

CHAPTER IV

DISCUSSION AND CONCLUSION

4.1 Discussion

The main objective of the project is to develop preventive behavior against complications of hypertension patients through an innovative health education program. The health education program focuses on participatory learning process. That extends to include nurses' support and supervision at home. From hypertension clinic, Yasothon Hospital, Yasothon Province, during October 1998 - February 2000. The totals of 31 samples were selected and assigned to the study group. The project evaluation uses pre and post with self-control and compared the study group with the control group. The control group data were collected at the hypertension clinic, Khumkhuankeaw Hospital, Yasothon Province. The control group contained equivalent number of 31 hypertension patients who had similar socioeconomic characteristics and similar basic selection criteria as those of the study group. The control group only received routine health education by the hospital staff. The discussion of the results is as follows:

Baseline

1. Basic characteristics of the study and the control populations were similar as a result of recruitment using the same selection criteria.
2. The start of the project, the average knowledge scores about essential hypertension disease and self-care behaviour of both groups were at moderate level and there was no statistically significant difference between them. It may be seen that prior to the training program both groups of patients had similar knowledge level about hypertension and self care behaviour. Both groups were previous patients of the hypertension clinic at the Hospital, every patient, therefore, had similar experience in health education from the health care staff and similar medical treatment experience at the clinic. The determined population criteria as well as pairing between opposite genders led to a similar distribution of population characteristics and illness experiences among members of the study and the control groups.

Training program by participatory learning process

The evaluation of the project outcome showed that participatory learning was effective. The learning process was interesting, entertaining as well as educative as participatory learning approach was learning from patients' previous experience and the study content was of their interest. Moreover, there were interactive activities throughout the session and was not dominated solely by a lecture. The patients were required to discuss their opinions and to practically experiment their conceptual ideas to become tangible. This is correspondent to the statement of adult learning principle,

which stated that “Learning is more effective when it builds on their experience and when they are aware” (JHPIEGO corporation, 1997:1-4).

In addition, the majorities of the study group were elderly with an education background at primary school level, writing and reading were, therefore, their limitations of learning. The patients were unable to practice every exercise techniques of Aunt Boonmee’s model, which required the use of a wood stick mainly due to arthritis symptoms, for example, in sit-up technique. Due to personal differences, some patients by nature did not like to speak or express their opinions while some patients were found to dominate or speak only about their story. These situations led to some difficulty in the learning process of the group.

Supervision and support by home visit

There were successfully 93 home visits of 31 hypertension patients according to the schedule. The duration of home visits to some patients was longer than 1 month as the responsible nurse was on other urgent duties during the planned time and date. As previously noted, the project was organized under the collaboration of three sectors within the Yasothon municipal area. Those were Yasothon Hospital, Yasothon Municipal Sector and the public health center of Muang Yasothon Sub-district. The particular nursing staff was recruited from the only nurse of Yasothon municipal sector, who had heavy load of responsibilities within the organization. Besides, this sector is working under the Ministry of Interior, which commonly emphasizes on administrative aspects rather than public health aspects. This led to her deviated schedule of home visits from the original plan.

According to the observation of self-care behaviour of the patients during home visit sessions; it was found that some physical and emotional health problems of the majorities of the patients were such as aching of various body parts. This might be due to aging deterioration of physical organs as most patients were the elderly. Another possible cause of pain might be due to incorrect body movement. The self-care behaviour during illness included intake of self-purchased medicines and monitoring the symptoms prior to seeing a doctor. However, the patients would not take herbal or traditional medicines, possibly due to previous perception of self-care routines from a healthcare staff. The general information gained from the home visit program corresponded to the study of Supatra Srivanichakan (1999), which found that majorities of the populations (45.5%) in the city would take self-purchased medicines when having minor illness.

Dietary intake, exercise and stress management were found to be appropriately practiced according to their individual health conditions. However, some cases had not changed their lifestyle routines possibly due to personal reasons, habit, personal belief, no practice motivation and family environmental condition as well as social and cultural environmental conditions.

Post intervention

1. Knowledge of essential hypertension

After the 2-day intensive training program and the home visits, the knowledge level about hypertension disease of the study group increased nearly twofold, comparing with the baseline data and the knowledge level remained at this level if not

receiving further intervention. It may be explained that the intervention program could improve the patients' knowledge about essential hypertension disease and it remained within the patients even without further intervention, especially improvement of knowledge of casual factors, intake of anti-hypertensive drugs and benefits of exercise activities.

The control group, which only participated in routine health education program, was found to have improved their knowledge level, however, with lesser extent than the study group, especially in improvement of knowledge about intake of anti-hypertensive medicines (see also Table 3.4 and 3.5).

There was an increase in knowledge level about hypertension disease of the study group at post-intervention from the baseline value and significantly higher than that of the control group by statistical comparison ($P < 0.001$). These results supported the purpose of the study, which stated that: participatory learning has an effect on knowledge level about hypertension of the patients. This corresponded to the study of Duangkamon Channimitr (1995:116), which found that after the health education program by participatory learning, the hypertension patients and their relatives had significantly better knowledge about hypertension than at pre-intervention. It might be said that participatory learning could enhance maximum learning process and the patients were able to remember the training materials once being reminded from the home visit nurse.

2. Self care behaviour

After two day intensive training and home visit program, self-care behaviour of the study group were found to be better than those at pre intervention (baseline), however, the self-care behaviour were lessen when evaluated at 3 month after the third home visit. This indicated that the intervention programs helped to improve self-care behaviour of the patients, especially with dietary, exercise and anti-hypertensive drug intake; however, these behaviour were lessen without retraining program. The lessen behaviour included exercise and intake of fruits with high sugar and fat content. The patients were no longer supervised and encouraged by home visit nurses and during this period (Dec-Jan) was a season of sweet tamarind, which is favorite among elderly people in the Northeast. In addition, the study group was found to lessen their practice of meditation and muscular relaxation, possibly due to the complication of the techniques, while they could do other entertaining activities and shared their problems as means of stress relaxation.

The control group, received routine health education program, was found to improve their self-care behaviour, however, the control group exercised less and not significantly improved during the study period. This might be because exercise training or technique demonstration was not included in the routine health education program, which rather emphasized on anti-hypertensive drug intake and medical appointment.

After the intervention program, self-care behaviour of the study group was significantly better than those at baseline and those of the control group with p-value <0.001. As a result of the participatory learning process and home visits, the study

group improved their self-care behaviour better than the routine education program, corresponding to the objectives of this project. However, the knowledge and behaviour of the participants declined when the home visits discontinued. This may be due to the fact that although participatory learning process was effective in increasing the subjects' learning capacity, home visits were instrumental in enhancing the subjects retaining the knowledge.

These findings were similar to the study's results of Bussabong Joathonon (1999:44-47), which stated that behaviour of the study group in Mosquito's disease prevention were significantly better than that of the control group and better at post intervention and at 1 month post intervention. Moreover, these findings were consistent with that of Wood, S., Sawyer, R., Simpson, Hebert M. (1998) who wrote a book on Participatory Hygiene and Sanitation Transformation (PHAST). The step-by-step guide described how the methodology is developed at workshop, how approach can be adopted. The steps in the guide seek to help the communities improve hygiene behaviour, prevention diarrhea diseases and encourage community management of water and sanitation and health status. Kim, Simon; Parks, B. Sue. (1969) who studied the effects of participatory learning program in middle and high school civic education found that according to the Center for Civic Education, assessment in civic education often focuses too much on student's knowledge and understanding of basic facts and concepts than on their ability to evaluate, take and defend position on political and civic issue, discuss and communicate their views on this issues, and actively participate in political and civic activities. Well-designed programs that include student participation can enhance civic education in middle and high schools.

4.2 Conclusion

The conclusion of the study is outlined as follows:

1. After the training program by participatory learning and the home visit sessions the knowledge about hypertension and self-care behaviour of the patients were significantly better than at before participation in the project by statistical comparison ($P < 0.001$).
2. The patients participated in the training program by participatory learning process and home visit program were found to have significantly better knowledge about hypertension and better self care behaviour than the patients, who were educated with routine health education ($P < 0.001$).
3. The important results were as follows:
 - This project could help raise hypertension patients' self-care behaviour especially with dietary and exercise.
 - Home visit program could assure better self-care behaviour of the patients.
4. Health team could adopt participatory learning method in other health education programs.

Shortcomings of this study

1. The target subjects were hypertension patients receiving medical treatment at the Hospital and were already interested in self-care activities so this might enhance the positive result of the training program by participatory learning approach and the encouragement from the home visit program.

Therefore, the study should be conducted on the group of patients who do not received medical treatment at the Hospital.

2. There might be some bias in selection of the control group as the target control group from Yasothon Hospital was not available due to other consultant programs organized during the same period of time.
3. The short study duration might be insufficient to measure the effect of the project on related disease conditions or changes in high blood pressure level.