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หทัยรัตน์ แสงจันทร์¹
สุจิตรา เทียนสวัสดิ์²
สุสัณหา ยิ้มแย้ม³
ทิพาพร วงศ์หงษ์กุล⁴

The development of a culturally sensitive educational programme to increase the perception, self-efficacy, and practice of Thai Moslem women regarding breast self-examination (BSE)

Sangchan H, Tiansawad S, Yimyam S, Wonghongkul T.

Department of Surgical Nursing, Faculty of Nursing,

Prince of Songkla University, Hat Yai, Songkhla, 90112, Thailand

Department of Obstetrical and Gynecological Nursing, Faculty of Nursing,

Chiang Mai University, Chiangmai, 50200, Thailand

E-mail: hathairat.s@psu.ac.th

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¹RN., M.N.S. (Adult Nursing), Ph.D. Candidate at the Faculty of Nursing, Chiang Mai University, 50200, Thailand

Instructor, Department of Surgical Nursing, Faculty of Nursing, Prince of Songkla University, Hat Yai, Songkhla, 90112, Thailand

²RN., D.S.N., Assist. Prof. ³RN., Ph.D., Assoc. Prof., Department of Obstetrical and Gynecological Nursing

⁴RN., Ph.D., Assist. Prof., Department of Medical Nursing, Faculty of Nursing, Chiang Mai University, Chiangmai, 50200, Thailand

รับต้นฉบับวันที่ 25 มกราคม 2550 รับลงตีพิมพ์วันที่ 4 เมษายน 2550

Abstract:

This action research using technical-collaborative approach was applied to develop a culturally sensitive educational programme to increase the perception, self-efficacy, and practice of Thai Moslem women regarding breast self-examination (BSE). Three phases of research process including rapid assessment, programme development and programme evaluation were conducted among three groups of participants. The groups included two primary health care providers, sixteen Moslem village health volunteers, and 165 Moslem women.

The rapid assessment revealed information in existing BSE promotion campaign, and BSE practice and issues related to BSE practice among Thai Moslem women. These were concerned in the programme development phase. Three essential programme components became apparent: 1) the health messenger, who gives BSE information to the villagers, should be a Thai Moslem woman, accepted by the villagers as being knowledgeable and skilful on BSE, and with the ability to manage small group activities; 2) BSE information should be culturally appropriate; and 3) BSE training through motivation and appropriate activities.

The programme was implemented among Thai Moslem women in the village. The results showed statistically significant differences between pre- and post-test findings for the perceived benefits of BSE ($p < .05$), perceived barriers of doing BSE ($p < .001$), BSE self-efficacy ($p < .001$), BSE proficiency ($p < .001$), and BSE practice ($p < .001$). The BSE practice among Thai Moslem women rose from 18.4% to 92.0%. This research exemplifies the need for development and implementation of a culturally sensitive educational programme for delivering preventive health information to Thai Moslem women and could guide nurses in working with any culturally diverse population.

Key words: culturally sensitive educational programme, breast self-examination, Thai Moslem women

บทคัดย่อ:

การวิจัยครั้งนี้เป็นการวิจัยเชิงปฏิบัติการแบบความร่วมมือเชิงวิชาการ มีวัตถุประสงค์เพื่อพัฒนาโปรแกรมการสอนที่สอดคล้องกับวัฒนธรรมในการส่งเสริมการรับรู้เกี่ยวกับการตรวจเต้านมด้วยตนเอง การรับรู้สมรรถนะแห่งตน และการปฏิบัติสำหรับสตรีไทยมุสลิม ประกอบด้วยการศึกษา 3 ระยะ ได้แก่ ระยะประเมินสถานการณ์ ระยะพัฒนาโปรแกรม และระยะประเมินผลโปรแกรม ผู้เข้าร่วมวิจัย ประกอบด้วย เจ้าหน้าที่สาธารณสุขประจำสถานีอนามัย 2 คน อาสาสมัครสาธารณสุขประจำหมู่บ้านซึ่งเป็นไทยมุสลิม 16 คน และสตรีไทยมุสลิมจำนวน 165 คน

ผลการศึกษาในระยะประเมินสถานการณ์แสดงให้เห็นถึงข้อจำกัดของกลวิธีการส่งเสริมการตรวจเต้านมด้วยตนเองที่มีอยู่ การปฏิบัติการตรวจเต้านมด้วยตนเองและประเด็นบริบทที่เกี่ยวข้องกับการปฏิบัติการตรวจเต้านมด้วยตนเองของสตรีไทยมุสลิม ซึ่งเป็นข้อมูลพื้นฐานสำคัญที่ต้องตระหนักถึงในการพัฒนาโปรแกรม องค์ประกอบของโปรแกรมที่จำเป็นได้แก่ 1) ผู้สื่อข่าวด้านสุขภาพควรเป็นสตรีไทยมุสลิมในท้องถิ่นที่ได้รับการยอมรับว่ามีความรู้เกี่ยวกับการตรวจเต้านมด้วยตนเอง และมีความสามารถในการสนทนากลุ่มย่อย 2) ข่าวสารสุขภาพเกี่ยวกับการตรวจเต้านมด้วยตนเองที่มีเนื้อหาสอดคล้องกับการปฏิบัติตามหลักศาสนาอิสลาม และสอดคล้องกับวัฒนธรรมของสตรีไทยมุสลิม และ 3) กลวิธีการส่งข่าวสารแก่สตรีไทยมุสลิม ควรมีการผสมผสานระหว่างการสนทนาเชิงใจและการฝึกปฏิบัติการตรวจเต้านมด้วยตนเอง

ผลการนำโปรแกรมดังกล่าวไปทดลองใช้กับสตรีไทยมุสลิม พบว่า การรับรู้ประโยชน์ของการตรวจเต้านมด้วยตนเอง การรับรู้สมรรถนะแห่งตนในการตรวจเต้านมด้วยตนเอง พฤติกรรมการตรวจเต้านม และการปฏิบัติการตรวจเต้านมด้วยตนเองของสตรีไทยมุสลิมเพิ่มขึ้นอย่างมีนัยสำคัญทางสถิติที่ระดับ $p < .05$, $p < .001$, $p < .001$ และ $p < .001$ ตามลำดับ ส่วนการรับรู้อุปสรรคของการตรวจเต้านมด้วยตนเองลดลงอย่างมีนัยสำคัญทางสถิติที่ระดับ $p < .001$ การปฏิบัติการตรวจเต้านมด้วยตนเองเพิ่มขึ้นจากร้อยละ 18.4 เป็นร้อยละ 92.0 การวิจัยครั้งนี้แสดงให้เห็นถึงความจำเป็นในการพัฒนาโปรแกรมการสอนที่สอดคล้องกับวัฒนธรรมในการส่งเสริมสุขภาพสตรีไทยมุสลิม และเป็นแนวทางหนึ่งในการปฏิบัติการพยาบาลในกลุ่มประชากรที่มีความแตกต่างทางวัฒนธรรม

คำสำคัญ: โปรแกรมการสอนที่สอดคล้องกับวัฒนธรรม, การตรวจเต้านมด้วยตนเอง, สตรีไทยมุสลิม

Introduction

Breast cancer is a major health problem among Thai women. During the period 1995–1997, female breast cancer is the second in frequency after cervical cancer. The estimated incidence rate is 17.2 per 100,000. In southern Thailand, the estimated incidence rate is 12.8 per 100,000,¹ and 14.7% of new cancer patients have breast cancer.² Although breast cancer can be cured and patients have a high survival rate if it is detected at an early stage, unfortunately most of the patients are more likely to be diagnosed with breast cancer at the invasive stages of the disease.² According to the American Cancer Society (ACS)³ three methods are recommended for breast cancer screening: mammogram, clinical breast examination (CBE), and breast self-examination (BSE). Although mammography is the most sensitive screening method, findings of many studies have indicated that most masses have been discovered by women themselves.⁴⁻⁵

BSE, unlike other methods, is free, under a woman's control and can be practised by women of any age.⁶ It is also a relatively easy, simple, painless, noninvasive, self-care action, which can be performed privately.⁷⁻¹⁰ Although the effectiveness of BSE is limited by the examiner's skill and depends on the proficiency of the examiner,¹⁰ regular practice of BSE remains a fundamental part of breast cancer screening because if it is performed correctly then it can add value to other screening methods in reducing the number of cases of breast cancer mortality.¹⁰⁻¹² Thailand's national health promotion policy also emphasises public health education and health awareness practices that can be achieved simply and cost-effectively. BSE practice is such a method for all women to detect breast cancer early, and thereby help reduce the number of women that are diagnosed at an advanced stage of the disease.¹³

Although Thai Moslem is a minority group, it contains a significantly large population in Thailand. Previous research reported that only 23% of Thai Moslem women in southern Thailand had performed BSE¹⁴ and the author recommended employing a culturally effective health education programme of BSE conducted in the indigenous languages. The research findings among Moslem women in other countries have

identified many factors related to their BSE practices. They included their perception in relation to breast cancer and BSE,¹⁵ the confidence to carry out BSE,¹⁵ an understanding of what BSE is,¹⁶⁻¹⁹ a belief that it is unnecessary to do BSE,¹⁹ a fear they will find abnormalities,¹⁶ having a personal history of breast problems,^{17, 20} having a family history of breast cancer,^{18, 20} having frequently heard or read about breast tumors and BSE,^{15, 21} and their number of clinic visits per year.¹⁶ Moreover, the findings of qualitative studies have demonstrated that although health promotion and disease prevention are highlighted and encouraged by the *Holy Qu'ran* and the Prophet Mohammed, some Islamic teachings may, however, be a hindrance to performing BSE among Moslem women, especially those Islamic views relating to female modesty and the male control in marriage.²²⁻²⁴

Consequently, promoting a BSE programme for Thai Moslem women requires addressing all the significant factors particularly those relating to Islamic teaching on health^{17, 25} as well as motivation that is consistent with the concept of Motivational Interviewing,²⁶ perceptions about breast cancer and BSE that are consistent with the Health Belief Model (HBM),²⁷ and self-efficacy that is consistent with the concept of the Social Cognitive Theory (SCT).²⁸ All the aforementioned concepts are used in this study as interventions that can help develop the use of BSE.

Moreover, when compared with the general female Thai population the Moslem women in Thailand are singularly different because of their religious beliefs, which affect all aspects of their cultural identity. As a consequence any BSE programme has to be conducted with an awareness of the Moslem faith and it is not appropriate to employ existing Thai women programmes to this group. As a result this study uses action research with a technical-collaborative approach²⁹ so that the Moslem community members could be involved at all the stages of the programme's development.

Purpose of the study

This study aimed to develop an educational programme which was consistent, appropriate and acceptable to Islamic teaching to increase the perception, self-efficacy, and practice of Thai Moslem women regarding breast self-examination (BSE). Evaluation for effectiveness of the programme was in

terms of: an improvement in the perceived susceptibility to breast cancer, the perceived severity of breast cancer, and the perceived benefits of BSE; a reduction in the perceived barriers to performing BSE; and an enhancement of the BSE self-efficacy and BSE practice among Thai Moslem women.

Materials and methods

Action research using a technical-collaborative approach was conducted in a Thai Moslem village in a rural area of southern Thailand. The village had a population of 1,292 made up of 212 families with the majority (85.06%) being Thai Moslems. The village was selected because the village health volunteers (VHVs) showed an interest in health promotion programmes, particularly in women's health. Approval for conducting this study was obtained from the Research Ethics Review Committee, Faculty of Nursing, Chiang Mai University. The researcher was then granted permission from the Public Health Office of Songkhla Province to conduct this study. Next the three groups of people, who were invited to participate in this study, were briefed on the objectives and research process. The groups of participants were: 1) two primary health care providers (PHCPs), who were key informants in the phase of rapid assessment and later played the role of field researchers, 2) 16 Thai Moslem village health volunteers (VHVs), five of whom were key informants in the phase of rapid assessment (all VHVs, however, eventually became involved in the programme development phase), 3) 165 Thai Moslem women who were selected to give information about their current understanding and use of BSE within the village in the phase of rapid assessment. Subsequently, sixty of these Thai Moslem women were involved in the phase of programme development by attending and commenting on the programme implementation. Ultimately 103 of the rest (105 women) attended the final programme, but only 87 Thai Moslem women completed the outcome questionnaires for the programme evaluation.

The research process (see Figure 1) consisted of three phases as follows.

Phase of rapid assessment

The current situation in relation to existing BSE promotion campaigns and operations were collected through observation and informal conversation with the two PHCPs. The issues related to BSE practice among Thai Moslem women were explored through informal conversation with five VHVs. The living pattern and BSE information and practice of 165 Thai Moslem women was examined using the Demographic Background Sheet and BSE practice questionnaire.

Phase of programme development

The programme was developed following the cycle of planning, action and observation, and reflection. In the planning stage, 16 VHVs, 2 PHCPs, and the researcher took part in four group meetings in order to reflect on the programme; the researcher and the PHCPs informally talked with attendees after finishing each group implementation. Each health messenger was invited to self-reflect on her role and on the programme components as well. After finishing the six group activities for programme implementation, all VHVs came to meetings with the researcher and two PHCPs to reflect on the programme. The information was collected via audiotape recorder. According to the conclusions from the programme components, each component was created, and the implementation activities were planned. In the stage of action and observation, the first developed programme was carried to six separate groups of Thai Moslem women (attendances) by six health messengers. Each group included five attendees. The researcher and two PHCPs observed every group implementation and made field notes. According to the conclusion of the reflection, the first developed programme was refined, implemented, and reflected in the later cycle of re-planning, action and observation, and reflection until the participants were satisfied.

Phase of programme evaluation

The final programme was implemented to 103 Thai Moslem women. All attendances were asked to complete three questionnaires before attending the programme and three months later. The BSE Perception Scale for Thai Moslem Women, which had been modified from the Champion's Health Belief Model Scale,²⁷ was used and designed with a 5-Likert scale.

The reliability of the scale was tested using Cronbach's alpha coefficient. The coefficient values were 0.69, 0.78, 0.74, 0.78 for perceived susceptibility to breast cancer, perceived severity of breast cancer, perceived benefits of BSE practice, and perceived barriers to performing BSE, respectively. The Lewis and Sainitzer BSE Self-Efficacy Scale³⁰ was given a prorated score from 0 (cannot do at all) through 50 (moderately

certain can do) to 100 (certain can do). The Cronbach's alpha coefficient value was 0.94. The BSE Practice Questionnaire made up of four closed-ended multiple choice items of time and frequency of BSE practice and 17 dichotomous checklist items concerning BSE proficiency. The interrater reliability of this questionnaire using a percentage agreement was indicated as 100.

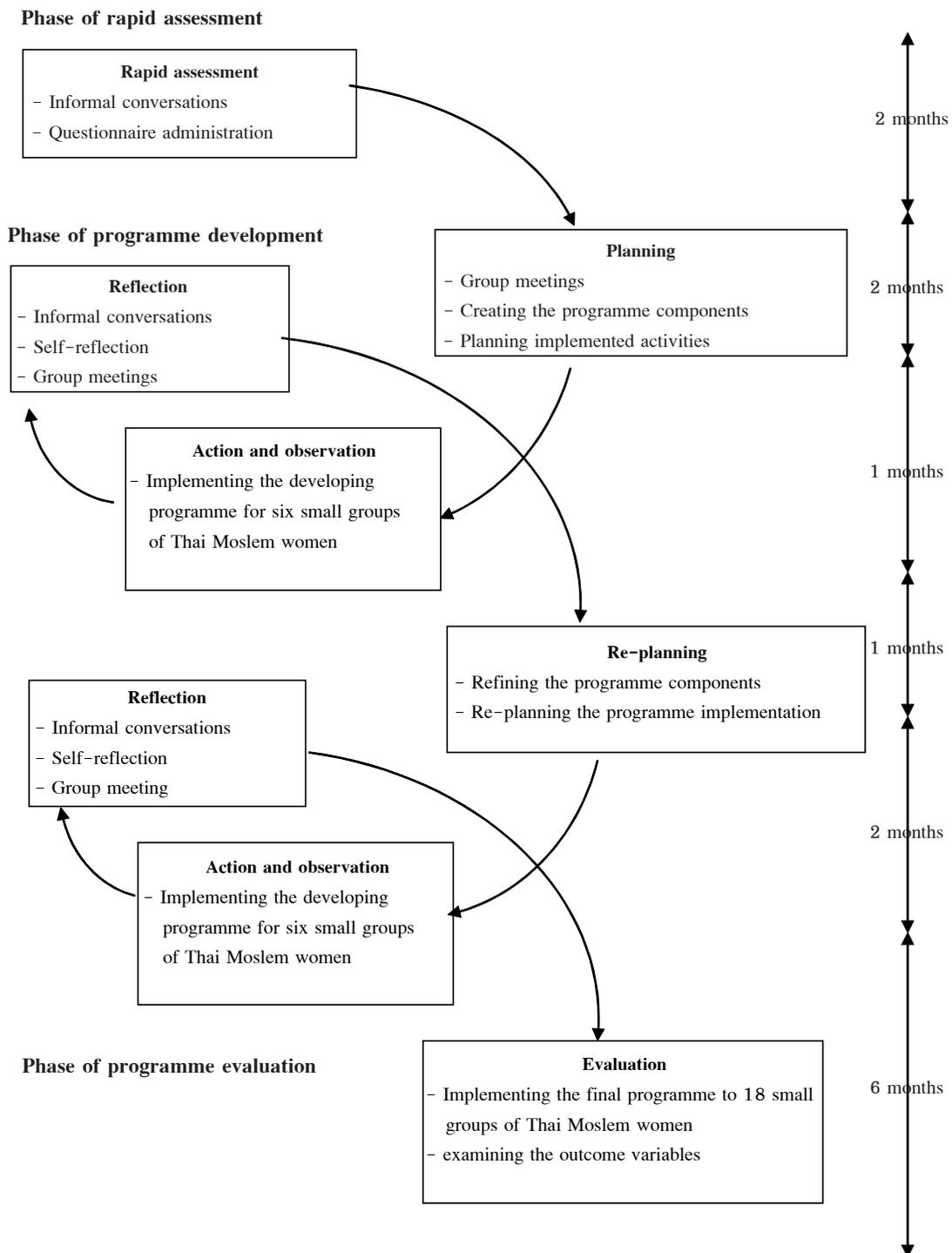


Figure 1 The research process

Results

The findings of rapid assessment showed that even though the PHCPs at the health station distributed the pamphlet on BSE to the Thai Moslem women in the selected village following the promoting of the BSE practice policy, the majority (85.5%) claimed that they did not receive the information. The research indicated only a few women (7.9%) had occasionally performed BSE. There were two significant issues related to BSE practice among Thai Moslem women emerged. The first was issues on Islamic teaching. Although BSE practice related to health practice in Islamic teaching, Thai Moslem women claimed that they unsure if it offended modesty manner, or not. They required the approval of the religious leader of the village in order to confirm that it was appropriate to perform. The second issue was background and living patterns of Thai Moslem women. They included literacy and language, role, responsibilities, and time allocation. All of these affected their access to, and the accessibility of, BSE information and BSE practice.

Three programme components became apparent from the phase of programme development. The first and essential component was the health messengers who delivered the BSE information to Thai Moslem women. They should be the local persons who have the following characteristics: 1) being a

Thai Moslem woman, 2) being accepted by the villagers as being knowledgeable and skilful in BSE, and 3) having the ability to manage small group activities.

The second component was comprised of the BSE information. The essential aspect of this information was linking with Islamic teaching related to health practices and living patterns of Thai Moslem women. The appropriate educational materials for transmitting the information included: 1) a motivational conversation script containing the appropriate BSE information, which was precise, concise, understandable for the layperson, and in the southern dialect; 2) a BSE booklet containing the main idea of BSE, and illustrations of BSE procedures; 3) a BSE pamphlet containing knowledge about breast cancer and BSE practice, which was precise, concise, in visible letters, and uncomplicated, and, importantly, had illustrations of BSE procedures inside; and 4) a model of breast with lumps that is similar to human reality, small size and portable.

The last component, the BSE training activities, should be concerned with choosing a convenient and private place, an appropriate time, and the ability to carry out informal small group conversation using understandable language for local persons. Further, these implementation activities should integrate motivational conversation and BSE skill training.

Table 1 Comparison of the mean scores of BSE variables (N=87)

BSE variables	Possible range	Before		After		t
		\bar{X}	SD	\bar{X}	SD	
BSE perception						
Perceived susceptibility	6-30	17.44	4.26	16.97	4.29	0.789
Perceived severity	10-50	39.89	6.26	41.16	4.78	-1.67
Perceived benefits	8-40	32.22	4.86	33.78	3.85	-2.55*
Perceived barriers	17-85	45.86	11.97	38.13	8.53	5.81**
BSE self-Efficacy	1-1,200	510.46	272.53	712.41	208.25	-5.72**
BSE proficiency	0-17	1.84	4.56	11.39	4.13	-15.20**

*P<.05, **P<.001

To examine the effectiveness of the programme, a trial was carried out with 103 Thai Moslem women in the village. However, only 87 attendants completed both pre- and post-test. Table 1 shows the data analysis. It can be seen that three months after attending the programme, the mean scores of the perceived severity of breast cancer, the perceived benefits of BSE practice, the BSE self-efficacy, and the BSE proficiency were increased, whereas the mean score of the perceived susceptibility to breast cancer, and perceived barriers to performing BSE were decreased. A comparison of the mean scores showed statistically significant differences between pre- and post-test findings for the perceived benefits of BSE ($p < .05$), the perceived barriers to doing BSE ($p < .001$), the BSE self-efficacy ($p < .001$), and the BSE proficiency ($p < .001$).

The percentage of women who did BSE increased from 18.4% to 92.0% of which 83.7% of those performed BSE either monthly or more than once a month. The percentage of women who practised BSE three months after attending the programme was significantly different from before ($p < .001$).

Discussion

The action research process was an essential strategy for developing the programme. The participants had a chance to express their opinions and feelings towards the BSE practice. The VHV's from the start were seen as essential contributors to the development of the programme and encouraged to recognise the importance for women's health of performing BSE as well as ensuring that it did not offend the Islamic culture. The action process was seen to affect their learning through having a sense of ownership in relation to the programme, which eventually turned into a commitment to follow the programme, and motivated other village women for BSE. The potential of action research to promote the health education in this study was similar to previous studies made in other countries³¹⁻³² and it was consistent with the model found in Choksamothong's study³³ for promoting BSE among menopausal women attending a clinic. However, unlike our study that particular programme also integrated advice from a physician and the presentation of pictures showing the severity of the last stage of breast cancer.

The programme developed in the current study focused on cultural issues, such as beliefs, living patterns, local personnel and language for the programme implementation. From the research it became apparent that BSE practice was motivated by the participants' personal beliefs, the Islamic teaching in relation to health, and the BSE practice being performed in harmony with their religious practices. Consequently, the perception of the attendances on BSE could be attributed in part to the motivational conversation's concern with the women's beliefs in taking care of the breast as a part of the body, which is wholly consistent with Islamic teaching in relation to health, resulting in a decrease in the cultural barriers. Additionally, two attendees found lumps in their breasts during BSE practice sessions, affecting the whole group's perceived benefits of practising BSE. The BSE skill training sessions provided an opportunity for the women to practise BSE on the tactile breast model and also on their own breasts. At these sessions the attendees were invited to talk openly about their obstacles to doing BSE and to share ways to solve their problems. These activities were seen to lead to a decrease in the barriers to performing BSE.

Three months after attending the programme, the majority of attendees did not find any abnormalities in their breasts, which might have decreased their belief in their susceptibility to breast cancer. Most of the participants were afraid of breast cancer as a threatening illness that leads to death. As a result the mean score of the understanding by the women for the severity of breast cancer was high and also increased after attending the programme.

The mean score relating to the BSE self-efficacy increased and was significantly higher than before attending the programme. This can possibly be attributed to the programme activities, which focused on BSE skill training that was able to provide three kinds of experience: doing the activity by return demonstration with their own breasts and with the breast model with lumps, visual learning by seeing others' succeed, and social persuasion through motivational conversation with the health messengers. This is consistent with the self-efficacy concept in the Social Cognitive theory.²⁸ The percentage of women who did BSE increased from 18.4% to 92.0% of which 83.7% of those performed BSE

either monthly or more than once a month. These findings are consistent with the HBM that indicates women who believe they are personally susceptible to breast cancer and that breast cancer is a serious disease are more likely to perform BSE. Women who can see more benefits from BSE and fewer barriers to doing BSE would be more likely to perform BSE²⁷, which is similar with the findings of previous studies in various countries.³²⁻³⁶ Moreover, an increase in the self-efficacy leads to an increase in the BSE practice. These findings were also consistent with previous studies in various countries.³⁷⁻³⁹

However, the limitations of this study are related to following the BSE practice of the attendances over a short time period (3 months). Therefore, the sustainability of their practice was not evaluated. The BSE practice is performed on a monthly basis so long-term follow up to determine the long-term benefit of the programme is recommended.

Implication and recommendation

The findings could have implications for nursing. Health care providers working in Thai Moslem communities could apply this educational programme to the enhancement of BSE practice among Thai Moslem women in other settings. The process of action research using technical collaborative approach could be adapted to developing an educational programme for delivering preventive health information to Thai Moslem women or other populations. Further researches are recommended such as to examine long-term effectiveness in order to evaluate the sustainability of the BSE practice among Thai Moslem women, to conduct a quasi-experiment or randomized controlled trial approach to provide stronger evidence for the effectiveness of the programme. Furthermore, replication of the action research process in other settings that include Thai Moslems or other vulnerable populations should be considered.

Conclusion

In conclusion, the action research process was an essential strategy for developing the culturally sensitive educational programme that was appropriate to enhance BSE practice among Thai Moslem women. However, long-term follow-up should be conducted to confirm sustainability of

the programme. This research could guide nurses for delivering preventive health information to any culturally diverse population.

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