a poor perceived health status. In other words, as they compare themselves to those without any chronic disease, the elderly with chronic disease perceive their health status as poorer. This poor perceived health status also leads to social isolation and further to loneliness. Also suggested by other studies that perceived

health status is negatively associated with loneliness^{21,22}, the elderly with chronic diseases with proper perceived health status experience less loneliness than those with a poorer one.

Based on various studies, factors most predictive of loneliness in the elderly with chronic disease include family relationship^{9,23,24}, self-worth²³⁻²⁵ and perceived health status.^{4,6,24} The mechanism of these influencing factors on loneliness could be described in relation with the process of self-help groups in our study as follows.

1. In promoting health status perception, we employed sharing information to each other regarding knowledge, experience and self-care of chronic illness. This imparting information of living with chronic illness could help each elderly individual understand more and take better care of themselves. The information shared among individuals with similar problems offered the sense of belongingness to and acceptance of the group. Helping each other solve the problems ultimately brought them a better perceived health status.

2. To promote the elderly self-worth, various approaches were used including reliving each individual past accomplishments, sharing the view of self-worth, and self-development for the elderly. In addition to these approaches, the examples of the elderly with self-worth could help empower the members of the self-help group to achieve the desired outcomes with their realized capabilities, to perceive their own worthiness realistically, to have a positive outlook, and to be satisfied with their own life. We also offered activities that enriched a positive view on each other in the self-help group, which in turn would let each member feel admirable and desirable by the other group members. Hopefully that feeling was extended to the family and society level. All of these approaches were expected to augment self-worth.

3. Family relationships were also enhanced in the self-help group by means of sharing each others family relationships, and problems and how to solve the problems relating to family relationships. The elderly could then realize their worthiness and belonging in their family. The session also offered the elderly ways to adjust themselves to their family members. These approaches could bring about a good family relationship, which was a basis for the well-being of the elderly, as they were receiving physical, mental and social care and support from their family members.

In short, the three mechanisms used in the self-help group described above could alleviate loneliness in the elderly with chronic illness by means of enhancing perceived well-being, self-worth, and social relationships. In the week of the self-help group session, the group members reflected and summarized what they had experienced, evaluated advancement in improving themselves, and evaluated the success of the group. All of these activities were found to help the elderly cope with the problems properly. Once successful as planned in coping with the problems, they were further motivated to apply more of what they had learned from the group to their daily life. The continuous practice could lead to loneliness scores both at the end of the program and follow-up that were lower than the elderly not participating in the program. It was also likely that the beneficial effect of the program was sustained through the two-week follow-up.

Self-help group programs could also offer the elderly tools to face problems, either physical or mental. What the elderly had learned from the sessions brought about behavior or guidance to properly encounter the loneliness. The loneliness was then lessened as evident by the reduced loneliness scores both at the end of the program and follow-up. Our finding was consistent with a study by Sudarat Fongsuwan¹³ on effects of self-help groups on loneliness of the early old age affiliating with the Bangkok Metropolitan Health Service Office 24, Bangkaen district, Bangkok. The study found that at the end, the elderly participating in the self-help group had loneliness levels lower than the control group at a significance level of $P < 0.01$. They also found that those participating in the group had a loneliness level at the end lower than the one before the start of the program ($P < 0.01$). The study by Saowanee Maidee²⁶ on effects of reality group counseling on loneliness in the elderly found that at the end of the program and follow-up, the elderly participating in the program had loneliness levels lower than that before the start ($P < 0.05$). Another study also found that the institutionalized aged persons participating in the reminiscence therapy had levels of depression and loneliness at the end of the program and follow-up lower than those at the start of the program.¹⁰

Our study found that the loneliness score of the elderly participating in the self-help group at the end of the program was not different from that at follow-up. This means that the beneficial behavioral effect of the program in alleviating loneliness lasted up to the two-week follow-up. The loneliness score at the follow-up was only 0.42 marks lower than that at

the end of the program. Sustainability of the self-help group program was evident. This finding was consistent with a study by Samai Prompradit²⁷ on the effects of group counseling by applying the Buddhism's Yonisomanasikara on the elderly's loneliness. The study found that loneliness scores among the elderly participating in the program at the end of the program and follow-up were not different. This indicates that loneliness-alleviating effects of the program were sustained.

As suggested, self-help group programs offer a sustainable benefit in reducing loneliness among the elderly with chronic illness, the program should be further tested to confirm its benefits in practice and research as follows. In nursing practice, to help the elderly with chronic disease better manage their treatment and lifestyles, loneliness, if suspected, should be detected in a timely fashion, and handled properly. Those with loneliness should be encouraged to participate in the self-help group program. The self-help program should comprise approaches to promote family relationships, self-worth, and perceived health status. These three components would lead the elderly to find better ways to face problems, physically and mentally. They could achieve ways to cope with loneliness properly, and finally alleviate loneliness. The elderly with hypertension and/or diabetes could benefit from the program. For research community, the opportunity for further research on the issue is limitless. Since our study limited subjects to only the elderly with hypertension and/or diabetes who were receiving care at the Burapha University hospital, it is needed to generalize to a wider Thai elderly population. Therefore, further studies to test the benefits of the self-help group program should be done in a wider range of illnesses, geographic area, and cultural and lifestyle context. With another limitation of the study that the study duration was only 10 weeks and the changes in loneliness were measured only 2 times, at the end of the program and two-week follow-up, further studies could extend the study duration and have more time-points for follow-up measurements, to further test the program sustainability.

Conclusion

The elderly with chronic disease participating in the self-help group program with eight weekly sessions had loneliness scores at the end of the program and follow-up significantly lower than those not participating in the program. In those participating the program, the scores at the end of the program

and follow-up were significantly lower than that at the beginning. The self-help group program should be encouraged in nursing practice to further confirm its effectiveness.

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Editorial note

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