CHAPTER V



CONCLUSIONS, DISCUSSIONS, AND RECOMMENDATIONS

There are four parts included in this chapter:

- 1. Conclusions
- 2. Discussions
 - 2.1 The customer's perception of quality of service
 - 2.2 The customer's satisfaction
- 3. Association between quality of service and satisfaction
- 4. Recommendations

1. Conclusions

Cross-sectional explanatory research was done at Bamrasnaradura Institute during the period of January 21 through February 20, 2003. A self-administered questionnaire was developed and used as the tool of the data collection. Reliability test of the questionnaire was done among 30 respondents at Bangrouy Hospital. The result, using Cronbach's Alpha Coefficient, was .88 for quality of service and .93 for satisfaction. Accidental (non-probability) sampling was used to select the 400 participants. The participants administered the questionnaire by themselves, but the instructor was needed to observe that all questions were completed and accounted for. The objectives were answered by using descriptive statistic for the quality of service and using Pearson Correlation Coefficient to determine the relationship between quality of service and the customers' satisfaction. The results are as follow.

The majority of the participants who took part in this study were female, and in the age groups of 15-30 and 31-45, with exactly the same percentage of 39.8%. The educational level with the highest percentage was a Bachelor's Degree at 27.5%. The largest occupational sector was self-employed at 21.3%. The highest income

rate, 21.3%, was 10,001-30,000 Baht per month. The majority of visit was three times or more with 74.3%.

The customer's perception is one aspect of quality. To answer the research question and objectives, the aim of the study was to describe how customer perceives the service offer made by OPD Med. A brief result of the study is as follow:

- The level of quality of care and customer satisfaction in OPD Med, Bamrasnaradura Institute was moderate.
- 1. The association between the customer perception in quality of services and satisfaction is significant (p<0.05) in a positive direction from moderate to strong (r = .497 to .631).

Detailed results are in Chapter IV.

2. Discussions

Cross sectional research was appropriate to use in this study, since it was descriptive research that developed in this current period of time. It can be used to help understand the condition of health care services and the level of customer satisfaction towards this condition. The time period used for collecting data could be anytime, since this department provides the same kind of services for medical health problems year round.

A self-administered questionnaire was appropriate to use, since the number of subjects in this study was high when compared to the time and money allocated for the research. The reliability test should not be conducted twice at the same hospital; it should be retested at the real setting of the study. However, this questionnaire can be trusted because it had a high reliability level, on quality of services was .88 and the satisfaction level was .93 when tested as explained previously.

The majority of the participants who took part in this study were female, similar to the study of Chaipayom (1999). It may be because females have a higher awareness in health seeking behavior. The majority of the subjects who visited the OPD Med were in the age groups of 15-30 and 31-45, and they had the exact same percentages of 39.8%. The educational level with the highest percentage was a Bachelor's Degree with 27.5%, and showed that the general educational level of the subjects was moderate to high. The largest occupational area was the self-employed at 21.3%. The highest income rate was 10,001-30,000 Baht per month at 21.3%. Seemingly, there was a contrast between their occupation and income, but it may be that their educational level was high and they may have had another job to supplement their income. The majority of visit was three times or more with 74.3%. This may be because this group of participants had appointments for further treatment or maybe the customers trusted the services at this health care center.

Two parts of discussion are concerned with the following

- 2.1 The customer's perception of quality of service
 - 2.1.1 Customer perception of clinic milieu
 - 2.1.2 Customer perception of staff competence
 - 2.1.3 Customer perceptions of personal interest of health care provider
- 2.2 The customer's satisfaction
 - 2.2.1 The Registration Room
 - 2.2.2 The Screening Center
 - 2.2.3 The Examination Room

2.2.4 The Pharmaceutical Room

2.1 Customer Perception of Quality of Service

In this study, the customer's perception of quality of service was measured in three aspects: clinic milieu, staff competence, and personal interest. The result of this study showed that the customer's perceived quality of service in each section of the OPD Med to be moderate. Among the respondents, 63.5% were satisfied with appropriate clinic environment, 59.2% with the competence of the staff, and 56.0% with the personal interest of the staff towards them. However, there might be two reasons to consider whether the results reflect the real perception of the subjects. Firstly, each individual interpretation of the questionnaire may have been different (Berry et al, 1985, cited in Edvardson and others, 1994: 102). The study indicated that the customer has different background and expectation. Therefore, personal perception in quality of services can be different accordingly. Lastly, Hawthorne effect (Clark, 1999) might come into play here because the Institute had assisted in data collection by circulating a memo to all involved sections and personnel. This includes informing the staff of the survey and requesting them to give the best of service to the patient during this time. Therefore the staff behaviors may be changed during the survey period.

2.1.1 Customer Perception of Clinic Milieu

The respondents rated cleanliness of this clinic as highest quality. It could be because of three reasons. Firstly, this Institute provides care mainly for communicable disease patients. Therefore, all staff are particularly clean, either by nature or by training and supervision. Secondly, all health care staff at the Institute has worked here for years, and they hand over tradition of being clean. Lastly, this OPD

hired a private company to clean all areas, and to keep it clean at all times. Therefore, it should not come up as a surprise that customer perceived that all sections were cleaned.

2.1.2 Customer Perception of Staff Competence

Customer, 31.3%, rated strongly agreed with staff competence and none of the respondents strongly disagreed. This may be because the doctor exudes confident when dealing with the patients. This finding agree with the study of Zeithaml, Parasuraman, and Berry (1990) that if the customers met their expectation to perceive the doctor's abilities in the practical treatment of diseases they might rated that they perceived high quality of service. In additional, 74.3% of the patients who visited this section had been there three times or more. Therefore, past experience of using these services caused them to be familiar with the doctors and they are confident that the doctors are excellent health care providers. From this result, it is clear that the doctors play an important role in patient satisfaction. This group of respondents would then share the satisfaction of their health care experience with other people by word-of-mouth.

2.1.3 Customer Perception of Personal Interest of Health Care Provider

When comparing among the three components, personal interest of the staff provided to all customers ranks the highest quality level. The highest quality of this personal interest is intention to listen while the patient trying to tell them about their problems. From the background of this study, Bamrasnaradura Institute provides care for communicable disease people, apart from non-communicable disease, patients perceive that the health care provider should pay attention and not leave them out. Personal interest takes an important role to ensure that the patient who visited will be supported.

Even if the Institute would have liked the customer to rate the quality at high level, however the result showed that quality in the customer's perception was at moderate level. As a nurse at this Institute of the researcher, the result appeared to be accurate. The factors that may have contributed positively to this rating were mentioned above (2.1.1, 2.1.2, and 2.1.3). For negative effects, there are at least three important factors; first, the length of waiting time for services in all section is too long, especially waiting for the doctor. For example, one person spent 510 minuets altogether for that visit to the Institute. The second factor could have been the unfriendliness of the staff. The last one is lack of co-ordination among service sections, even low percentage at 2.3%, which seem small considering 400 subjects. However, this means dissatisfaction still existed and may cause greater problem in the future.

2.2. The Customer's Satisfaction

As far as overall customer satisfaction, the subjects rated the level of this variable at moderate. Most of the respondents, 68.5%, were satisfied with the convenience and 61.3% with the staff's courtesy. Satisfaction with the coordination of health care services was at 57.5% and 54.5% for the medical information provide. Customer perception of the convenience of health care services agreed with Chaipayom (1999) the study found a moderate level with 68.5%. This may be because they did not need to wait to carry their history file after they registered. They were referred to the next step of services and the staff of the OPD will carry the patient's file for them. However, 2.8% of the respondents still rated convenience in this section as low level. Even though the percentage is low considering there were 400 subjects who participated, the Institute needs to consider improving the following problem. First of all, the length of waiting time was unaccepted at all sections (the Registration, the Screening Center, the Examining Room, and the Pharmaceutical Room). These may be because the doctors

had to finish visiting inpatients before they examine outpatient department. The problem of shortage of health care staff agrees with Donabedian (1980) and Newbrander (1997) findings that this factor can cause difficulty in maintaining professional standards of care. Nowadays, the crisis of shortage of health care providers is one problem that concerns all health care setting. One strategy to solve the problem of long waiting time is to set up earlier doctor's visiting hour at 8:00 am for the patients who have appointments.

The level of satisfaction regarding staff courtesy was also moderate. This is because the Institute provides a helpful staff and prefers to provide care with the outpatient's visits. The staff was professionally trained to care for outpatients and was rotated to many outpatient sections. However, 4.0% of the participants thought that the courtesy of the health care provider was low. That may be because there were many patient who visited the OPD Med and they had different ideas and perceptions of quality. The customer will not be satisfied if their expectation were too great, even if the Institute has good services, (Edvasson and others, 1994). Another reasons may be because some of the staff is moody while providing care, especially the Pharmaceutical Room that received a dissatisfaction level of 5.5%. The results agreed with the studies of Aday and Andersen (1978) that each and every patient wants to be recognized as an important person.

As for coordination, customer were most satisfaction that they can get all their needs met in one place at this OPD Med. Percentage of the participants who were satisfied with this factor was 40.0%. When we look at each service section, the Registration Room was satisfied with at the highest level (20.5%). For example, a patient with an incomplete record instead of having to go back to the previous station, a nurse will assist him or her in obtaining the missing information.

The level of satisfaction in medical information was rated as moderate and high levels with 54.5% and 43.5%, respectively. The OPD Med provides the necessary medical information, such as, the doctors and nurses giving them information on how to take care of themselves when they were sick. This will make the patient feel satisfied that the health care staff is concerned about their health. Therefore, even the doctor's visiting time was late, but the doctor allowed the patient to ask question and was willing to answer and elaborate. This was shown as 64.3% rated in one of the item, understanding of medical information.

Several determinants appeared to have influenced its satisfaction in health care services. Socio-demographics (age, educational level, and gender) of the subjects agreed with the studies of Lovdon and Bitta (1990). Older customers tend to have lower expectations, and be satisfied more easily. However, most of the subjects of this study were in lower age group (between 15 and 45 years old), therefore, their expectation may have been greater than what they received. The educational level of the majority of the participants was a Bachelor's degree; this indicated a high level of education. Also, this variable indicated that they tended to have lower satisfaction in the services that they received, as Lovdon and Bitta mentioned. The last factor that may be influential was gender. Female tends to expect higher quality. In this study, 51.5% were female; their rating may affect the level of satisfaction. Consequently, the health care setting, the providers, and the environment were influential in forming a judgment on the satisfaction of the services.

The detailed results of the four departments that the customers had contacted with, the Registration Room, the Screening Center, the Examination Room, and the Pharmaceutical Room, are as follow.

2.2.1 The Registration Room

The level of customer satisfaction at this unit was moderate. They were very satisfied with the accurate recording of their history, and the clear and easy to understand notices in the registration room had the same rate of 21.3%. Most of them were satisfied with correctly recording the patient's history at 69.3%, while the satisfaction level of clear and understandable information of notices in the registration room was 65.5%, and the waiting time ran the lower rate of 57.8%. Organization of the front desk services at the Registration Room is essential to maintain the good name and to be well known for health care services at this institute. Therefore, it should be considered; for example, waiting time, because the patient might not satisfied in service quality if they have to waiting in line while they feel sick. The other is in part of the staff did not smile while talking or having contact with the patient. Those mentioned should be considered to make it better, in the eyes of the patient.

2.2.2 The Screening Center

The customer's satisfaction towards the Screening Center was moderate for all the four dimensions, convenience, staff courtesy, coordination of service, and medical information. Coordination ranked the highest with the satisfaction level of 70.8% concerning the sending of messages to others sections, followed by the convenience of the physical examination, rated at 66.0%, the same as giving the results of the vital signs to the patient. Courtesy of staff, both willingly and confidently when providing care, received 21.8% in the level of very satisfied. Percentage of the customer who was dissatisfied with the waiting time was 25.0% while 3.11% rated the level of "very dissatisfied".

2.2.3 The Examination Room

The Examination Room provides nine rooms for the patients. The area is connected to the Pharmaceutical Room. After visiting the Screening Center, patients who have medical health problems will be referred to this section. The result from this study shows that the patient was very satisfied towards the role of the doctor who provided instructions and explanations, so 31.5% of the respondent was impressed with this factor. The courteous manner of the doctor also received a very satisfied rate of 29.5%. At the same time, the personal respect that the doctors had led to a satisfaction level of 69.0%. The convenience of this section had a satisfaction level of 66.3%. On the level of dissatisfied, most of the participants answered that they spent too much time waiting for service 35.3%. And the lowest level was adequate seating and other equipment, with the same rate of 2.8%. After the long process from the previous sections, when they arrived at the Examining Room, the patient was faced with another long wait for the doctor. Considering that they did not feel well with their health problem could have caused them to feel bad about services of this section. However, when they met the doctor, their bad feelings became better with the competence of the doctor and his or her courteous manner. Doctors, therefore play critical role in patient satisfaction.

There are two suggestions for improving customer satisfaction. One is that the doctor would visit the patient earlier than at present. The other is to device up strategies that would decrease tension among anxious people. These include: providing them with entertainment TV program, a relax area for seating, instead of fix rows that makes it difficult to move and the closeness to other patient that makes them worry about the transmission of the disease might help each some dissatisfaction.

2.2.4 The Pharmaceutical Room

The last section which the respondents visited after they met the doctors was the Pharmaceutical service. When considering the level of very satisfied, this section received the highest level in complete and correctly labeled medical packages at 27.3%. Explanation on how to use the medicine had the highest satisfied participants with 68.3%, the same as coordination of services in the Pharmaceutical Room. Dissatisfied level of most participants, 32.3% agreed that they took too much time. Like the level of the very dissatisfied, 9.3%, most of the dissatisfaction was towards long waiting time.

When considering total time taken to visit all sections, it is remarkable that the Pharmaceutical Room got the most sympathy. The patients leave their home early in the morning and spent time waiting in the sections they contacted. By noon, some of them may not yet have breakfast, and they probably are hungry or uncomfortable with their health problem. The feeling of dissatisfaction easily occurs. To decrease this situation, the Pharmaceutical Room should have impressive service. From the result of this study, it can be observed that what the patient did not like most about the staff was they were unenthusiastic, bad manners, using impolite words and did not pay attention to the patient while serving care. Then, considering how to improve this service may be helpful for health care services and its satisfaction.

3. Association Between Quality of Service and Satisfaction

All of the relationships were significant (p<0.05) in a positive direction, but were not very strong (r<. 8). The association supports the previous findings that both quality of services and customer satisfaction were rated at moderate level. The relationship between quality in customer perception and satisfaction will shows as follows.

Convenience was tested and the result showed a significant positive relationship (r = .601, .617, .631 and p < .05). This result agrees with the customer's satisfaction that 68.5% was rated in moderate level, the most strongly relationship was the personal interest.

Courtesy of staff also has positive direction and significant (r= .567, .601, .626, p<. 05), the same as 61.3% of the respondents rated their satisfaction with moderate level. The same as convenience, factors of which influenced courtesy staff was the personal interest.

The third, coordination and quality of care show the significant correlation (p<. 05). The strong coordination of all department or its services caused the high of their satisfaction. The correlation between them is r = .519, .613, .623 and p< .05. This also agrees with their satisfaction that in moderate level.

The last, medical information was correlated with clinic milieu, staff competence, and personal interest of the OPD Med. The relationship among them was in positive direction (r = .497, .591, .620 and p< .05). When look at the satisfaction level, most of the customer, 54.5%, were moderately satisfied.

From this study, all variables of quality of service and customer satisfaction of the OPD Med, Bamrasnaradura Institute, showed significance in the positive directions. Therefore quality of service took an important role influence the satisfaction level. Health care providers and the organization management will be considered. Personal interest got the highest relationship between health care staff and the customer satisfaction. Therefore, as they are the main resources of health care service, the patients may use to predict how well or bad of its quality.

4. Recommendations

There are two major recommendations included in this study: one for the OPD Med, Bamrasnaradura Institute and another one for future studies.

4.1 The Recommendations for the OPD Med, Bamrasnaradura Institute

As previous mentioned that the Institute implemented a policy to improve quality of service by using TQM, QC and HA. The customer was informed that this Institute was certificated the standard of service with ISO 9002. By looking at the results obtained from the questionnaire, the researcher would like to recommend some changes that should be made at the OPD Med, Bamrasnaradura Institute, such as policy implementing, supervision, and skill improvement.

4.1.1 Policy Implementing

- 4.1.1.1 Maintain the good service that met the customer's perception for example, carry the patient file by nurse aid, keep clean in all areas, and assist a patient with an incomplete record instead of having to go back to the previous station, a nurse will him or her in obtaining the missing information.
- 4.1.1.2 Improving of waiting time that is too long. The doctor should be more considerate of the patients who are waiting. Earlier visit of OPD clinic, as has previously been the practice, should be practiced.
- 4.1.1.3 Improve staff friendliness. The nurses and other staff who provide preliminary services should be trained to

be more friendly and having comforting words whenever talking with the patient

- 4.1.1.4 Improve the information or notices of the services by making them clearer and more understandable signs, especially at the Registration Center and the Pharmaceutical Room.
- 4.1.1.5 Assure standard of quality of service by designing and implementing of standard guidelines that are suitable for all employees. The guidelines should address all possible situations.
- 4.1.1.6 Improve the waiting areas to be more pleasurable, for example, should be supplied with TV, chairs that is nice to sit, and current reading materials for people to use while waiting.
- 4.1.1.7 Decrease any activities that cause confusion to the patient by making agreement, between service sections, for example the Examining Room and the Pharmaceutical Room when using the microphone to call the patient.

4.1.2 Supervision

- 4.1.2.1 Increase the opportunity of the organization to be the winner in competition among health care service by supervision and training the staff to improve their professionalism in customer care.
 - 4.1.2.2 Maintain the team and Work Instruction (WI) strategies that were set for quality control, using spot-checking technique during the operating hours in all area of service.

4.1.2.3 Improve or maintain the best services to overcome the composition by consider having a yearly survey in quality of services in measuring the customer satisfaction.

4.1.3. Skills improvement

- 4.1.3.1 Maintain training program for all staff, such as Universal Precautions (UP), Excellent Service Behavior (ESB), Counseling, and Interpersonal Communication.
- 4.1.3.2 Maintain training program in Emergency care or Screening technique.

Summarizing the report and submitting it to the Administrator of the Institute will address the results that were established in this study. For the continuation of quality improvements, a systematic approach needs to be taken to address the problems involved in customer care.

4.2 Recommendations for Future Studies

- 4.2.1 Quality of care should be measured from all aspects: perspective of the provider, the organization, and the patient. It may be helpful to health care services if the next study gathers the data from the three above-mentioned aspects.
- 4.2.2 The study should consider the quality of service and satisfaction of the patient to include the 30 Baht scheme.
- 4.2.3 The study should be applied to the Inpatient Department as well, by considering the appropriate variables, for example equity of service.

- 4.2.4 The study should be conducted in all department of this Institute for completion and comparison.
- 4.2.5 The study should be conducted at the OPD of a different hospital to compare the results with this study's results of the OPD at Bamrasnaradura Institute.