

Chapter 3

Methodology of the project

Methodology

The purposes of this project were : to develop a training program for head nurses in human resource planning, and to implement and evaluate the training program for head nurses in human resource planning, Mahosot Hospital LAO P.D.R.

Design of the project

The design of the project was first to assess the needs in relation to human resource planning of twenty eight head nurses in 1997. The head nurses were asked to fill in questionnaires providing demographic characteristics (Appendix A). The survey findings indicated that 67.85 per cent of the head nurses had undergone no training in nursing administration. A second survey was done during April - May 1998 on the topic of analysing the nursing service management (Appendix A). The questionnaires emphasized knowledge of planning and management. The report showed that 83.33 per cent lacked knowledge of planning and management for nursing personnel.

Second, after assessing needs in relation to human resource planning for nursing personnel, the project organizer designed a questionnaire form and invited the experts to validate the contents of the training program. The

instrument was administered, tested and retested with 28 head nurses from Lao-Friendship Hospital two times. The experts included four persons from Thailand and four persons from LAO P.D.R.

Third, the training program was developed and ready to be implemented for head nurses in Mahosot Hospital. The training schedule was from March 29 to 31, 1999 on the title of : “The Training Program for Head Nurses on Human Resource Planning”. The training was conducted in the conference room at Mahosot Hospital, LAO P.D.R.

The evaluation of knowledge in human resource planning was done with a “pretest” and “posttest”, a questionnaire of 15 items with three choices each (Measurement 1 : Test of Knowledge for Human Resource Planning). The “pretest” was done one week before the start of the training program. The “posttest” was done on the last day of the training. The scores from “pre and posttest” were rated 1 (one) (answered correctly), and 0 (zero) (answered incorrectly) and then “t-test” statistic was used to analyse the progress of knowledge in human resource planning.

For the evaluation of the activities for discussion in relation to human resource planning, the project organizer used Measurement 2: List of Activities for Discussion of Human Resource Planning. This measurement was planned to assess five main topics discussed during the training session. The first four topics were : List the management activities and its problem solving, 1 activity per participant; planning for staff work; SWOT analysis of staff strengths and weaknesses in their work and list the staff rewarding; then emphasized on the participants’ individual reports. While, Measurement 3: Evaluation of Training Program planned to evaluate the project.

Subjects

The subjects were 27 head nurses posted at Mahosot Hospital. They were registered nurses and auxiliary nurses.

Auxiliary Nurse is a first level nurse who completed a 1-2 year program after 6-8 years of basic education and received a license to practice nursing in the country (Appendix C).

Registered Nurse is a nurse who completed a 3-year program after 10-11 years of basic education and received a license to practice nursing in the country (Appendix C).

They are considered first line managers. These head nurses have had at least one year up to more than thirty years of experience. They were working in medical, surgical, pediatric, obstetric, gynecology, operating room (general surgery, gynecology and traumatic surgery), post-operative (general and traumatic), intensive care (adult and pediatric), emergency (medicine and surgery), mental health clinics, out-patient departments, otorhino-laryngology, ophthalmology, and rehabilitation / orthopedic departments.

Development of the instrument

The demographic characteristics and the test were prepared before the training to assess needs in relation to knowledge and activities for discussion of human resource planning. It was divided into two parts : administration activities and staff planning activities. The test was used with 27 head nurses in order to assess the need for the training.

The measurements were divided in four parts as follows:

1. Part 1 was “Demographic Characteristics” (Appendix A). This measurement was to assess basic education, professional experience, training experience obtained (inside the country and abroad), and experience in supervision.

2. Part 2 was “Test for Knowledge of Human Resource Planning” (Appendix A). This measurement included 15 items used to measure the knowledge and understanding of human resource planning before and after the training. Each item had 3 possible choices and valued 1 (one) score / mark for a correct answer and 0 (zero) for an incorrect answer.

3. Part 3 was “List of Activities for Discussion of Human Resource Planning” (Appendix A). The measurement was used to evaluate the activities for discussion after the lectures’ sessions.: list the management activities and problem solving, planning activities for staff, SWOT analysis of staff work, and list method of staff rewarding, and the individual reports (planning work for their nursing personnel). This measurement consisted of 4-rating scale and gave values as follows :

Scale			Value
3	=	always	4
2	=	sometimes	3
1	=	seldom	2
0	=	never	1

4. Part 4 was “Evaluation of the Training Program” (Appendix A). The instrument was developed for participants to evaluate the performance of the lecturers and the training program as well as to give suggestions and recommendations.

Scale			Value
3	=	very good	4
2	=	good	3
1	=	fair	2
0	=	needs to be improved	1

Criteria for interpreting the arithmetic mean of part 2 and part 3 were as follows :

1.00 - 1.50	=	needs to be improved
1.51 - 2.50	=	fair
2.51 - 3.50	=	good
> 3.51	=	very good

Content validity and reliability

The instruments were developed according to the literature review and were evaluated for validity and accuracy of content by eight experts, four from Thailand and four from LAO P.D.R. Instruments were revised according to the comments and suggestions given by the experts. Since the instruments were developed in English, they had to be translated into Lao language. The Lao version was checked for face validity by four Lao-English linguistic experts from the Ministry of Public Health and Mahosot Hospital before being used with participants. Then the instrument was tested and retested (two times : Feb 22/99 and March 12/99) with 28 head nurses from Lao-Friendship Hospital.

The level of difficulty and the power of discrimination of the instrument “Test of Knowledge for Human Resource Planning” was analysed and revised. Then the reliability of the test was performed by using Kuder-Richardson (KR-

21). The result of reliability of the test was at $r = .99$. After the validity and reliability were obtained, the project organizer determined that the instrument had sufficient internal consistency and validity for use with participants.

Collection of data

1. Before conducting the project, permission and support were obtained from the Ministry of Public Health and Mahosot Hospital, LAO P.D.R.

2. Oral informed consent was obtained from the department of nursing in Mahosot Hospital after an explanation of the study was given to head nurses.

3. The test-retest for reliability was administered to 28 head nurses in Lao-Friendship Hospital (February 22, 1999 and March 12, 1999).

4. The “Test for Knowledge of Human Resource Planning” was distributed by the project organizer during the meeting for the pretest session. A ball pen and notebook were given to each subject for convenience and as a reward for responding. The participants were asked to complete the test by themselves. Most participants completed the test in 30 minutes and returned it to the administrator.

5. The pretest was administered one week before the start of the training while the posttest was given on the last day of the training program.

6. The evaluation form used during the discussion session was distributed to the four facilitators after extensive explanation about scoring.

7. The project organizer checked the forms for completeness prior to the analysis.

Statistical analysis

Data obtained from the training program were analyzed by using manual calculation. Descriptive statistics were used for presenting the findings of the project.

1. Frequency and percentage were used for describing demographic characteristics.
2. Mean and standard deviation were calculated for the knowledge and the activities for discussion.
3. Frequency and percentage were used to describe the correct responses on the pretest and posttest.
4. The t-test statistic was performed to examine the difference between the scores on the pretest and the posttest.