CHAPTER II



LITERATURE REVIEW

Concepts and Theories

The researcher reviewed materials available from books, magazines, articles and reports on the subject of the needs and satisfaction levels of Diagnostic Radiology consumers in community hospitals in Krabi

1. Consumer Needs

- **1.1 The meaning of need** (Maslow,1970: 24-59) There are five levels of need as follows
 - 1.1.1 Physiological needs such as food, water, body functions which are the basic needs that come before all others.
 - 1.1.2 Safety and Security needs both physiological and psychological. The needs of not only of a safe environment but the good feeling of safety.
 - 1.1.3 Love and Belonging needs is the next level above safety and concerns the good feelings from strong and positive relationships with individuals and groups.
 - 1.1.4 Esteem Needs comes from the feeling that one is valued and important from friends and other in the social arena.

1.1.5 The need of Self-Actualization – is the Need to fulfill one's potential. This is the highest need to attain happiness in life (Maslow cited in Taylor, Lillis & Lemone, 1993:103)

1.2 Consumer need concept

1.2.1 Lenninger Theory of consumer needs

Lenninger said the basic needs of the human in each culture are different, Accordingly the service of those needs will be different, as the individuals in each culture will specify their particular needs for care, and more specifically health care. The care concept means help or support for individuals or groups in need of something to improve their status in life including value judgments, and beliefs contained in a culture. (Culture care) (Lenninger, 1988:5-6,12-13)

1.2.2 Wise Theory of needs

Wise theory looks at patient care management and the elements necessary to provide satisfactory care. He mentions communication, information and relaying knowledge to the consumer as important to providing good care. He notes seven areas that the care management team must focus on.

- 1. Values and preferences of the consumer, expressed needs.
- 2. All functions that are interrelated and linked must be given the proper attention to provide a high level of service.
- 3. The consumer and family should receive the data and information in a timely manner. With the proper

- 4. The physical comfort needs of the patient are important to provide a familiar and comfortable environment such as at home. The management team should be aware of this need for patient comfort.
- 5. The management team should be cognizant of the worries and fears of the patient and their family. So they should provide information and proper consultation so the patient has a full understanding of their condition and give a feeling of confidence in the service.
- The family and relatives of the patient should be provided with proper service as they will often be part of the decision making process
- 7. Health treatment should include hospital after care to continue care after the consumer has returned home.
- Conclusion of Wise Theory The providing of proper and efficient information to the consumer and continuous care are important to mixed health treatment service.

1.2.3 Orem Theory

(1991:237) *Orem* believes the consumer has the right to know their health status to make their own decision. Self-Care means one is independent in determining their needs which are supplied by the health care provider. The

environment of the health care provider and the ultimate health status will influence the consumer's needs.

The conclusion of all these theories sees the consumer as the final determinant as to the health care provided. However, not all consumers have the same level of decision making ability of understanding of health care. Differences in beliefs, culture and the environment will impact the needs of the consumer. These theories attempt to provide a framework for examining the physical, psychological and social needs in a consistent manner.

2. Consumer Satisfaction

2.1 The meaning of satisfaction

Satisfaction means contentment, gratification, pride and fulfillment. Satisfaction is the positive feeling when the consumer receives good service that fulfills their need (Chaipayom,1999:14) Satisfaction comes from the feeling when the person receives the response that they require. That level of satisfaction can decrease if that need does not bring about the required response (Rewwattana, 1999:38)

2.2 Consumer satisfaction concept

Ware & et al. discusses consumer satisfaction being related to the level of care, high standards of techniques, patient comfort, financial concerns, the physical environment, readiness of the provider, after-care and the effectiveness of service (Ware J.E. et al., 1978:12) Brone (1992 cited in Kuptanon, 1996:16) said the meaning of consumer satisfaction is related to the quality of health care service and the positive

feeling that is generated after a good experience. This good experience occurs when the consumers expectations and needs are met and their evaluation of the service is positive.

The study of *Avis M. & et. al.* discusses the topic of when is satisfaction reached. This topic has not been satisfactorily answered as to the exact measurement of satisfaction of the patient However, once the concept is adapted with the patient being the focal point of the service then it will be easier to devise a measurement tool. Studies show the consumer does have the chance to provide feedback. (Avis M. et al., 1995:316-322) also 1995 Larrabee.

Larrabee presented the strategy for consumer to increase their participation in planning and evaluation. This would result in increased consumer satisfaction and be a measurement tool of quality health care services (Larrabee, 1995:8-15)

Oxler's study showed that the solving of customers complaints results in customer satisfaction. Complaints arise from the customer not receiving a positive response to their needs. At every level of the organization from the head of the department to the customer provider, everyone needs to study and contribute to the understanding of what the consumer needs (Oxler K.F., 1997:27-34) Consumer participation in planning and evaluation is important and necessary to achieve customer satisfaction as confirmed by Chang who found that consumer feed back helped the health care organization learn their strengths and weaknesses in care service (Chang K.,

1997:35)

Aday & Anderson ,1971 cited in Purtchongruk ,1995:56-57 there are six are basic types related to consumer satisfaction in health care service. The nurse is the one to support and help the consumer

- 1. Convenience
 - In terms of waiting times for service
 - Availability of care taking when needed
 - Comfort levels of the environment
- 2. Coordination
 - Access to all the types of service needed
 - Doctors interest in the physical and psychological health of the patient
 - Doctor follows up of the condition of the patient
- 3. Courtesy
 - The provider should be polite and pay close attention to the patient
- 4. Medical Information
- 5. Quality of care
 - Can be determined by the attitude of the consumer
- 6. Out of pocket cost
 - Expenses that the consumer must pay themselves

3. Diagnostic Radiology Service

3.1 The meaning and importance of radiology diagnostic service

Diagnostic Radiology Service includes general x-ray service, secondly recording different parts of the body of the patient by x-ray. X-rays are used in the normal techniques, for complicated cases specialized techniques including chemical and color bodily injection are used. Thirdly, the Diagnostic Radiology Service reviews the film quality before sending to the doctor.

In 1995, the 100 year anniversary of the discovery of the x-ray by Roengten, is an important day in medical history. In Thailand, all the clinics and nursing home, both government and private, make use of this radiology tool for health maintenance. Although it is in wide use throughout, there is no system for the quality control, for the x-ray machine and dark room. Overuse of x-ray is dangerous to the human body, as well as improper as long term use. Dangers also arise from misuse by staff without proper knowledge of x-ray safety.

Quality Assurance of Diagnostic Radiology Service is one way to reduce the risk of the dangers of x-ray, This also can extend the life of the machinery and improve the efficiency of the equipment such as the dark room facilities, x-ray machine, and Ultrasound CT MRI Machinery. Film quality is consistent (improving patient diagnosis) and all of these factors help reduce budget outlays

At the same time as the quality assurance is being implemented, the consumers' needs and satisfaction levels are determined to develop a working system.

The cycle of x-ray services consists the provider and the consumer. The provider includes the physician, nurse radiologist and other related staff for all the methods x-ray, computer x-ray ultrasound etc. (show Figure 2. : Suriyachaiyakorn ,J. et al. ,1996) The cycle starts with the request from the doctor's to the x-ray room, in some cases these will be additional details. The technician must follow the correct procedures for the use of the machinery and any other equipment used. Once the film has developed at the highest quality, it is sent for diagnosis to the doctor, with a standard quality image, the doctor can make an accurate and timely diagnosis.

Through this process the staff can study, research, experiment and improve the techniques and efficiency of diagnostic radiology

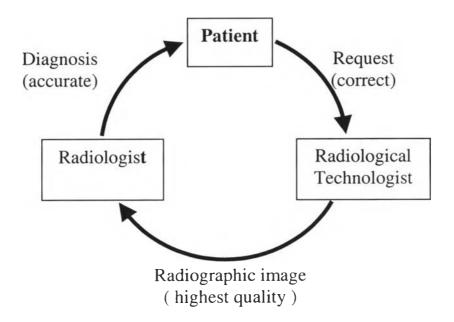


Figure 2 : Cycle of X-Ray Service