

CHAPTER 4

DISCUSSION AND CONCLUSION

Discussion of the project and conclusion, are as the follows:

1. Discussion in 3 categories.
 1. Result of progress toward ministry of public health standards
 2. Health risk factors at Ban Chang Hospital
 3. Organizational behavior for development
2. Conclusion 2 categories.
 1. Occupation health service participatory development
 2. Concern with organization's theory

1. Discussion

1. Result of progress toward Ministry of Public Health standards. In order to develop occupational health service to the same standard, it's necessary to follow with 10 categories of service standard.

- 1.1 Organization and management
- 1.2 Information center for occupational health, toxics, occupational and environmental medicine.
- 1.3 Occupational health safety service in hospital.

- 1.4 Industrial hygiene service in hospital.
- 1.5 Occupational medical services for staff in hospital.
- 1.6 Occupational health services for working people.
- 1.7 Human resource development for occupational health, occupational and environmental medicine.
- 1.8 Educational services for occupational health.
- 1.9 Research and investigation in order to solve local problems.
- 1.10 Equipment for sampling of working environment and equipment for occupational health service.

From above categories 1.1-1.9 categories could separate into 102 activities. The evaluation and compare with the standard found that Ban Chang hospital could develop 84 activities or about 82.35%.

However there were 18 activities or 17.65% that need to be developed. They developed 17 activities of those (18 activities) or 94.44%.

Ban-Chang hospital provided equipment to survey environment from environment sampling and they also provided full set of equipment for patients. These showed that the hospital could reach the objective.

2. Health risk factor at Ban Chang Hospital. According to project development, the hospitals have some health risk factor. From occupational health examination for hospital staff, it found the following:

- 2.1 Hepatitis Virus type B and virus immune. There were total of 23 staff, and 11 staffs were found to be viral carriers (47.8%). There were 5 negative staff and without immune or 20.83%. The 7 staff were found to be normal.
- 2.2 Sight capability, examination on only group of staff who frequently use their eyes more than other such as group of staff who work with computer, driver. There were 78 staff and 34 staff (44.9%) were found to have positive eye problems: 25 staff with short sight, 5 staff with long sight, 2 staff with cataract, 1 problem with sight nerve from accident, and 1 staff problem from congenital.
- 2.3 Lung function. Lung function test was done with staff who work with chemical, x-ray laboratory, sanitation and disease prevention. None of them was found positive with the problem.
- 2.4 Hearing competency. Examination with risk group of staff such as sanitation staff, staff who work in central supply division and gardener. There were 8 staffs; 6 staffs were found to be positive with the problem (75%).
- 2.5 Stool examination for 4 staffs who work in kitchen. None of them was found positive with disease.

In conclusion, it was found that health problems of hospital staff need to be solved. Project development was a warning for other community hospitals to remind them about health of their staff. They need to take care of their staff, in order, to work more efficiently.

3. Organization development behavior.

Objective of occupational health service development in community hospital at industrial area, is to reach the standard. Organizational structure means process to reach the objective (Siriwan Sareerat and Associate, 1998). Result of organizational structure was a combination of leadership, persuasion, communication, teamwork, decision-making, objective, and controlling. Ban Chang hospital had current advantages as follows;

3.1 Leadership

- Chief of the hospital (director) educated staff in the hospital about specialty in occupational health service.
- Responsible for finalizing and writing logical policy on occupation health.
- 14 years experience in this position until 2001

3.2 Motivation

- Activities in the hospital such as sport, event festivals
- Golden certificate on Healthy Work Place from Department of Health
- Adapt occupational health service to use with nursing division in order to solve problem in the area. They had ability to assign staff to work and solve the problem.

3.3 Communication

- Communication between staff and radio broadcasting
- Case conference

- Occupational health, safety and workplace environment meeting with representative from every division
- Report system start from small group to all level of representatives- hospital management committee and occupational health, safety and workplace environmental committee.

3.4 Cooperation

- Service development - process by occupational health, safety and environmental committee in term are as follow:
- Vision - standard of work to cover all aspects with service in mind
- Mission, service standard with efficiency and continue work development
- Value - active teamwork
- Framework customer (patient, client), all working people
- Activity framework - to promote, protect, treat and rehabilitate at initial stage of disease
- Definition of Occupational Health Work related to take care of health to working people with the purpose of safety at work and healthy. Thus, they can enjoy living life.
- Organization Chart: Vertical and Horizontal

Vertical organization chart

There were 4 representatives in vertical organization chart with different categories of responsibility:

Division head

Division head has to manage and involves in decision making at medium stage with cooperation between internal and external matters. The head has to perform as main of occupational nurse.

The other 3 representatives:

1st representative performed as main representative in occupational health clinic.

2nd representative performed as main representative in occupational education.

3rd representative performed as main representative for information center and occupational education.

Each of them also has to work according to work assignment.

Horizontal organization chart

Chief of the hospital selected the occupational health, safety and workplace environmental committee of the hospital with 9 representatives from every division. Their regulations are as follows:

- a) Planning for occupational health, safety and workplace environment.
- b) Job evaluation for occupational health, safety and workplace environment.
- c) Risk factor monitoring on occupational health, safety and workplace environment. In order to find solution, information must be submitted to the hospital management committee.

- d) Occupational health and safety activities promote to all staff and stimulate them to participate in the activity.

3.5 Decision making

At Ban Chang hospital, they had set goal and controls in 4 categories:

- Chief of the hospital responded technical service and decision making according to level of management.
- Management committee of the hospital: supporting, internal and external cooperation, decision making.
- Occupational health, safety and environmental health committee: tried to reach project's goal by participating in planning policy.
- Vertical organization chart, it incorporates between internal and external matter. Chief of the hospital performed as vertical, where as occupational health, safety and environmental health committee performed as horizontal, as prescribe in the organization chart.

3.6 Effective goal

Achievement of development's goal was internal development from staff and group process.

2. Conclusion from the development

1. Participatory development of occupational health service, as the following:

(1) Training for subordinates on occupational health. The training used epidemiology concept to present situation of host, agent and environment.

- Host defined as staff of the hospital and working people

- Agent defined as hazard, such as noisy environment
 - Environment defined as work environment while they're working including physical, chemical, biological and psychological.
- (2) Delegation of authority. Occupational health work at the Ban-Chang Hospital was delegated from chief of the hospital. He set up the committee and head of sanitation and health promotion division performed as chief of the committee. Head of occupational health division performed as committee secretary. Representative from other divisions performed as member of the committee responsibility including work development and work report.
- (3) Clarity of plan. Occupational health development plan consisted of 2 plans: self-development (non-written) plans, and written plan, such as occupational health plan and budget.

Hospital service development was a participatory process. Occupational health, safety and environmental health committee approved plan by director of the hospital. The plan included rehearsal plan in case of emergency case, accident, and natural disaster, for staff to understand their rules.

In addition, the members of the committee were representatives from every division in the hospital, consequently they could distribute message of understanding to their staff more clearly.

- (4) Use of objective standard. Ministry of Public Health standards for occupational health services in community hospitals in industrial areas were initial objectives for project development. The standards were divided into 3 categories:

1. Management
 - a) Organization management
 - b) Information center for services and poison
 - c) Budget support for machine and equipment
 2. Service
 - a) Occupational health service in hospital (safety at workplace)
 - b) Industrial Hygiene education service in hospital (workplace environmental)
 - c) Occupational medicine for staff in hospital
 - d) Occupational medicine for working people
 3. Knowledge
 - a) Staff training aimed to educate and train for services
 - b) Occupational education service
 - c) Local problem investigation
- (5) Communication technology. Ban Chang hospital provide radio broadcast to use in emergency case and routine work. It had to be ready to use whenever it's emergency. As routine work, it broadcast news, information and education conference. Information advertised included notice board.
- (6) Variation by organization level. There was no indication for number of staff for occupational health service in Ban Chang hospital. However, there was a continual development of the occupational health especially for staff that needs to constantly develop their knowledge, by various means:

1. Internship for medical doctor in occupational health.
2. Educational tour for other government departments and education institutes.
3. Full circulation of services for emergency and regular cases.
4. Quality of service development such as health care accreditation.
The service aimed to satisfy patients' needs as the main point.
5. Development of healthy workplace.
6. According to constitution law, 1997 in Thailand, they wanted to distribute health service to all people in the country with the same standard and quality.
7. Health examination of staff in hospital for efficiency service.
Moreover, this can adapt to use with other patients.

2. Theoretical approach to organization design. Organization design by behavior, as Elton Mayo (Siriwan Sareerat and associate, 1998) stated, is organization management, which is stimulated by subordinate staff. Successful management is understanding and accepting conditions subordinate by management staff. The management is responsible for stimulation, leadership, and psychology. Ban Chang hospital management also used this methodology within their organization.

At Ban-Chang hospital, organization design used the 4th design of the Likert's System. It was a system of Rensis Likert, Director of Research Institute in University of Michigan. The research was aimed to cooperate organization design in 8 dimensions:

- Leadership
- Motivation
- Communication
- Interaction
- Goal Setting
- Decision Making
- Control
- Product efficiency

Likert used the research adapted for 4 forms:

1st form organization design according to culture and custom with clarity of formal authority.

2nd and 3rd forms emphasis on management and working between management and staffs.

4th form organization design for management and staff to trust and believe between them. So they can work together with stimulation system and use their talents according to the organization needs. This form was the most people wanted.

According to team development by changing attitude and behavior, also pilot project can be achieved to satisfy people needs better than individual development. Arun Raktham gives assumption, which are consisted of, (Arun Raktham, 1994)

1. People want to see their development within their organization. They always requested what the organization can offer/provide to them including value, glory and career development.

2. People gathering together into group of people, the efficiency of group occurs when all the members have full cooperation. This theory came from how we can change people behavior from competition to cooperation for the best benefit under limited resources.

3. Changing in sub-organization always affect the main organization. This is relation within the organization.

In order to drive system process and occupational health service development to reach objective, there are 2 main factors: human means of task and skill, organization behavior design such as job regulation, leadership, communication, motivation, vision, mission, goal, trust and participatory of staff in the organization for decision making in planning, controlling and evaluation.

Moreover, we expect continue development of the above factors as long as the organization survive.