

CHAPTER 3

PROJECT EVALUATION

3.1 Introduction

This project involved training program for a group of family healthcare leaders of Phuwiang district about social support provision and uses of the record form in caring for non-insulin independent diabetic patients. Evaluation of this project emphasized on evaluation of the input (the support of the superior, the budget, the time, the characteristics of the participants, the trainers, the training media, and the training contents), the training process (the training method , and the participant), and the outcomes in relation to the family healthcare leader participants (levels of knowledge, attitudes, and social support for diabetic patient care) and the diabetic patients (levels of social support received from the family healthcare leaders) including problems and obstacles occurring during operation of the training project. In addition, the outcomes gained from this evaluation process will be adopted for improving future training projects for family healthcare leaders

3.2 Objectives

To evaluate the training project for family healthcare leaders in terms of the input, the training process, its effects on the participated family healthcare leaders, its effects on the diabetic patients, and problems and obstacles of this training project including to use the evaluation outcomes for improvement of future training programs.

3.3 Evaluation Questions and Indicators

3.3.1 Evaluation questions

1. Input

1. Did the superior(s) provide support for the project? If yes, how?
2. Was the budget sufficient?
3. Was the time used appropriately for the project operation?
4. Was the training program implemented as planned?
5. Did the participated family healthcare leaders have suitable qualifications? How were their demographic characteristics?
6. Were the trainer suitable for the program?
7. Were the employed media appropriate?
8. Was the actual training content consistent with the imposed content?

2. Training process

1. Was the training methodology appropriate?

3. Effects on the participant family healthcare leaders

1. Did the family healthcare leaders' levels of knowledge about diabetes and about diabetic patient care for disease control increase?
2. Did the family healthcare leaders' level of attitudes towards diabetes and towards diabetic patient care for disease control increase?
3. Did the level of social support for diabetic patient care of the family healthcare leaders increase?

4. Effects on the diabetic patients

1. Did the diabetic patients' level of social support received from the family healthcare leaders increase?

3.3.2 Evaluation indicators

The evaluation indicators of the training project were set up for each evaluation question as shown in Table 3.1.

Table 3.1 Evaluation indicators for the family healthcare leader training program

Evaluation questions	Objectives	Indicators	Information source
<p>1. Input</p> <p>1.1 Did the superior (s) provide support for the project? If yes, how?</p>	To evaluate the training project input	The superior(s) provided support to various aspects of the project such as the project team, the training venue, audio-visual equipment, time, and trainers.	Summary reports on various aspects of superior support including the project team, the training venue, audio-visual equipment, time, and the trainers.
<p>1.2 Was the budget sufficient?</p> <p>1.3 Was the time used appropriately for the project operation?</p> <p>1.4 Was the training program implemented as planned?</p> <p>1.5 Did the participant family healthcare leaders have suitable qualifications? How were their demographic characteristics?</p>		<p>There were sufficient uses of the allocated budget.</p> <p>There was efficient use of time for each session as planned.</p> <p>The training program was run as planned.</p> <p>The qualifications of the family healthcare leaders participating in the training program were in accordance with the imposed criteria.</p>	<p>Summary report on the expenses of the training project.</p> <p>Report on time spent in each activities</p> <p>Summary report on the family healthcare leader- training procedure.</p> <p>Summary report on the qualifications of the family healthcare leaders participating in the training program</p>

Table 3.1 Evaluation indicators for the family healthcare leader training program (cont.)

Evaluation questions	Objectives	Indicators	Information source
1.6 Were the trainers suitable for the program?		The qualifications of the trainers were according to the imposed qualifications.	Summary report on qualifications of the trainers for the training program.
1.7 Were the employed media appropriate?		The uses of media were in accordance with the plan.	Summary report on types of media employed in the training program.
1.8 Was the actual training content consistent with the imposed content?		The training content was in accordance with the plan.	Summary report on the training content.
2. Training process	To evaluate the training process of this project		
2.1 Was the training methodology appropriate?		The training methodology was in accordance with the plan.	Summary report on the training methodology.
3. Effects on the family healthcare leaders	To evaluate the effect on the family health care leaders		
3.1 Did the participants' level of knowledge about diabetes and about patient care for the disease control increase?		After the training there was an increase in the participants' level of knowledge about diabetes and diabetic patient care.	Pre- and post-test knowledge scores of the participants.

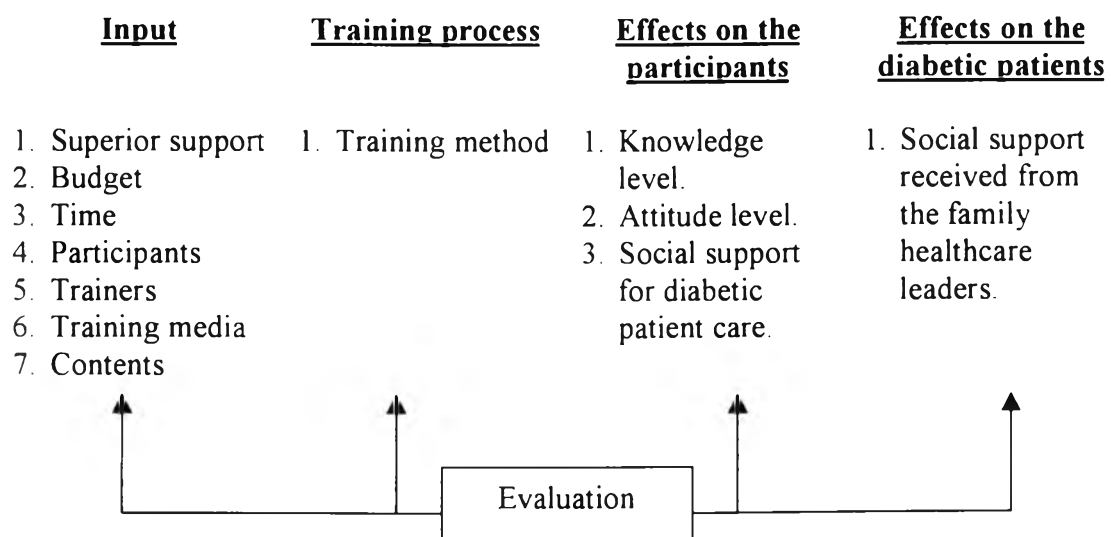
Table 3.1 Evaluation indicators for the family healthcare leader training program (cont.)

Evaluation questions	Objectives	Indicators	Information source
3.2 Did the participants' level of attitudes towards diabetes and towards diabetic patient care for disease control increase?		After the training there was an increase in the participants' level of positive attitudes towards diabetes and diabetic patient care.	Pre- and post-test attitude scores of the participants.
3.3 Did the level of social support provision for diabetic patient care of the family healthcare leaders increase?		After the training the participants' level of proper social support provision for diabetic patient care increased.	Social support provision scores before and after the training program.
4. Effects on the diabetic patients	To evaluate the effect on the diabetic patients		
4.1 Did the diabetic patients' level of social support received from the family healthcare leaders increase?		After the training the diabetic patients received more social support from the family healthcare leaders.	Diabetic patients' scores of social support reception from the family healthcare leaders before and after the training.

3.4 Evaluation Design

The project evaluation was a summative evaluation emphasizing on improvement of the project by comparing the actual project with the imposed measurement indicators for successful project.

Figure 3.1 Evaluation concepts for the family healthcare leader-training project



3.5 Data Collection

3.5.1 Data collection method

1. Interview.
2. Activities checklist.

3.5.2 Data sources

1. The participant family healthcare leaders.
2. Diabetic patients.
3. Primary and secondary data record.

3.5.3 Instrument used in data collection

1. **Questionnaires for the participant family healthcare leaders comprised of 3 parts of data, which were:**

Part 1 Demographic data of the participants included gender, age, education background, marital status, and relationship with diabetic patients.

Part 2 Knowledge test questionnaires were prepared by the trianer and used to test the knowledge level of the participants before and after the knowledge training on diabetes and diabetic patient care for disease control, which included dietary control, exercise, medicine, skin and foot care, follow up, prevention and basic care for the

complication . There were a total of 26 multiple-choice questions. Thirteen questions were of 4 choice questions and the other thirteen questions were of 5 choice questions all with only one best answer.

Scoring method was: 1 score was given to the correct answer and 0 score was given to incorrect or no answer. The knowledge score of the participants was the sum of the scores from the test questionnaires created by the author ranging from 0 – 26 scores.

Part 3 Attitude test questionnaires were prepared by the trainer and used to interview the family healthcare leaders before and at 6 months after the training. Interview topics included the participants' feeling, belief, and true intention in providing social support for diabetic patients for disease control in 6 aspects, which were dietary control, exercise, medicine, skin and foot care, follow up, prevention and basic care for the complication. There were a total of 20 questions containing 2-scale answers, which were agree and disagree. The participants were required to choose only one answer and scores were given as follows:

<i>For positive questions</i>			<i>For negative questions</i>		
Agree	1	score	Agree	0	score
Disagree	0	score	Disagree	1	score

2. The record form for social support provision to diabetic patients of the family healthcare leaders

The record form was created by the trainer and used to measure the family healthcare leaders' behaviors in providing social support for diabetic patients. The family healthcare leaders were required to record their practice during 1 week prior to the training session and continued to record everyday during their patient care at home. The author would assess the participants' social support provision on a monthly basis for 6 months. The record form comprised of both positive and negative aspects of social support practice related to diabetic patient care for disease control covering dietary control, exercise, medicine, skin and foot care, follow up, prevention and basic care for the complication. There were a total of 25 items, which required the participants to record their actual practice. Scores were awarded based on medical accuracy and advice as in the followings:

Positive social support item	was given	1	score
Negative social support item	was given	0	score

The participants' social support provision score ranging from 0 – 25 scores derived from the sum of the scores from each item.

3. Questionnaires for the diabetic patients.

The questionnaire was created by the trainer for interview of the diabetic patients about social support received from the family healthcare leaders before and at 6 months after the training. It covered emotional, information, and resource support, which were relevant to the disease control in 6 issues including dietary control, exercise, medicine, skin and foot care, follow up, prevention and basic care for the complication. There were a total of 44 items. Scores were awarded based on frequency and continuity of the practice with consideration of medical accuracy and advice as in the followings:

Social support reception item that met the criteria	1	score
Social support reception item that did not meet the criteria	0	score

The social support reception score of the diabetic patients ranging from 0 – 44 scores was the sum of the scores from each interview item.

3.5.4 Construction and quality assurance of the instrument

There were 5 procedural steps of construction and quality assurance of the instrument employed in this study as detailed in the followings:

- Step 1** : Review of theory, documents, and relevant literature and then determine the scope, structure, and content of the questionnaires to cover the project objectives.
- Step 2** : Construct the questions.

Step 3 : Deliver the completed instrument to diabetic experts, which were 3 medical doctors of Phuwiang Hospital and the project supervisor for approval of language accuracy and clarity, structure validity, and content validity. The questionnaires were then improved and revised prior to instrument quality test.

Step 4 : Conduct quality test of the instrument as follows:

- i. The knowledge test questionnaire was tried out with a group of 30 family healthcare leaders who had similar characteristics as the study group at Muangkaopattana sub-district to test for language perception. The test process involved the following items:
 - a). Test for levels of difficulty of the questionnaire by testing each individual item. It was found that level of difficulty of each item was between 0.2 – 0.8.
 - b). Test for the power of discrimination value of the questionnaire. It was found that the power of discrimination of each item was 0.2 or above.
 - c). Test for the reliability by the Kuder Richardson method (KR 20) using the SPSS program for Windows and determined the reliability of minimum 0.75 (Portney and Watkins, 1993). The reliability of the entire knowledge test questionnaire was found to be 0.84.
- ii. The attitude test questionnaire was test for precision by the Kuder Richardson method (KR 20) using the SPSS program for

Windows. The reliability of the entire attitude test questionnaire was found to be 0.76.

Step 5 : Revise the questionnaires to obtain the instrument with high reliability and structure and content validity prior to the actual application with the study group

3.6 Data Analysis and Results

3.6.1 Data analysis

After the data were completely collected, checking completeness of every questionnaire and data record were conducted. The SPSS program for Windows was used to analyse data which are presented as follows:

- 3.6.1.1 Frequency and percentage values were used to describe the data with nominal and ordinal scales.
- 3.6.1.2 Mean and standard deviation were used to describe the data measured by interval and quotient scales in the case of data that fitted within a normal distribution. Median and interquartile range (IQR) were used to describe the data measured by interval and quotient scales in the case of data that did not fit within a normal distribution.
- 3.6.1.3 Statistical comparison by a paired t-test was adopted to compare the differences between the mean score of knowledge, attitudes, the participants' social support provision, and the diabetic

patients' social support reception before and after the training program.

3.6.1.4 For all statistical tests, the test results were concluded to be significant only when the p-value was less than 0.05 ($p < 0.05$).

3.6.2 Evaluation results

3.6.2.1 Input

Question 1: Did the superiors provide support for the project? If yes, how?

Results: The superiors provided support to the project in the following aspects:

1. **The project assistant team:** the superior facilitated the project operation by allocating 6 healthcare personnel as the project assistant team including 2 nurses from Phuwiang Hospital, 1 technical public health officer from Phuwiang District Public Health Office, and 3 public health officers from Khaonoi Sub-district Health Center.
2. **The training venue** was organised at the conference room of Khaonoi Sub-district Health Center throughout the project with facilitation from the center head officer.
3. **Audio-visual equipments** were supported by Phuwiang District Hospital which included a slide projector, overhead transparency projector, picture screen. In addition, an audio player was supported by Khaonoi Sub-district Health Center.

4. **Time:** the project team members were allowed to run the project activities during their on-duty time. Those activities were such as training, follow-up meetings, and collection of data.

5. **Trainers:** three trainers were provided from Phuwiang Hospital and other 2 trainers were from Phuwiang District Public Health Office.

6. **Budget :** Some budget was supported by Phuwiang District Public Health Coordinating Committee with a total of 10,000 Baht and some budget was received from Khaonoi sub-district health center and Phuwiang hospital such as training room, A.V., vehicle ect.

Question 2: Was the budget sufficient?

Results: The budget was sufficient and spent 3,000 Baht less than the planned budget demonstrating the efficiency of budget management as shown in Table 3.2.

Table 3.2 Comparison of the budget plan and the actual expenses.

Particular	Planned	Actual
1. Materials	6,400	6,400
2. Miscellaneous (training room, A.V. ect.)	12,900	10,900
3. Traveling and compensation	6,500	5,500
4. Others	4,000	3,000
Total	28,800	25,800

Question 3: Was the time used appropriately for the project operation?

Results: Most activities were run appropriately within the time frame except for preparation of the target group, which required additional 3 days as the preparation step was carried out during the farming season when the participants were busy with their work. Extra time was then required for arrangement of their convenient time prior to the target group preparation as detailed in Table 3.3.

Table 3.3 Comparison between the actual time periods spent in running the activities and the planned schedule.

Activities	Planned	Actual
- Preparation of the training course	4 months	4 months
- Preparation of the target group	2 days	5 days
- Training of the project team	2 days	2 days
- Training sessions	6 months	6 months
- Evaluation process	4 days	4 days

Question 4: Was the training program implemented as planned?

Results: The investigation found that the training program was run in accordance with the plan as shown in Table 3.6.

Table 3.4 Comparison between the training plan and the actual training process

	Procedure	Planned	Actual
Time	Activities		
Week 1	<ul style="list-style-type: none"> - Prepared the target group. - Conducted pre-evaluation. - First training of the participants. 	Yes	Yes
Week 1-24	<ul style="list-style-type: none"> - The participants provided patient care at home. - The participants recorded activities of social support provided on to diabetic patients at home. 	Yes	Yes
Week 4, 9, 14, 19, and 24	<ul style="list-style-type: none"> - Conducted follow-up meetings. - Retrained the participants on continual basis for the 2nd, 3rd, 4th, 5th, and 6th times. - The participants submitted the completed record for social support provision. 	Yes	Yes
Week 24	<ul style="list-style-type: none"> - Conducted post- training evaluation. 	Yes	Yes

Question 5: Did the participant family healthcare leaders have suitable qualifications? How were their demographic characteristics?

Results: The evaluation process indicated that the participated family healthcare leaders had qualifications according to the imposed criteria except the ages, which showed large discrepancy among the populations. That is, 28 participants were of a working age group accounting for 78.88 % while the other 8 participants were elderly people between 61-70 years old. This is because in those 8 families with diabetic patients there were no other members who were of a working age group and they were willing to participate in the training. Qualifications of the participants are detailed in Table 3.5

Table 3.5 Comparison between the imposed and the actual qualifications of the participants.

Imposed criteria	Planned		Actual	
	Number	%	Number	%
1. Be a caretaker of the diabetic patient in the family.	36	100	36	100
2. Be of a working age group.	36	100	28	78.88
3. Be able to read and write Thai language.	36	100	36	100
4. No communication problems.	36	100	36	100
5. Be willing to join the project.	36	100	36	100
6. Resided in the study area throughout the project.	36	100	36	100

Analysis of demographic data of the populations found that 55.56 % of the participants were female. The mean age was 42 years old and the majority of the populations were of a working age group (21-60 years old) and usually worked away from home. 22.22% of the participants were between 61-70 years old. The highest level of education of 75.00 % of the populations was at primary school level. The majority (91.67%) was married and stayed coupled. In terms of a relationship with diabetic patients, 44.44 % of the participants were children of the diabetic patients. Table 3.6 showed the detail of the participants' demographic data.

Table 3.6 Number and percentage of the participant family healthcare leaders classified by demographic variables.

Variables	Number (n=36)	%
1. Gender		
Male	16	44.44
Female	20	55.56
2. Age (years)		
21-30	6	16.67
31-40	10	27.78
41-50	4	11.11
51-60	8	22.22
61-70	8	22.22
Median = 42, IQR = 26.25		
3. Education background		
Primary school	27	75.00
Junior secondary school	4	11.11
Senior secondary school	4	11.11
Bachelor degree	1	2.77
4. Marital status		
Single	3	8.33
Coupled	33	91.67
5. Relationship with diabetic patients		
Husband	11	30.56
Wife	5	13.89
Children	16	44.44
Son/ daughter in law	3	8.33
Grandchildren	1	2.78

Question 6: Was the actual training content consistent with the imposed content?

Question 7: Were the trainers suitable for the program?

Question 8: Were the employed media appropriate?

3.6.2.2 Training process

Question 9: Was the training methodology appropriate?

Results of questions 6-9 : Assessment of the training activities found that the participants were trained by the trainers according to the imposed content. The training methodology, the trainers and the media were also adopted appropriately according to the plan as shown in Table 3.7.

Table 3.7 Comparison between the planned and the actual training content, trainers, methodology, and teaching media.

Content	Planned			Actual
	Trainers	Method	Media	
Yai Ma story I	Professional nurses	Lecture	Slide show	Yes
Yai Ma story II	Professional nurses	Lecture	Slide show	Yes
Diabetes knowledge	Professional nurses	Short lecture and group meeting	Slide show, poster display, and handbook.	Yes
Diabetes control	Professional nurses	Short lecture and group meeting	Slide show, poster display, and handbook	Yes

Table 3.7 Comparison between the planned and the actual training content, trainers, methodology, and teaching media (cont.).

Content	Planned			Actual
	Trainers	Method	Media	
Exercise for diabetic patients	Thai traditional medicine officers	Demonstration and practice	Poster display, pictures, and audiocassettes.	Yes
Roles of FHLS in providing social support for diabetic patients.	Professional nurses	Short lecture and group meeting	Slide show and information leaflets.	Yes Yes
Recording of the form for diabetic patient social support provision.	Professional nurses	Demonstration and practice	Demonstration and practice recording the form.	Yes

3.6.2.3 Effects on the participants family healthcare leaders

Question 10: Did the family healthcare leaders' levels of correct knowledge about diabetes and about diabetic patient care for disease control increase?

Results: The study found that before the training the participants' mean score of knowledge about diabetes and diabetic patient care for the disease control was 12.97 scores with standard deviation of 5.41 scores. After the training the mean knowledge score increased to 18.97 scores with standard deviation of 4.21 scores. Statistical comparison between the mean knowledge scores before and after the training indicated a significant increase in the participants' knowledge level about diabetes

and diabetic patient care for the disease control ($P < 0.001$) with an increase of 6 mean scores (S.D. = 2.31) as shown in Table 3.8.

Table 3.8: Comparison of the participants' knowledge mean score about diabetes and diabetic patient care for the disease control before and after the training

Knowledge about diabetes and diabetic patient care for the disease control	Study group (n=36)
Baseline \bar{X} (SD)	12.97 (5.41)
Post-training \bar{X} (SD)	18.97 (4.21)
An increase (Post-training – Baseline)	
d (SD)	6.00 (2.31)
P-value	< 0.001
95% CI	4.45 – 7.54

Analysis of the knowledge scores of the family healthcare leaders about different aspects of diabetes and about the 6 aspects of diabetic patient care for disease control (dietary control, exercise, medicine, skin and foot care, follow up, and prevention and basic care for the complication) found that there was an increase in every mean knowledge score of the participants after the training as detailed in Table 3.9.

Table 3.9: Mean knowledge scores of the participants about diabetes and different aspects of diabetic patient care before and after the training.

The participants' knowledge	Mean scores	
	Pre-training	Post-training
1. About diabetes	2.19	4.08
2. About diabetic patient care for disease control		
2.1 Dietary control	3.58	5.08
2.2 Exercise	1.75	2.55
2.3 Medicine	1.41	1.66
2.4 Skin and foot care	1.44	2.13
2.5 Follow up <i>Answer correctly</i>	19 (52.78%)	30 (83.33%)
2.6 Prevention and basic care for the complication	2.05	2.61

Question 11: Did the participants' level of correct attitudes towards diabetes and towards diabetic patient care for disease control increase?

Results: The study found that before the training the participants' mean score of attitudes towards diabetes and towards being social support providers for diabetic patients was 15.31 scores with standard deviation of 2.21 scores. The mean score increased to 18.06 scores with standard deviation of 1.37 scores after the training. Statistical comparison of the mean scores of attitudes towards diabetes and towards being social support providers for diabetic patients indicated a significant increase of the score ($P < 0.001$) after the training with an increase of 2.78 mean scores and with standard deviation of 2.30 scores as shown in Table 3.10.

Table 3.10: Comparison of the scores for the participants' attitudes towards diabetes and towards being social support providers for diabetic patients before and after the training.

The participants' attitudes towards diabetes and towards being social support providers for diabetic patients	Study group (n=36)
Baseline \bar{X} (SD)	15.31 (2.21)
Post-training \bar{X} (SD)	18.06 (1.37)
An increase (Post-training – Baseline) d (SD)	2.75 (2.30)
P-value	< 0.001
95% CI	1.97 – 3.53

Analysis of the mean scores for the participants' attitudes towards diabetes and towards being social support providers for diabetic patients before and after the training found that there was an increase in the mean attitude scores for both aspects as shown in Table 3.11.

Table 3.11: Mean scores of the participants' attitudes towards diabetes and towards being social support providers for diabetic patients before and after the training.

The participants' attitudes towards	Mean scores	
	Pre-training	Post-training
1. Diabetes	2.11	3.47
2. Being social support providers for diabetic patients.	13.19	14.58

Question 12: Did the level of social support provision for diabetic patient care of the family healthcare leaders increase?

Results: The evaluation outcome indicated that before the training the mean score for the participants' social support provision was 9.97 scores with standard deviation of 2.71 scores. After the training the mean score increased to 14.50 scores with standard deviation of 1.61 scores. Statistical comparison of the mean scores of the participants' social support provision for diabetic patients found a significant increase of social support provision ($P < 0.001$) after the training with an increase of 4.53 mean scores and with standard deviation of 2.55 scores as shown in Table 3.12.

Analysis of the mean scores of the participants' social support provision for diabetic patients before and after the training found that there was an increase in the mean scores for every aspect of social support provision, namely, dietary control, exercise, medicine, skin and foot care, follow up, prevention and basic care for the complication as shown in Table 3.12 and 3.13.

Table 3.12 Comparison of social support provision scores of the participants before and after the training.

The participants' social support provision for diabetic patients before and after the training	Study group (n=36)
Baseline \bar{X} (SD)	9.97 (2.71)
Post-training \bar{X} (SD)	14.50 (1.61)

Table 3.12 Comparison of social support provision scores of the participants before and after the training (cont.).

The participants' social support provision for diabetic patients before and after the training	Study group (n=36)
An increase (Post-training – Baseline)	
d (SD)	4.53 (2.56)
P-value	< 0.001
95% CI	3.66 – 5.39

Table 3.13 Mean scores of the participants' social support provision for diabetic patients before and after the training.

Social support provision for diabetic patients	Mean scores	
	Pre-training	Post-training
1. Dietary control	4.44	6.41
2. Exercise <i>Answer correctly</i>	15 (41.65%)	34 (94.44%)
3. Medicine	2.58	2.52
4. Skin and foot care	0.47	1.69
5. Follow up	1.72	2.00
6. Prevention and basic care for the complication <i>Answer correctly</i>	12 (33.33%)	33 (91.66%)

3.6.2.4 Effects on the diabetic patients

Question 13: Did the diabetic patients' level of social support received level from the family healthcare leaders increase?

Results: The study found that before the training the means core for the diabetic patients' social support reception from the participant family healthcare

leaders was 17.82 scores with standard deviation of 8.62 scores. The social support reception mean score increased to 29.03 with standard deviation of 3.93 scores after the training. Statistical comparison of the mean scores for the diabetic patients' social support reception before and after training indicated that the diabetic patients significantly received more social support ($P < 0.001$) with the mean score increase of 11.21 scores (S.D. = 7.78) as shown in Table 3.14.

Table 3.14: Comparison of the mean scores for the diabetic patients' social support reception from the participants before and after the training.

Social support reception of the diabetic patients	Study group (n=36)
Baseline \bar{X} (SD)	17.82 (8.62)
Post-training \bar{X} (SD)	29.03 (3.93)
An increase (Post-training – Baseline)	
d (SD)	11.21 (7.78)
P-value	< 0.001
95% CI	8.49 – 13.92

3.6.3 Problems, obstacles, and means for resolution

Results : The problems and obstacles encountered in operation of this project and their solutions are as the followings:

Problem 1 Two participants were unable to continually participate throughout the 6-month course of the project resulting in a total remainder of 36 participants accounting for 94.46%.

Solution The training program was conducted for the remainder 36 participants who were informed of the advantages of this training program.

Problem 2 Twenty participants did not completely/ thoroughly fill the record form for diabetic patient social support provision after the training, accounting for 55.56%.

Solution A meeting was organised in order to inform the participants in detail on proper form recording as well as re-explaining the importance and benefits of uses of the form. The participants then understood proper form-recording method and perceived the importance of the record form.

Problem 3 There were 9 relatives of diabetic patients who were not family healthcare leaders and would like to sit for the training.

Solution The author permitted all 9 people to sit for the training as they were considered as caretakers of the diabetic patients in the family. However, the data were not included in the project evaluation process.

Problem 4 The participants still provided incorrect primary care practice for diabetic patients who developed secondary disease.

Solution The participants who were to care for diabetic patients with similar secondary disease were grouped together and were provided with specific advice.

Problem 5 Some participants administered bad medicines containing steroids for the patients.

Solution They were informed of the dangers of steroid containing medicines to diabetic patients and were recommended to discontinue using those drugs. In addition, the drug samples were sent for close examination at the responsible pharmaceutical department to verify the presence of harmful ingredients to diabetic patients.