CHAPTER 4

Conclusion

The research was an evaluation research. Data collection in the process of implementation in accordance with the model for DM prevention and control in Yasothon used in-depth interview and focus group discussion techniques. The in-depth interview technique was used for health personnel related to this job in Korwang, Kudchum and Loengnokta districts. They were doctors and nurses who work in the DM clinic, and pharmacists, card recorders, lab investigators, and health personnel who are responsible for this job in hospitals, district health offices and health centers; this group consisted of 25 persons. The focus group discussion technique was used for the village health volunteers (VHVs) who live in the villages where the health centers are established in these districts; these consisted of six groups. The interviews and discussions included those issues that related to implementation in accordance with this model that were different from each other.

The data was collected by in-depth interview and focus group discussion. Furthermore, the researcher collected data from related documents for checking validity and reliability of data. The data analysis was used to give the content analysis. The researcher turned off the tape cassettes and recorded the words for evidence, then read the results of the in-depth interview and focus group discussion and checked the documents. Next, the researcher distinguished the issues in accordance with the conceptual framework by cutting technique, grouped the same or similar contents and

interpreted the result for conclusion in accordance with the research objectives. The researcher would like to conclude the results of this study as follow:

Conclusion: the Important Findings

1. DM Service System

1.1 Screening System in the Village

DM screening began with target group determination, public relations for target group preparation, screening, and following up of the urine abnormal group. This study found that the process of DM screening by health center level personnel and VHVs, when compared with the model of provincial determination, was adequate and concluded that they could perform every activity, namely the screening and the following up of the urine abnormal group. The screening was mostly in community primary health care centers (CPHCC); the services were complete; the activities consisted of history investigation, measuring body weight, blood pressure and height (in some villages), and checking urine. As for the health education, the form was not clear. The following up of the urine abnormal group was relevant to the flow chart of this model. But the target determination and the public relation for target group preparation weren't specific to them. So this might affect the screening and not find the real target group.

1.2 Treatment System

1.2.1 Treatment System in the Health Center

DM treatment system in the health center consists of service arrangement in DM clinic and referring the DM patients to be treated at the hospital. The study

concluded that every health center had set up a DM clinic once a week. The services given to the patients were measuring body weight, blood pressure and height at the first visit (in some health centers), taking a blood sample from the peripheral finger for checking blood sugar (using blood strips), treating in accordance with the doctor's plan and giving drugs. The model of provincial determination followed these but the health education wasn't clear; it was only making suggestions to practice or inquire about the symptoms during service. For the DM patient referral to be treated at the hospital, the personnel in every health center couldn't perform in accordance with referral criteria although the blood sugar level in the patients was very low. The main causes were that the DM patients didn't assent to be treated at the hospital, and some of the responsible persons in the health centers couldn't remember these criteria.

1.2.2 Treatment System in the Hospital

The DM treatment system in the hospital consists of service arrangement in the DM clinic and referring DM patients to be treated at the health centers. The study concluded that every hospital had set up a DM clinic once or twice a week, depending on the number of the patients. There was one hospital that set up the DM clinic once a week although there were many patients. It solved the problem by making an appointment every three months for patients who could control blood sugar and had no complications. The services given to the patients were measuring body weight, blood pressure and height at the first visit (in some health centers), drawing blood for checking blood sugar from vein and serum, and ordering the patients to visit the doctor and providing the drugs. The steps of services would be different between the hospital conditions and the convenience of the staffs. The DM doctor's plan concluded that

every doctor's method of treating DM patients was the same, beginning from drug adding and reducing. The service arrangement in DM clinic was related to the model of provincial determination. But the patient referral to be treated at the health centers in a district wasn't under the same criteria because there were managerial problems in that district, namely there weren't any blood strips in the health centers. Furthermore, the nurses who work in DM clinic were too busy to write the referral form, although the patients met the criteria.

2. Support system

2.1 Medical and Medical Equipment Service

This study concluded that the health centers at every level had set the plan to ask for medical and medical equipment support. The health center level personnel would survey and calculate the urine and blood strip use each year. Then they sent the utilization plan to the person responsible for DM in the district health office. Next he/she wrote the project to ask for financial support from the health promotion budget (10%) for the province and submitted this to his/her boss respectively. After the project had been permitted, the person responsible for DM in the district health office coordinated with the hospital pharmacist in buying that equipment. After that, the person responsible for DM in the district health office requisitioned to keep in health centers and made the admit-offset registration. The health center level personnel offset from district health office and signed their names as given evidence. But in districts where the health promotion budget wasn't enough, the health center level personnel solved the problem by using health centers' revenue to buy needed equipment. Concerning DM drug requisitioning, the health center level personnel would requisition

drugs in accordance with the drug request form of the hospital. The pharmacy division was the drug stock of the health centers. The model of Medical and medical equipment supporting was followed the model of provincial determination.

2.2 Development of Health Personnel and VHVs' Potential

The study concluded that there was continuous development of responsible persons once a year. The direction of the development was not the same in each district. Some districts would hold academic meetings; others would tell the health center level personnel to make a case study of DM and bring it to a conference at the hospital. There were the doctors and the nurses serving as instructors. Most of the training contents were the knowledge of DM, DM caring and DM complications; it was followed provincial determination. Regarding knowledge of DM drugs, technique of checking blood sugar by blood strip and urine sugar by urine strip, there was no clear model of training. The main content to be taught to the VHVs was urine checking by urine strip and blood pressure measurement training for more service than providing the knowledge of academic DM.

2.3 Development of DM Information System

The study concluded that DM patient identification and DM cards were used continuously; the district level staff would arrange this by themselves. Concerning use of the DM central registry program, provincial level staff had already trained the responsible person. But after using it, there were many problems. Data reiteration could not be calculated and checked. This wasn't included in development of the DM information system. Now this program is being improved.

2.4 Supervision

This study concluded that the health personnel at every level (from province, district and tambon) were interested in and attended to supervise regularly at least once every year. It was followed the model of provincial determination. But the direction of health center level personnel supervising the VHVs was the only job monitoring and inquiring the problems of performance; it integrated with the other jobs.

3. Problems and Obstacles

3.1 Screening

- People didn't believe the VHVs.
- The VHVs lack morale and motivation; they didn't get any reward.
- The public relation about target group determination in the village was not specific.
- Most the screened people were not in target group.
- There were not enough urine strips (in some health centers).

3.2 Health Center Treatment System

- Modern blood strips could not be used with the old Glucometer.
- Technique of drawing blood was not sure during the changing of Glucometer.
- The health center level personnel couldn't perform in accordance with referral criteria

3.3 Hospital Treatment System

- The hospital was crowded with DM patients.

- DM treatment was not continuous because of the rotation of the doctors.
- There were no clear directions to refer the patients who had complications to be treated at the general hospital.
- There were not enough drugs for treatment (in one hospital).

3.4 The Other Problems : The staff in heath centers and health education support, were not enough. There was the rotation of the administrators and responsible personnel. Besides, the standard of urine strips and technical checking were different as well.

The responsible persons had suggestions for provincial level staff as follow:

1. Screening

1.1 Regarding public relations; most of VHVs agreed that if the health personnel themselves announced screening, it would be interesting and the target groups would understand and be screened in larger numbers.

1.2 If urine sugar is abnormal, the blood sugar should be checked in the community before referring the patients to confirm blood results at the hospital.

1.3 Blood strips should be bought from a company that has the same standard because it would be more reliable in checking urine.

2. Treatment

2.1 The criteria about referring the patients back to the community hospital and from the community hospital to the general hospital should be reviewed. It would be convenient for the staffs and suitable for the situation, especially the criteria to refer patients who had eye complications.

3. Material Support

3.1 The health education media and the direction poster of DM caring should be increasingly supported.

3.2 The provincial level should provide the directions about morale for the responsible personnel