

CHAPTER 2

PROJECT DESCRIPTION

2.1 Introduction

This project was to improve self-care behaviour of diabetes mellitus (DM) patients by employing participatory learning into health promotion training program of 4 days duration. The project implementation was conducted at in-patient department, Saimoon Hospital, Saimoon district, Yasothon province. 30 cases of DM patients with fasting blood sugar (FBS) of ≥ 200 mg% or with the disease's complications were selected as participants of the training program. 5 health personnel were assigned as facilitators of the training. The project was divided into 2 phases: training phase and evaluation phase. The training phase was conducted in 4 days duration and participatory learning process was employed.

Participants of this project referred to DM patients with FBS of ≥ 200 mg% or disease complications and have willingness to participate in the project.

In Saimoon Hospital, there were 124 cases of DM patients, but only 30 cases participated in the project.

2.2 Goal and Objectives

1. General objective

General objective of the project was to organize participatory learning program to improve self-care behaviour of diabetes patients.

2. Specific Objectives

2.1 To improve self-care behaviour of diabetes patients who have FBS of \geq 200 mg.% or have disease complications.

2.2 To evaluate the effectiveness of participatory learning in improving self-care behaviour of DM patients.

3. Expected Outcomes

3.1 A suitable model for improving self-care behaviours in diabetes patients is developed.

3.2 Diabetes patients have appropriate self-care behaviours.

3.3 This training program is implemented into other areas.

2.3 Methods/Approaches

2.3.1 Methods

The project aimed to improve self-care behaviour of DM patients by employing participatory learning technique into health promotion training (the project's first

phase). The project was divided into 2 phases comprised of 4-day health promotion training and project evaluation. The project evaluation was taken place after the training had completed for 6 months.

1. Participatory Learning (PL)

Participatory learning is an important tool that was designed to compare capability of patients before and after participating in the project. The use of participatory learning helps improving capability of the participants. It helps collating background experiences of the patients before they can learn about knowledge and skill practices of self-healthcare behaviours.

2. Components and functioning of participatory learning

Participatory learning or an education has been original known as “popular education”. It was originated in 1980 with efforts of Brazilian educator, Paulo Freire and his colleagues who at that time were teaching oppressed peasant population basic literacy skills. Participatory learning breaks down “polarity between teachers and student. It avoids the manipulations of experts and emphasizes the collective nature of learning (Pan American Health Organization, World Health Organization, 1996: 142-143 cited in Dares, 2000).

The purposes of participatory learning are to promote the presence of the precursors to health behavior and to assist participants in making appropriate related decisions on health. These purposes can be achieved through increasing interest of participants to participate in the project, awareness on health issues during group

discussion, mutual support of participant to others in problem solving, changing health-damaged behavior, provision of information and preparing participants for life style behavior changing. (Ewles, L., & Smimneet, I., 1996: 162).

Participatory learning uses flexible approaches and variety of methods. The purpose of the learning is to facilitate empowerment of individuals or groups through processes of education and skill practices. This is in order to obtain decisions or actions. These approaches help participants to identify their concerns and then be able to develop skills and confidence. It is a process of experience and perception of an individual's health. The strength of this style is that participants learn to believe in decisions in accordance with that of others (Ewles, L., & Smimneet, I., 1996: 163).

3. The principles of participatory learning

Principles of participatory learning comprise of;

- 1) Provision of confidence in decision-making to the participants
- 2) Health educators should shift their role from instructors to facilitators.

In participatory learning, facilitators will only be a guide to help and support participants to learn by experience, encourage them to exchange their views and experience to each other and provide consultation (Pensiri, N. Cite in Anulak, Y. et al 2000: 76-77).

Facilitators are to help encouraging participants to think critically, help them gain confidence, self-awareness, and self-esteem in giving their opinion and able to adapt knowledge into real-life practices (Ewles, L., & Smimneet, I., 1996: 183).

- 3) Participatory learning is based on adult learning and learner-centered approach.
- 4) Participatory learning encourages everyone to learn and teach.
- 5) Participatory uses principle of two-ways communication.
- 6) Participatory learning is not interruption or leading, but it listening and learning.
- 7) Participatory learning employs various activities, methods in order to encourage participants to participate in the learning.
- 8) Participatory learning works well in small groups of participants (Downie, R. S., Tanahill, C., Tanahill, A., 1996:44 cite in Dares, 2000).

4. Components of Participatory learning

Participatory learning comprises of 4 main stages as follows:

- 1) Experience
- 2) Reflect and discussion
- 3) Understanding and Conceptualization
- 4) Experimental and application

Experience: normally, learner undergoes experience in everyday life and each individual has it in different ways. Telling one's experience to others is one of learning processes. When several participants exchange their experience, it creates broad wide learning. The subject for the learning is by bringing about the experiences of learners. Trainers/facilitators and group process can encourage participants to express their

experiences. The advantages of this process are that learners can share their experience to the group, exchange their knowledge and have good relation with others.

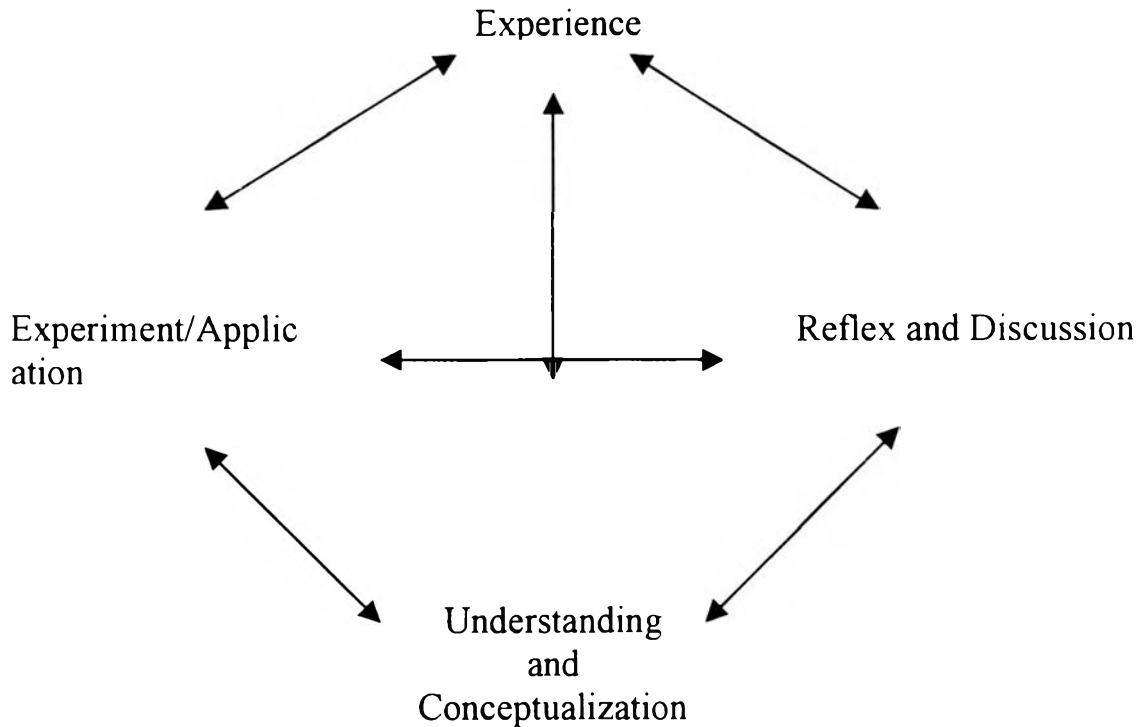
Reflection and Discussion: It is important for learners to participate in group process. This is in order for them to exchange their knowledge, attitude and life-skills with others. The issue for discussion will be set by trainers or facilitators. Learners can learn about different feeling and thinking. Reflect and discussion of experience between participants or learners helps them gain profound understanding. In addition, they can learn by themselves, and know how to accept opinion of others.

Understanding and conceptualization: Learners can develop their knowledge by participating in the participatory learning process and after the discussion stage, the following stage is understanding and conceptualization which people will find out a conclusion and final concept is extracted.

Experimental and application: This is a step for active experiment. Trainers or facilitators can summarize the process of PL in this section. Learners can finally take conceptual ideas to adapt into real life practices.

Source: Ministry of Public Health: 1999

Figure 2.1: Components of Participatory Learning



Source: WHO (1994) Life Skill Education in Schools; Geneva.

The figure above shows the circle interaction and relationships of all stages of participatory learning. Participatory learning is a continuing cycle which learners can start at any stages as this learning related to each other so that no matter where the learners start, they can eventually go through all stages.

In this project, accomplished processes are as follows:

1. Thirty participants were divided into six groups. Each group comprised of 5 members. These participants participated in 4-days self-care training at In-

patient Department, Saimoon Hospital, Saimoon district, Yasothon province.

2. The 4 days-self care training employed participatory learning to establish knowledge and skill practices on self-healthcare in the health promotion program.
3. Self-care training program consisted of dietary consumption, exercise practices, diabetic medicine intake, stress management, hygiene and prevention of complications.
4. After the completion of training project for 6 months, project evaluation was conducted.

Components of PL that were applied to this project:

1. **Experience:** The trainers and participants introduced themselves to the group. Participants had to tell the group about their activities and daily tasks such as meal activity, exercise practices, and self-care activities to prevent diabetes complications. Participants could participate with others by asking and answering questions and exchanging their experience and points of views.
2. **Reflection and Discussion:** The participants participated with the group. The issue for discussion will be set by trainers or facilitators. Learners can learn about different feeling, opinion and thinking. Reflect and discussion of experience between participants or learners helps them gain profound understanding. In addition, they can learn by themselves, and know how to accept opinion of others.

3. **Understanding and Conceptualization:** The participants understand the concept. They can conceptualize the ideas and then trainers or facilitators can help leading them to accurate knowledge and ideas on self care.
4. **Experimental and application:** The participants can finally apply their conceptual knowledge and ideas to similar situations.

2.3.2 Venue for Project Implementation

The project implementation was conducted at In-patients Department, Saimoon Hospital, Saimoon district, Yasothon province. The reasons for selecting this venue were as follows;

1. The researcher would like to study self-care behavior of DM patients who registered at Saimoon Hospital.
2. There was readiness in terms of leader, teamwork, participants and supporting system in every level.
3. The concept of participatory learning is new and it has never been implemented in this area before.

2.3.3 Target Group Selection

There were thirty cases of DM patients in this project. They were divided into six groups each of 5 members. The criteria for selection of DM patients to participate in the project were as follows;

1. DM patients with FBS of ≥ 200 -mg% or who have disease complications with willingness to participate in the project
2. Ability to read and write Thai language

2.3.4 Methods for Implementation.

1. Baseline data collection

The data was collected from group discussion, questionnaires on DM patients (target groups) and documents on non-communication disease prevention control.

1.1 Baseline Data Design

The questionnaire to evaluate knowledge and behaviors of DM patients was established by the research team. It was a try-out with thirty-five DM patients at the Outpatient Department of Saimoon Hospital.

1.2 Baseline Data Collection Methods

The data was collected by the researcher:

1. The diabetes knowledge test consists of 16 items covering diabetes knowledge and self-care behaviors such as dietary, exercise practices, and treatment and prevent for complications. Participants can select 'true' or 'false' in accordance with their opinion.
2. The Questionnaires for pre-post tests on self care behavior practices consists of 21 questions.
3. Data of FBS and HbA_{1c} was collected by laboratory officer.

1.3 Baseline Data Analysis

The analysis of the data was based on program SPSS for Windows. The statistical methods used in the data analysis based on descriptive statistics such as percentage, average standard deviation and Paired Samples T Test.

1.4 Results of Baseline Data

Part 1: Demographic characteristics of participants.**Table 2.1: Demographic Characteristics of DM patients (N = 30)**

Characteristic	Frequency	Percentage
Gender		
Male	2	6.67
Female	28	93.33
Marital status		
Single	1	3.34
Married	23	76.66
Widows	6	20.00
Age Group (years)		
< 40	1	3.33
40-49	7	23.33
50-59	21	70.01
60-69	1	3.33
Education Level		
Primary education	29	96.67
Secondary education	1	3.33
Occupations		
Agricultural	26	86.66
Housekeeper	4	13.34
Relations		
Husband/Wife	20	66.67
Children	7	23.33
Son-in law/daughter-in law	1	3.33
Relative	2	6.67

From Table 2.1, there were 2 male (6.67%) and 28 female (93.33%) diabetes patients. The highest number of marital status was 'married' with 76.66 %. Majority of participants were in age group of 50-59 years old (70.01%). There were 96.67% of participants with primary education level. 86.66% of participants worked in agricultures with 66.67 were 90.2% of participants % lived with their family.

2. Training Program

2.1 Facilitators

There were 5 health personnel in the teamwork; four of them were nurses who worked at IPD Saimoon Hospital and one was a researcher. All of them were qualified on knowledge and skills of DM patient cares.

2.2 Contents

The contents consist of:

1. Dietary
2. Exercises
3. Treatment
4. Complications Prevention

2.3 Training Instruments

1. Questionnaire on knowledge test consisted of 16-question covering dietary, exercises, treatment and complications prevention. The participants were required to select on 'true' or 'false' answers. A 'correct answer' has 1 score and no score for false answer.

2. Scientific instruments included blood pressure machines. FBS checking machine and weigh scale.
3. Non-specific question guidelines for the evaluation of diabetes patients' satisfaction in training participation.
4. Records of FBS and HbA_{1c} results.
5. Participatory learning model.
6. Diabetes patient's handbook which was published by Medical Department, Ministry of Public Health: Thailand, 1998.
7. Overhead projector.
8. Questionnaire for collecting general data, knowledge and self-healthcare behaviors of DM patients. (The questionnaire details as shown in the Appendix)

2.4 Data Analysis

The data analysis was based on program SPSS for Windows. The statistical methods used in data analysis were based on descriptive statistics such as percentage, average, standard deviation, Chi-square and t-test and Paired Samples T test.

2.5 Data Analysis Guidelines

The level of knowledge on diabetes and knowledge on self-care behaviors for pre-post training programs was set with 3 score levels.

Table 2.2: Level of diabetes knowledge and knowledge of self-care behaviors for pre-post training programs

Level	Percentage	Score
High	>80	48-60
Moderate	60-80	36-47
Low	<60	20-25

Source: Somkid (2000). Project evaluation techniques.

2.4 Sustainability of the Program

The model of health promotion program to improve self-care behavior in DM patients was applied to use in routine work at IPD in Saimoon Hospital. Reason to admit DM patients of only 5 cases at a time was that the number appropriate for health officers to manage.

2.5 Activity Plan with Timetable

This project duration was within 6 months. The detail of project schedule is shown in Table 2.3.

Table 2.3: Activity plan with timetable

Activities	Time (month)
1.Literature review, with the scope of the title for study and consultation with adviser.	Oct.-Nov. 2000
2.Project proposal and improvement	
3.Implementation	Dec.2000-Jan.2001
3.1 Data collection	
3.2 Try out	Feb.-Jul.2001
3.3 Intensive training	
3.4 Data collection in post training	
3.5 Follow up	
3.6 Collecting data post follow up	
3.7 Data analysis and summarization	
4.Project evaluation	Aug.2001
5.Conclusion	Aug.2001
6.Thesis Writing	Sep. 2001
7.Preparation for presentation	Dec. 2001

2.6 Problems, Conflicts and Mean for Resolution.

Problems

The researcher identified the causes of problems that deter the process of implementation as followed.

1. **Institute:** There was a limitation in provision of private places for the participants. There was an inconvenient while participants were sharing a room with general patients in IPD at Saimoon Hospital. Some of participants felt uncomfortable about noise from the beds nearby. This resulted in increasing stress because participants did not have sufficient sleep.
2. **Facilitators:** Even though, there were preparation for developing the knowledge and skills of the officers who were responsible as facilitators in this project, the process of activities faced some difficulties. This was because this process was too difficult for regular nurses who were only on day-time duty.
3. **Activities coordination:** The laboratory of Saimoon Hospital was incapable to check the level of HbA_{1c}, then the researcher had to send the specimens for HbA_{1c} checking to central hospital in Ubonrajchatanee province. There was insufficient time for collecting data to bring to instantly improve self-care behavior of the DM patients.
4. **Participants:** Some of the participants could not participate in the training program during the evaluation interval because they left to other provinces for a long period.

Means for resolution

1. During the participatory learning program, the facilitators should provide private room for the group process.
2. The director selects a nurse to act as a coordinator of the training program. This nurse has to participate in the activities with the participants.
3. Direct call to check for laboratory results was to be conducted.
4. Participants who were unable to stay in the target area during the project evaluation period were defined as missing cases.