

# **CHAPTER IV**

# **DISCUSSION AND CONCLUSION**

### 4.1 Discussion

Information system is important for a precise and evidence-based decisionmaking. Therefore, an appropriate information management would enable an efficient work or problem solving, and bring effectiveness. Nonetheless, an idealistic information management is difficult and takes a long time.

In Dokkamtai district, the public health information system has long been developed continuously aiming for an efficient information system, which responds to the public health care and service to all target groups. The development emphasizes on human resource as a center. Initially, the information system of a target group consists of 0 to 5 year-old children to develop a system that serves a lifetime.

Public health information system development is influential to the work of health workers. It is so important that concerned personnel should share the problem and learn to work together to head for an idealistic information system. Such system requires minimum tasks but bears high efficiency. To achieve, everyone has to be cooperating seriously. The top-down policy as a command that makes everyone work, produces minimum result and isn't sustainable. Thus, to participate in common problem solving by the concerned staff is the solution called "AIC" (Appreciation Influence Control) or the solution that "unites for the brighter future".

The result of the development, with participation of concerned parties in planning, implementing, creating, etc for information system development with humancentered emphasis e.g. the 0 to 5 year-old target group, is a personal recording system. The recording system has designed a framework of information that is simple to record and file, with continuity for a lifetime, an integrated all standardized basic services of a health center with family and social context. By the way, there was an analysis of the basic service activities and the analysis of information required. The requirement was for planning, monitoring, and evaluation of services and impacts.

For such personal recording system, the health worker would record information of services received by the target group both actively and passively. It can record integrated information including health promotion, prevention, care, and rehabilitation. However, although the recording system works well for individual information, it brings some difficulties when a holistic result evaluation is required because it needs a lot of effort and time. Information technology is needed and using computer in the collecting and processing is introduced. It can reduce time and increase accuracy. But the subsequent problem is the price of computer, an essential component, which is rather high and it is definitely demanding to buy one. Another problem is that the health workers are still familiar with manual recording in paper sheets. Changing to computerized recording needs a significant development of human resource capacity such as knowledge and skill on personal computer emphasizing the self-dependent trouble shooting. Nevertheless, with a common goal, the capacity building has been satisfying.

For data flow, health workers collected initial data by a survey together with local health volunteer. The data was collected and filed at health center. After each visit of patient, or field work of health worker, or information from health volunteer, the health worker would update and put in computer, for further data search and processing. The existing database is useful when some data is to be utilized, or being asked for by other organizations, and it is reported monthly to district health office.

### Limitations

- The beginning of implementation suffered from financial constraints, due to economic crisis. It had to spend economically according to the "good health at low cost" policy.
- Health center level database has to follow the provincial and the ministry framework. That limits the freedom of management.
- The rotation of health workers causes implementation distracted because new staff has to be trained for knowledge, understanding, and skill on database and computer, etc.
- Limited number of health worker at health center. During the initial stage it was an extra load for health workers who were also occupied with extra meetings and workshops, and this had affected the public health service to some extent.

#### Lessons learned

It was found that some health workers were capable enough for developing greatly the work of health center but still lacked of systematic working and skill in team work. Moreover, in terms of budget, only budget from the Ministry of Public Health was not adequate, local resources should be mobilized as well e.g. local community leader, village health volunteer, etc. For communication and equipment, the community-based organizations were so helpful. For example, they donated a computer set to health center, and the Tumbon Administration Organization and Health Volunteer Club supported budget. Therefore, if health center pays attention to the community and let the community participate in activities, all intervention should be smoothly implemented.

#### Strength and weakness of this project

#### Strengths

- All staff, both health workers and administrative personel in Tumbon and district level had participated in the project activities
- It was the holistic development, including input, process, and output
- Utilized existing organizational resources such as village health volunteers, health centers, district health offices, who had experience in public health database

### Weakness

- The project took a lot of time and budget
- It had to coordinate with various persons from the village to district and provincial levels, whose expectations and backgrounds were totally different

## 4.2 Conclusion

According to the continuously developed information system, the system could be considered relevant to the objectives i.e.

- It has information of the target group (0 5 year) individually both in traits and quantity aspect, which is utilizable in service planning for the target group e.g. vaccination, children health promotion, continuum care, etc.
- 2. The information could be used to follow up the outcome, assess the coverage of service, and quantity of service activity. It was found that the vaccination had higher coverage than that of the previous year.
- 3. The information could be continuously used for the target group from their birth to the present and could comprehensively collect information on health promotion, prevention, nursing care, and rehabilitation, which truly leads to the holistic care.
- 4. The obtained information can be analyzed and processed for other organizations as required or routine reporting more precisely and quickly. Previously, health center was assigned to submit report by the 5<sup>th</sup> of each month but few health centers could do so. After the system was improved, almost all health centers could submit it on time.
- 5. Database with information technology could greatly reduce workload of health workers. They could spend more time for care service.