



CHAPTER V

CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS

The research analyzes the needs and satisfaction of the consumer of diagnostic radiology of the community hospitals in Krabi. The interview process was used for the external customer while a questionnaire was used for the internal consumer. There were a total of 320 consumers during October 1-31, 2003. The SPSS 11 for Windows software program was used to collect the data. The measures used were frequency, percentage, average and standard deviation. The levels of the satisfaction and need were compared using Paired T-TEST at the level of 0.05.

1. Conclusions

External Consumer

1.1 General Information

The majority of the consumers were women, married and between the ages of 15-31, with the average age of 35. Most were Buddhist, graduating from primary school. The main occupation is agriculture with the average income of 7,800 Baht, with a mode of 6,500 Baht. Most of the patients used the 30 Baht hospital card.

1.2 Needs and satisfaction of the external consumer

The highest levels of needs was found in the category of consumer rights of the patient and x-ray service system. The next highest level of needs was the working methods, safety and environment. The highest satisfaction levels was found in the category of x-ray service system, followed by the consumer right of the patient. Working method , environment and safety also found levels of satisfaction at the high.

1.3 Comparison of the need and satisfaction of the x-ray system, working method, safety and environment and consumer rights of the patient.

The average score between the need and satisfaction for all categories was different at $p < 0.05$. The categories of working method, safety, environment and consumer rights of the patient showed the average score of needs was higher than the average score of satisfaction. The average score of the x-ray service system was equal at $p > 0.05$.

1.4 Details of the categories of x-ray service system, working methods, environment, safety and the consumer rights of the patient

It was found that the outcomes of the comparison of the level of needs and levels of satisfaction were different. It found that the average satisfaction score less than average needs and these items should be improve which are x-ray safety warning sign , information board , comfort in the x-ray room and fire warning sign , staff explanation of the x-ray process , pregnancy warning sign and comfort of changing room , waiting time from registration to receiving film and staff politeness in addressing customer and staff listening abilities.

Internal consumer

For this study the majority of the internal consumers were doctors, followed in number by nurses. The development and waiting time for film was found to be fast and on time. The film was free of defects, The average scores for both the needs and satisfaction for x-ray film quality was at the highest levels. The needs and satisfaction scores for the totals services system was also found to be at the highest level.

2. Discussions

The result of the study of the needs and satisfaction of the diagnostic radiology of the community hospitals in Krabi should be beneficial for reviewing the point of views of the consumer, the doctors, providers and the organization and management team.

2.1 General Information

The majority of the consumers were women with an average age of 35. Most were Buddhist with an education level of primary school. Agriculture was the main occupation with income levels between 5,001- 10,000 Baht. Most used the 30 Baht card and were outpatients.

2.2 Needs and satisfaction of external consumers

From the evaluation of the needs and satisfaction of external consumers, the categories of service activity and service behavior found the needs measurements at the highest levels. The consumer rights of patients and x-ray service system also found the needs levels at the highest rating. Working method, environment and safety were at the

next high level. These results are confirmed by Orem (1991,237), Lenninger (1988,5-6,12-13) and Wise (1995) and are referred by Boonyanuruk (1998, 89-90).The results of the work shows that providing the highest level of service allows the consumer to make the proper decision for the care or service needed. This is confirmed by K, Chang (1997,35) who said the interaction between the consumer and provider will create examples of weakness or problems of the health organization. The findings point to the importance of the organization to improve their service once the problems or weaknesses are determined. Satisfaction of the consumer ,The highest satisfaction levels was found in the categories of x-ray service system, followed by the consumer rights of the patient. Working method, environment and safety also found levels of satisfaction at the high to highest level. These high results in satisfaction showed that the overall service provided was of good quality.The highest level of satisfaction in the x-ray services system and consumer rights of the patient was confirmed by Chaipayom (1999,14) and Reuwattana (1999, 38) who found the satisfaction levels the highest when the consumer needs were fulfilled. The staff, doctors and providers are the main persons responsible for providing he service to the patient.

2.3 Comparison of the average scores of the needs and satisfaction separated by the categories of x-ray service system, working method, environment, safety and consumer rights of the patient.

After comparing the average scores, it was found that the highest levels for both needs and satisfaction were found in x-ray service system and the consumer rights of the patient. This signifies that even though the needs of the consumer are the greatest, the service levels in satisfaction derived are at the highest levels as well. However, the

management and providers should keep in mind, that even though the quality of service is high, it is necessary to continue to develop and improve working methods. The categories of working method, environment, safety and the consumer rights of the patient found the levels of needs and satisfaction at different levels within the high level of scores. The provider needs to adapt measures and continually monitor the service levels in these categories, to keep consumers satisfaction levels high. This is confirmed by Bower K. A (1996, 162) who stated that even at a high level of service quality, the consumer will continue to demand improved services. The management team and staff must continually find ways to improve service, as confirmed by Young W.B. et al. (1996, 15-20). Young points out that the staff and management should try to determine the customer's expectation and improve staff performance to those levels. The ability to discern the difference between the customers needs and the level of service available will allow the management to develop strategies to improve customer satisfaction. The study of the community hospitals in Krabi showed the levels of needs and satisfaction were different, so further detailed reviews are necessary to determine the reasons for these differences and to improve service where necessary.

2.4 Comparison of the average scores of needs and satisfaction of x-ray service system, working method, environment, safety and consumer rights of the patient separated by category.

The results showed the comparison of the needs and satisfaction levels found some to be similar, while others were at different levels.

2.4.1 X-ray service

The customer needs for the explanation of the x-ray process by the staff is at the highest level. However, the customer satisfaction of the service provided was only at the high level. The following categories found the need and satisfaction scores at similar levels. The waiting time from registration to receiving the film process found both needs and satisfaction at the high level. The level of courteousness and fairness in service of customers by the provider also were at the same highest level in needs and satisfaction. The polite addressing of the customer by the staff found both the customer needs and satisfaction at the high level. On the other hand there were several categories with different levels. The listening ability of the provider was found to have different levels of customer needs and satisfaction. The needs level was at the highest level while the consumer satisfaction was only at the high level. The results of this study show the levels of needs are at a high level, which means the x-ray service system should continue to strive to improve the level of service, using the consumer as the focal point.

2.4.2 Working method, environment, safety

The average scores between the needs and satisfaction of the customer are at different levels for this group as the needs are at a high level. The category of comfort in the x-ray room found both customer needs and satisfaction at the high level. The fire warning sign and x-ray safety sign found needs in the highest level but satisfaction at the high level. These results showed the need to improve service quality and efficiency in the workplace. The management needs to provide support and advise to the provider to achieve these results.

The average score of the needs and satisfaction are similar, but the actual score of needs is less than satisfaction. The cleanliness of the x-ray room falls into this score as the rooms are usually cleaned before the customer arrives, thus the satisfaction levels are higher. However, it is important for the staff to maintain these high standards. The quality of the x-ray film and the efficient use of the film (no defects) found the customer needs and satisfaction at the highest level.

2.4.3 Consumer rights of the patient

The overall results showed the customer scores for needs and satisfaction to be different. The average score of customer needs was found to be higher than satisfaction. The levels of needs and satisfaction was in the highest level for the category of the customer receiving enough information to make a decision about service. This high level shows the importance of the provider interacting with the customer to exchange information so the customer can make the correct decision about service.

The right of the customer to know the name of the providers category found the needs to be in the highest level with the customer satisfaction only at the high level. The right of doctor/patient secrecy found the needs and satisfaction levels at a high level. The results show the customer is satisfied, but the service can be improved through the continued development of service. The fairness in servicing customer category found both needs and satisfaction at the highest level. The provider has accomplished their objective in this category. The right to be included in the research found both levels of need and satisfaction at the high level. The provider should give the customer all the details of the interview and research process for the consumer to

make a decision. Overall , the average scores can be summarized as follows: where the customer satisfaction is less than the needs, the provider needs to make improvements in the service for that category. Where satisfaction is greater than the needs, the provider should examine why the satisfaction is so high, and whether the service is necessary at that level. Where the customer needs and satisfaction levels are similar, x-ray service system, working method, environment, safety and the rights of the patient, further detailed examination is necessary to insure that a high level of service is maintained. This is confirmed by Boonyanuruk (1995,4-6) (1998, 89-90) and Hirunnoot (1998, 20-21) who found if the overall consumer needs are greater than the satisfaction than the standard of quality is insufficient.

Internal Consumer

Internal consumers are doctors, nurses, x-ray reader, and working staff in the x-ray room.

1. The needs and satisfaction of the internal consumer of the category of quality of film that the doctors and film readers receive is at he high level. This research is not confirmed by the research of Chaipayom (1999, 14) and Reuwattanna (1999, 38) The difference may result from the doctor and reader not understanding the questionnaire and this area needs to be re-evaluated.
2. Overall x-ray service system

The needs and satisfaction for this category is in the highest level, possibly because of the small population of the internal consumer.

3. Recommendations

For the research

From this study, it would be benefit to x-ray service, however some part in this research should be improve, the items as follow

1. Add the description of suggestions in each activities.
2. Should be study in emergency group, accident which can interview with their spouse.
3. Should be study the needs and satisfaction with the diagnostic radiology staff.
4. Should be repeat study 4 times per years.
5. Should be assess between inpatient and out-patient needs and satisfaction. It will benefit to improve, core service activity, plan service and support service.

For intervention

1. The provider may have to change certain behaviors in their service through additional training in customer interaction and using the customer as the focal point of the organization's service. And the service should be improve are x-ray safety warning sign , information board , comfort in the x-ray room and fire warning sign , staff explanation of the x-ray process , pregnancy warning sign and comfort of changing room , waiting time from registration to receiving film and staff politeness in addressing customer and staff listening abilities respectively.

2. The management team must insure the comfort levels of the environment are high and be an active consultant for the staff in such areas as cleanliness and comfort of the x-ray room. A second example is the separation of the changing room from the toilet. A third suggestion concerns the waiting times. Most community hospitals only have one staff assigned to the x-ray room, so waiting times can be lengthy. During periods of heavy use, the staff must make extra efforts to insure fairness of service. Management should also pay attention to the maintenance and quality of the x-ray equipment. Higher standard of equipment are more efficient and produce a higher quality film.