## DEVELOPMENTOF SELF-HEALTH CARE MODEL FOR PRE-RETIREMENT TEACHERS

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Abstract: This study aimed at developing and determining the effects of self-health care model for preretirement teachers. The study sample consisted of teachers aged 45 to 59 years old in Bangkok Metropolis who were teaching at Nipat Wittaya School as an experiment group and Amnuaysilpa Thonburi School as a control group. The sample was recruited by means of multistage random sampling. The instruments used to collect data included the health status record form, the weekly activity assessment form, the satisfaction with activity assessment form, and the self-health care assessment form. As for data analysis, scores from the health status record form and the self-health care assessment form were analyzed in terms of mean, standard deviation, t-test and Repeated Measure ANOVA. Finally, LSD was also employed to test the differences of mean scores between each pair, with the statistical significance level set at .05. The study findings were as follows:

1. The development of self-health care model for pre-retirement teachers consisted of three main activities namely food, exercise, and rest each of which was further divided into items totaling 12 activities for teachers in the experiment group. Content validity was determined, and the IOC was equal to 0.71, hence confirming that the model was effective and could be applied for use.

2. The experiment revealed that the self-health care model for pre-retirement teachers; 1) The mean scores of health status of the experimental group before and after the experiment showed no statistical significances at the .05 level, with the mean scores of health status of the experiment group tended to improve a little bit; 2) The mean scores of health status of both groups showed no statistical significances at the .05 level, with the mean scores of health status of the experimental group tended to be higher than that of control group; 3) The mean scores of self-health care concerning practices of the experimental group before and after the experiment showed no statistical significances at the .05 level, but the mean scores in the experiment group obtained after the experiment were higher than that was obtained before the experiment a little bit which meant that thepre-retirement teachers had better health care; 4) The mean scores of self-health care concerning practices of both group showed no statistical significances at the .05 level, but the mean scores of the experimental group were higher than the control group; 5) The experiment group who participated in self-health care model in the developed self-health care model showed a very good level.

**Keywords:** model, a self-health care model for preretirement teachers, self-care behavior, health status, preretirement teachers

## Introduction

Teachers are educational personnel who are highly important for developing individuals to have good health requires education. Teachers are significantly knowledge able providers of the country. In order to promote growth and development of the citizens of the country, from childhood to adulthood, to have good physical, mental, social, and intellectual health, teachers need to teach and become good role models for their students as well as community members, to ensure that they will become capable, moral, and happy individuals. As such, it can be stated that teachers have an important role that is different from the roles of the general public. That is, teachers are responsible for developing human resources of the country. For this reason, health care is vital for teachers. If teachers are in poor health, they will not be able to be a good role model for their students for both physical and mental health. In addition, teachers have a closed relationship with both students and their teachers. Therefore, health problems of children have effects on teachers, and teachers' health problems similarly have effects on children (Somprayoon, 1981). If teachers have poor health, they will not be able to carry out their instruction to the best of their potential, so children will not receive most effective possible instructions, and this can affect human resource development of the country. As such, good health of teachers means good quality of life of both children and parents, which is seen as the most valuable human resource development of the country. This is because promotion of individuals' physical and mental health is associated with social and environmental well-being, hence a full-fledged health development system with an emphasis on preventive health care and physical and mental rehabilitation to strengthen human resources of the country with reduction in and cessation of health risk behaviors (National Economic and Social Development Plan, 2007).

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Learning based on self-efficacy and self-regulation an important concept of the social cognitive theory because self-efficacy is the means that enables individuals to change their existing behaviors to achieve targeted behaviors by themselves (Bandura, 1977). It also promotes individual's morale to adopt self-care behavior to ensure skills necessary to achieve the desired goal of health care. Furthermore, self-regulation is a process that individuals use to plan for, control, and oversee their own behaviors with an aim to change their current behaviors to adopt the desired behaviors (Bandura, 1994).

In general, a self-health care model that is universally practiced involves food, exercise, and rest, which is called a balanced health principle (Somprayoon, 1973). This is because these activities can be practiced to benefit oneself in daily living. For teachers, in addition to their own health benefits, they can also apply and transfer their knowledge and experience with the self-health care model to students and community members. These activities can be practiced by teachers any time when they have free time because at school there are a gymnasium and sports field, auditorium, and venue that are safe and appropriate for the activities. For this reason, these three activities should be included when selecting a self-health care model for teachers (Wattanaburanon, 2013) because the model is deemed appropriate for promotion of health, particularly for pre-retirement teachers.

Besides, a review of literature has shown that there was no study conducted to investigate a self-health care model for teachers. Thus, the researcher was interested in developing an appropriate self-health care model for teachers to benefit the teachers, students and community. It was believed that the model will not only benefit the pre-retirement teachers' health but also help enhance their work efficiency, which in turn, will promote effective human resources development of the country. Furthermore, the model will help decrease medical expenses of the teachers, both before and after their retirement. It is also worth noting that the self-health care model is a practice that is in compliance with the recommendations of the World Health Organization (WHO) which encourage all schools in member countries to revise their health promotion program, increasing three components of health promotion to eight. Promotion of teachers' health is one of the additional components (Somprayoon and Wattanaburanon, 2005). For these reasons, development of a self-health care model for preretirement teachers should be of considerable significance for national development. Therefore, the researcher was interested in exploring the effects of a self-health care model for pre-retirement teachers.

## The Purposes of the Research

The purposes of the research are:

1. To develop a self-health care model for preretirement teachers

2. To determine the effectiveness of the self-health care model for pre-retirement teachers

### Methodology

## Population

The population of the study consisted of elementary and secondary schools teachers aged between 45 and 59 in Bangkok Metropolis.

### Sample

The study sample was composed of 38 teachers aged 45 to 59 years who did not have any contagious diseases or chronic illnesses and were also willing to participate in the study. The sample was recruited by means of multistage random sampling.

# The research process could be divided into two phases as follows:

**Phase 1:** Development of a self-health care model for preretirement teachers based on baseline data regarding to self-health care and the concepts of self-efficacy and selfregulation

1. Studying baseline data regarding to self-health care of pre-retirement teachers

2. Studying concepts and theories related to selfhealth care and concepts of self-efficacy and selfregulation to develop a self-health care model for preretirement teachers

3. Constructing and developing activities in three aspects of self-health care-food, exercise, and rest, totaling 12 activities

4. Validating the developed self-health care model for pre-retirement teachers by a panel of seven experts and teachers who were not the subjects of the study

5. Revising and improving the self-health care model for pre-retirement teachers

6. Implementing the developed self-health care model for pre-retirement teachers

**Phase 2:** Evaluation of the effectiveness of the self-health care model for pre-retirement teachers

1. Developing a total of seven instruments used in data collection including the self-health care manual, the self-health care plan, the self-health care assessment form, the satisfaction with activity assessment form, the weekly activity assessment form, the food, exercise, and rest record form, and the health status record form

2. Validating the data collection instruments in terms of content validity and the index of item objective congruence (IOC)

3. Implementing the self-health care model for preretirement teachers with the teachers in the experimental group at the Nipatwittaya one hour a day, two days a week, for six weeks, with each session covering three activities and lasting one hour, with the total data collection period of ten weeks

4. Analyzing data

5. Concluding and discussion research findings

# Findings

The development of the self-health care model for preretirement teachers consisted of activities in three main aspects, or balanced health, including food, exercise, and rest; each of which was further divided into different activities totaling 12 activities.

As regards the effects of the self-health care model for pre-retirement teachers, it was found that:

- The mean scores of health status of the experimental group obtained before and after the experiment showed no statistical significances differences at the .05 level, but the mean scores obtained after the experiment slightly increased.
- The mean scores of health status of the subjects in the experimental group and the control group obtained after the experiment showed no statistical significances differences at the .05 level, but the mean scores of the experimental group increased more than that of the control group;
- The mean scores of self-health care practices of the experimental group obtained before and after the experiment showed no statistical significances differences at the.05 level, but the mean scores obtained after the experiment were slightly higher than that obtained before the experiment, thus indicating that the experimental subjects had better self-health care practices.
- The mean scores of self-health care practices of the subjects in the experimental group and the control group obtained after the experiment showed no statistical significances differences at the .05 level, but the mean scores of the experimental group increased more than that of the control group.
- The satisfaction with the self-health care model for pre-retirement teachers of the experimental subjects was at a very good level.

## Conclusion

As regards the effects of the self-health care model for pre-retirement teachers, it was found that overall selfhealth care practices of pre-retirement teachers were at a good level and satisfaction with the developed model of the pre-retirement teachers in the experimental group was at a very good level. According to the study findings, the effects of the self-health care model for pre-retirement teachers were as follows:

- The mean scores of health status of the experimental group obtained before and after the experiment showed no statistical significances differences at the .05 level, but the mean scores obtained after the experiment slightly increased.
- The mean scores of health status of the subjects in the experimental group and the control group obtained after the experiment showed no statistical significances differences at the .05 level, but the mean scores of the experimental group increased more than that of the control group.
- The mean scores of self-health care practices of the experimental group obtained before and after the experiment showed no statistical significances differences at the .05 level, but the mean scores obtained after the experiment was slightly higher than that obtained before the experiment, thus indicating that the experimental subjects had better self-health care practices.
- The mean scores of self-health care practices of the subjects in the experimental group and the control group obtained after the experiment showed no statistical significances differences at the .05 level, but the mean scores of the experimental group increased more than that of the control group; and
- The satisfaction with the self-health care model for pre-retirement teachers of the experimental subjects was at a very good level.

### Discussion

The study findings showed that the self-health care model for pre-retirement teachers enhanced health status of preretirement teachers. This may have been because 12 activities in the food, exercise, and rest aspects enabled teachers to develop knowledge and understanding of the 12 activities, thus making them able to have correct practice, develop positive attitudes, and have satisfaction with the model. As a result, their health status was enhanced. Likewise, Somprayoon (1999) have pointed out that behaviors related to knowledge, attitudes, and practice were closely interrelated, and they tended to take place with one another, with inter-dependence and inter-



Figure 1: Summary of the Self-Health Care Model for Pre-Retirement Teachers

reinforcement, as one behavior could help promote the other behaviors. As a result, it could be concluded that self-health care activities enabled the study subjects to have better health. Furthermore, according to self-care theory of Orem (1995), self-care activities were activities initiated and carried out by individuals to maintain their own health and security. When self-care activities were effectively conducted, individuals' health development could be maximized. In order for individuals to appropriately perform self-care activities, in addition to knowledge, responsibility, and perceived self-care behavior, they needed to have motivation, encouragement, intention, and perseverance to continuously and consistently carry out self-care activities to ensure success to achieve better health and had less health risk. In general, it is believed that experiential knowledge is valuable, so if individuals have theoretical or academic knowledge but they do not practice it, they cannot achieve good health. In other words, individuals need to carry out self-health care practices to achieve good health, as Goethe, a German scholar and author had stated, "knowing is not enough, we must apply. Willing is not enough, we must do" (Somprayoon et al, 1999).

It was found that the mean scores of health status of the teachers in the experimental group obtained before and after the experiment showed no different with statistical significance at the .05 level, which did not support Hypothesis 1. However, during the follow-up, it was found that even though mean scores obtained before the experiment, after the experiment, and during the follow-up showed no statistical significances differences at the .05 level, the mean scores of health status of the experimental subjects slightly increased. Thus, it could be concluded that after the experiment the experimental subjects had slightly better health status. One plausible explanation was that naturally it took time for health status of middle-aged persons to change as different bodily organs and functioning systems begin to deteriorate with age (Sirampuj, 2006). Also, the duration of the experiment was only six weeks, and the teachers working at school generally had a heavy workload. Thus, their health status did not improve enough to result in clearly different mean scores after the experiment. However, it was worth noting that all teachers in the experimental group had higher mean scores of health status after the experiment. Therefore, if they continued practicing the self-health care model, their health status could clearly be improved. As such, the self-health care model for pre-retirement teachers based on the concepts of self-efficacy and self-regulation of Bandura (1994) as well as the activities developed in the present study could be used to effectively improve health status of preretirement teachers. This is because the self-regulation concept of Bandura was an important process that enabled individuals to observe themselves, to set a goal, to remind themselves, and to make their own decisions based on verbal persuasion and vicarious experience, hence positive attitudes toward and continuous practices of the self-health care model.

The mean scores of health status of the teachers in the experimental group and the control group obtained after the experiment showed no different with statistical significance at the .05 level, so Hypothesis 2 was not supported. This means that the activities experimented in the self-health care model for pre-retirement teachers were activities that were generally universally carried out by individuals, so the scores of health status of the subjects in the experimental group and the control group were rather similar. However, it was noteworthy that the mean scores of overall health status of the experimental subjects increased more than that of the control subjects after the end of the experiment. This may be explained that the teachers in the experimental group carried out the activities in the self-health care model for pre-retirement teachers developed by the researcher, so their health status improved. Such findings were consistent with what Vasee (1998) had pointed out that correct and moderate food intake, regular exercise, and health promoting environment could strengthen both physical and mental health and prevented diseases. Similarly, Hanucharoenkul (1994) had contended that self-interest, self-concern, intention, self-understanding, and readiness to continuously and consistently carry out self-health care practice could promote health and disease prevention.

The mean scores of opinions toward self-health care practices of the teachers in the experimental group obtained before and after the experiment showed no different with statistical significance at the .05 level, which did not support Hypothesis 3. Furthermore, when comparing the mean scores of opinion toward self-health care obtained before the experiment, after the experiment, and during the follow-up, it was found that they showed no statistical significances differences. However, after the experiment, the mean scores of opinions toward selfhealth care practices increased, so it meant that preretirement teachers had better understanding and more practices of self-health care. This may have been because the teachers learned to develop age-appropriate food intake behavior, correctly and regularly exercised, and had sufficient rest, which was important for health development of the people in their age group. According to Kongsomboonvej (2009), self-health care for longevity had to be continuously and consistently conducted including eating and drinking food and drink with antiageing properties, having regular exercise, having sufficient rest and sleep, quitting smoking, and developing positive attitudes toward life. A study conducted by Kwanbonchan et al. (2007) to investigate health promoting behaviors of nursing instructors, staffs, and students of Srinakarinwirote University had shown that after participating in the activities for three months, the study subjects had better food consumption behavior with statistical significance at the .05 level, better exercise behavior with statistical significance at the .01 level, and better physical fitness with heart rates and maximal

oxygen consumption with statistical significance differences at the .05 level.

The mean scores of opinions toward self-health care practices of the pre-retirement teachers in the experimental group and the control group showed no different with statistical significances at the .05 level, so Hypothesis 4 was not supported. This meant that the subjects in both groups had similar opinions toward selfhealth care practices. This could be explained that the teachers may have received knowledge, attitudes, and practice from teacher training institutes and health promoting programs in school for a long period of time, so they had similar knowledge and understanding of selfhealth care practices. According to Orem (1995), self-care was a concept of action that resulted from individuals' intention. Self-care consisted of goals and step-by-step processes, so when it was properly conducted, individuals could develop their structural functioning to their fullest potential. Also, this could be considered experiential learning derived from actually conducting activities, as individuals could learn from events and their environment all the time to practice by themselves to suit the constantly changing environment.

Pre-retirement teachers' overall satisfaction with the self-health care model was at a very high level. This may have been because the developed model was easy, convenient, and safe to implement, and the activities were activities that teachers had known and practiced before but had never systematized them just like the researcher did. Therefore, when they were able to carry out familiar activities in a more systematic manner, they developed a high level of satisfaction with the model, which, in turn, enabled them to carry out their overall weekly self-health care practices at a good level.

# **Implications of Findings**

School administrators should implement the findings of the present study to develop a self-health care model for pre-retirement teachers in combination with existing health promoting programs of the school to ensure consistency and uniformity.

As the study findings revealed that all aspects of health status of the pre-retirement teachers in the experimental group improved more than those of the teachers in the control group, school administrators should implement the self-health care model for preretirement teachers developed in this study to promote health of other groups of teachers, both elementary and secondary school teachers, in combination with the current health promoting programs of the school.

### **Recommendations for Further Research**

The study findings showed that health status of the preretirement teachers in the experimental group and the control group before and after the experiment were not different but tended to increase. Therefore, further research should be conducted with a longer period of 12 weeks or longer, with a monthly follow-up, to remind teachers, to monitor changes, and to observe retention of self-health care behaviors of the teachers. Also, a trend analysis should be carried out.

The differences in the effects of the self-health care model for pre-retirement teachers between female and male teachers should also be investigated.

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