CHAPTER 2

ESSAY ON PATIENTS' SATISFACTION AND SERVICES QUALITY ASSESSMENT

2.1 Background

Chulalongkorn Hospital, a major medical school in Thailand, started its OHC in May 1995. It followed government policy which encourage the hospitals to open OHC as a part of re-engineering process. The main idea behind it is to make health care services more convenient and accessible to the people. The objectives of OHC according to the government policy was to make health care services available to people in the evening (after office hours) as they can earn their living during day time. It can also generate some income for the hospital and the staff while benefiting the patients, and reduce the brain drain from the public to the private sector in the health care system. According to the government policy, 25% of the public hospitals should have opened their OHC in 1993. The visit for each patient should take less than one hour, and the revenue generated should be sufficient to operate the OHC including staff payment. (MoPH policy, 1992)

The MoPH sets guidelines for the OHC, such as, amount of payment to the staff, service hours, and resources, but individual hospitals should consider to open OHC only if there is adequate manpower, at least 200 OPD patients per day and allocation of clear cut job descriptions and responsibilities to the staff in running OHC.

In developing an out patient department, the hospital mission is to provide the highest quality outpatient service to the patients within the resources available. An OHC is an innovative program for public hospital. The public health mission is to approach in privatization of services within a public setting and the main strategy is to emphasis accessibility to public health services with convenience and more availability.

As a result, according to MoPH policy, the Chulalongkorn Hospital in-cooperate with the Faculty of Medicine, Chulalongkorn University have the mandate to implement an OHC based on the following assumptions: (1) the needs of clients to have greater access to medical consultation after office hours, (2) the need to improve the position of the hospital on the market, (3) the need for better utilization of investments and equipment, (4) the need to reduce or stop the brain drain to the private sector, and (5) the wish of medical staff to avoid the traffic problem in earning additional income.

The scope of services include (1) a specialized clinic, with facilities to provide minor surgery, which does not require hospital admission and (2) services for those who make advanced appointment reservations

Patients must pay for treatment and doctor fee which deviates from the regular payment scheme. Unlike the regular hours services, this program must pay for the manpower working in OHC for this over times working.

At the introductory period, only a few clinics were available such as internal medicine, Eye, (ENT), Psychiatry, Radiology, Preventive medicine, Rehabilitation. Later in July 15, 1995 Dentistry clinic was added along with minor surgeries in August, 1995.

The H.M. KING BHUMIBOL building is used for OHC. Registration of all new patients take place on the ground floor. The fourth floor is used for Laboratory and X-ray investigations. Surgery for Orthopedics and OB&GYN are situated on the fifth floor, with OPD for medicine, surgery, orthopedic, OB&Gyn department on thirteenth floor. OPD for ENT and Eye Surgery are located in the Pantip building and Sirikit building respectively. High technology diagnosis facilities, such as, CT scan, MRI, EST, Echo cardiogram etc., are also available for the patients as in the regular services. Service hours for OHC are on Monday to Friday 4.30 - 8.00 PM., and on Saturday 8.30 - 12.00 AM. OHC closes on Sunday and on special holidays.

Manpower consist of experienced physicians in various speciality, qualified nurses, other health staffs both OPD and IPD and other personnel who work in Chulalongkorn Hospital. Presently, there are 60 doctors and dentists, 15 pharmacists, 160 registered nurses, 170 assistant nurse and office nurses, and 40 office workers who participate in the OHC program.

OHC charges a minimum of 60 bath per visit, in which, 20% are for doctor fee, and 20% for medicine and laboratory charges. Revenues generates must also cover expenses for personnel, administration, medical supplies, building, and

equipment etc., 50% of any remaining income goes to Chulalongkorn Hospital and the other 50% goes to the Faculty of Medicine, Chulalongkorn University.

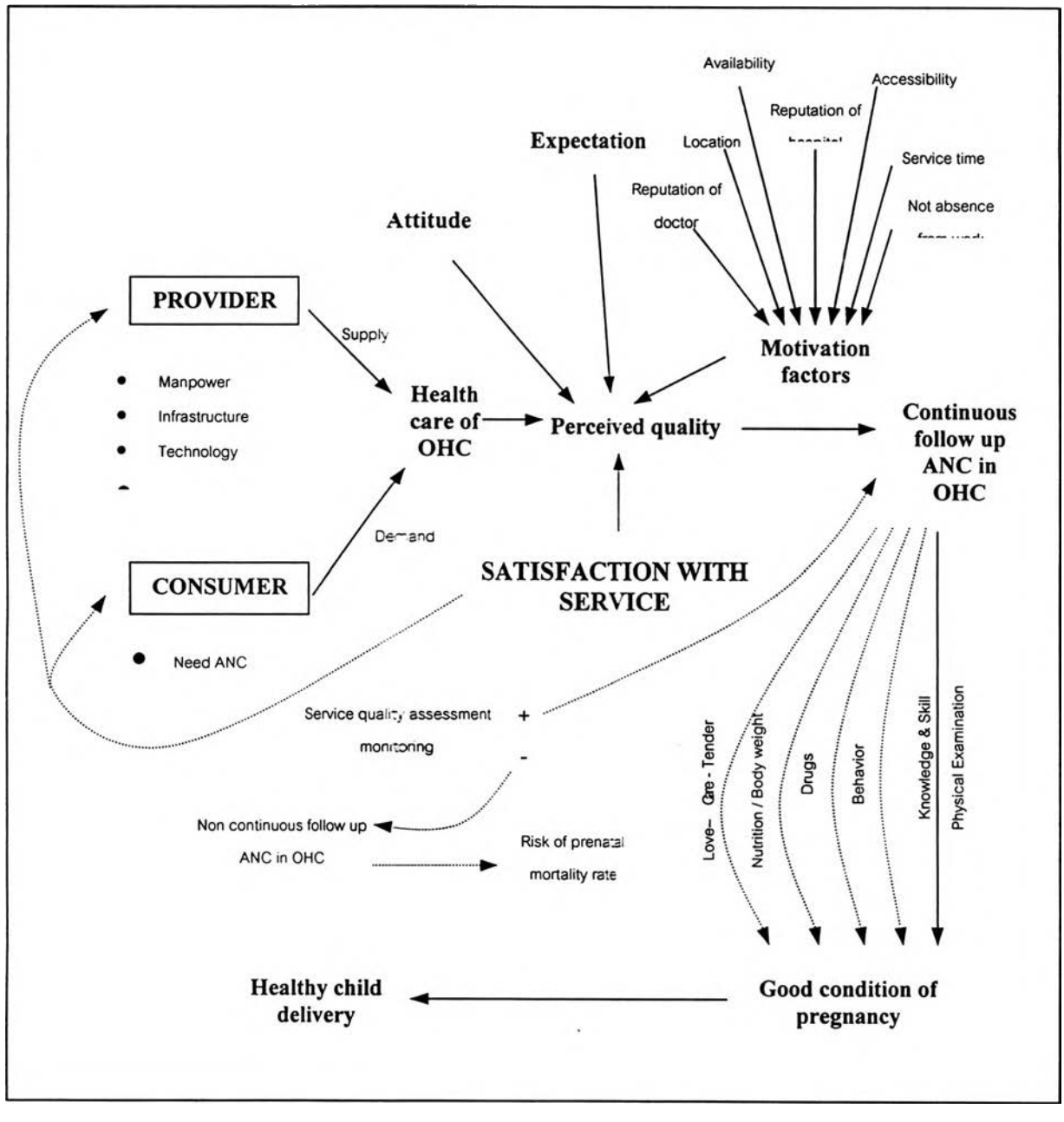
Health care services of OHC, Chulalongkorn Hospital provide all of preventive, promotive, curative, and rehabilitative services for clients to have access to medical consultation after office hours there by contributing substantially to the quality of life for the people in Bangkok who face with the present problem such as, socio-economic problem, traffic problem, and environment problem.

OHC is a new program for public hospital to serve as a private organization under MoPH policy. Since the Director of Chulalongkorn Hospital is in favor of re-engineering the health care service. And part of this process involves setting OHC clinic which can make the hospital to be more competitive on the open markets and increase staff income which could contribute to diminishing, to decrease the ongoing brain drain to the private sector and improve the satisfaction of patients. This can, subsequently, improve the overall health care services of Chulalongkorn hospital.

However, improvement of health care services must be an integral component for the management scheme which must continuously be evaluated. The environmental analysis of the hospital is an important aspect to identify both present and future threads and opportunities which may influence the organizational ability to reach its influence and goals. Therefore, there is a need to assess the environment (external and internal) of OHC, Chulalongkorn Hospital in terms of input, process, output and respond to the forces and trends accordingly in order to introduce changes

for improvement. This preliminary analysis is based on my own perception and experience as the part of health personal which is concerned in the issue of patient's satisfaction towards hospital services.

Figure 2.1 Conceptual Framework of Study



Basically, services are intangible and quite subjectively experienced processes where consumption activities take place simultaneously.

Free (1787) said that the meeting of customer expectations in the course of selling and post-sales activity through providing a series of functions which match or better the competition in a way which provides and incremental profit for the supplier.

So, according to the conceptual framework of this study (Figure 2.1), when consumers have a need for ANC service, they will go to OHC where its facility is supplied by the provider which, in this case, is Chulalongkorn Hospital. The service quality of OHC therefore revolves around four domain factors provided by the provider, which are management, infrastructure, technology, and manpower. These domains turn directly or indirectly contribute to the patients' satisfaction with the health care services of OHC. Satisfaction may also be part of positive feedback mechanism keeping people in or out of the health care system. Andolsek, Kathryn M. (1990) has described that one of the factor contributing to infant mortality and low birth weight is the lack of adequate prenatal care. Delay in obtaining prenatal care or a lower number of prenatal visits is directly related to an increased risk of poor obstetrical examination. If the consumers' experience quality is almost or exactly the same as their expectation, they will get perceived quality and they will then continuously follow up ANC, resulting in better knowledge and skill, behavior, drugs etc. This will consequently cause a good condition of pregnancy and good health child delivery. On the other hands, if the consumers are not satisfied with the service

of OHC, there will be no continuous follow up ANC, but risk of prenatal mortality rate instead.

2.2 The Perceived Service Quality

Six criteria of Good Perceived service quality (Gronroos, 1990):

1) Professionalism and skill: the customer realize that the service provider, its employees, operational systems, and physical resources, have the knowledge and skill required to solve their problems in a professional way.

2) Attitudes and behavior: the customers feel that the service employees (contact persons) are concerned about them and interested in solving their problems in a friendly and spontaneous way.

3) Accessibility and flexibility: the customers feel that the service provider, its location, operating hours, employees, and operational systems, are designed and separate so that it is easy to get accessed to the service and so that they are prepared to adjust to the demands and wishes of the customer in a flexible way.

4) Reliability and trustworthiness: the customers know that whatever takes place or has been agreed upon, they can rely on the service provider, its employees and systems, to keep promises and perform with the best interest of the customers at heart.

5) Recovery: the customers realize that whenever something goes wrong or something unpredictable unexpectedly happens the service provider will immediately and actively take actions to keep them in control of the situation and find a new acceptable solution.

6) Reputation and credibility: the customers believe that the operation of the service provider can be trusted and give adequate value for money, and that it stands for good performance and values which can be shared by customers and the service provider.

Berry (1985) studied on how a number of service are perceived by customer, ten determinants, which is related to the perceived quality are shown as the followings:

1. Reliability involves consistency of performance and dependability:
    - the firm performs the service right at the first time
    - accuracy in billing
    - keeping records correctly
2. Responsiveness concerns the willing or readiness of employees to provides service:
    - timeless of service
    - mailing transaction slips immediately
    - calling the customer back quickly
    - giving prompt service
3. Competence means possession of the required skills and knowledge:
    - knowledge and skills of the contact employees
    - knowledge and skills of operational support personnel
    - research capability of the organization

4. Access involves approachability and ease of contact
    - the service is easily accessible by telephone
    - waiting time to receive service is not extensive
    - convenient hours of operation
    - convenient location of service facility
5. Courtesy involves politeness, respect, consideration, and friendliness of contact personnel:
    - consideration for the consumer's property
    - clean and neat appearance of public contact personnel
6. Communication means keeping customers informed in language they can understand and listening them:
    - explaining the service itself
    - explaining how much the service will cost
    - assuring the customers that a problem will be handle
7. Credibility involves trustworthiness, believability, honesty, and having the customer's best interest at heart:
    - company name
    - company reputation
    - personal characteristics of the contact personnel
    - the degree of hard sell involved in interaction
8. Security in the freedom from danger, risk, or doubt:
    - physical safety
    - financial security

- confidentiality

9. Understanding / Knowing the customer involves making the effort to understand the customer's needs:
    - learning the customer's specific requirements
    - providing individualized attention
    - recognizing the regular customer
10. Tangibles include physical evidence of the service:
    - physical facilities
    - appearance of personnel
    - tools or equipment used to provide the service
    - physical representations of the service
    - other customers in the service facility

What is the definition of 'Quality' and 'Services'?

Feigenbaum (1983 cited in Kemp, 1995) has described that "Quality is the total composite product and service characteristics of marketing, engineering, manufacture and maintenance through which the product and service in use will meet the expectation by the customer."

Another definition has been stated by Berry (1988 cited in Groroos 1990): "Quality is conformance to the customer's specifications. Customers decide what they consider good quality, what they consider important, and what unimportant in service production. They also judge the Perceived Service Quality."

Marcus (1988 cited in Kemp, 1995) described his first encounter with quality in a much more practical way. These included:

- Pleasant, helpful staff.
- Staff with good knowledge about the service and could give information and advice (for example, if things were delayed, how long the customer would have to wait; specific expertise on the service offered).
- Environment (for example, tasteful decor, furnishing and carpets in good repair and cleanliness).
- Good car parking facilities.
- Prompt services (staff felt they should not have to wait more than 5 minutes in a bank or shop queue).
- A wide choice of goods or services.
- Clear sign-posting.
- Ability to courteously and efficiently deal with customer complaints, with easy access to senior management.
- Value for money
- Opening at convenient hours.
- Privacy (many disliked the communal changing rooms in some clothes stores)

According to Nattrass (1992 cited in Kemp, 1995) quality in health care has three dimensions:

- The supremacy of 'the customer', including 'the internal customer'
- Process analysis and improvement
- Meeting the agreed measurable requirements.

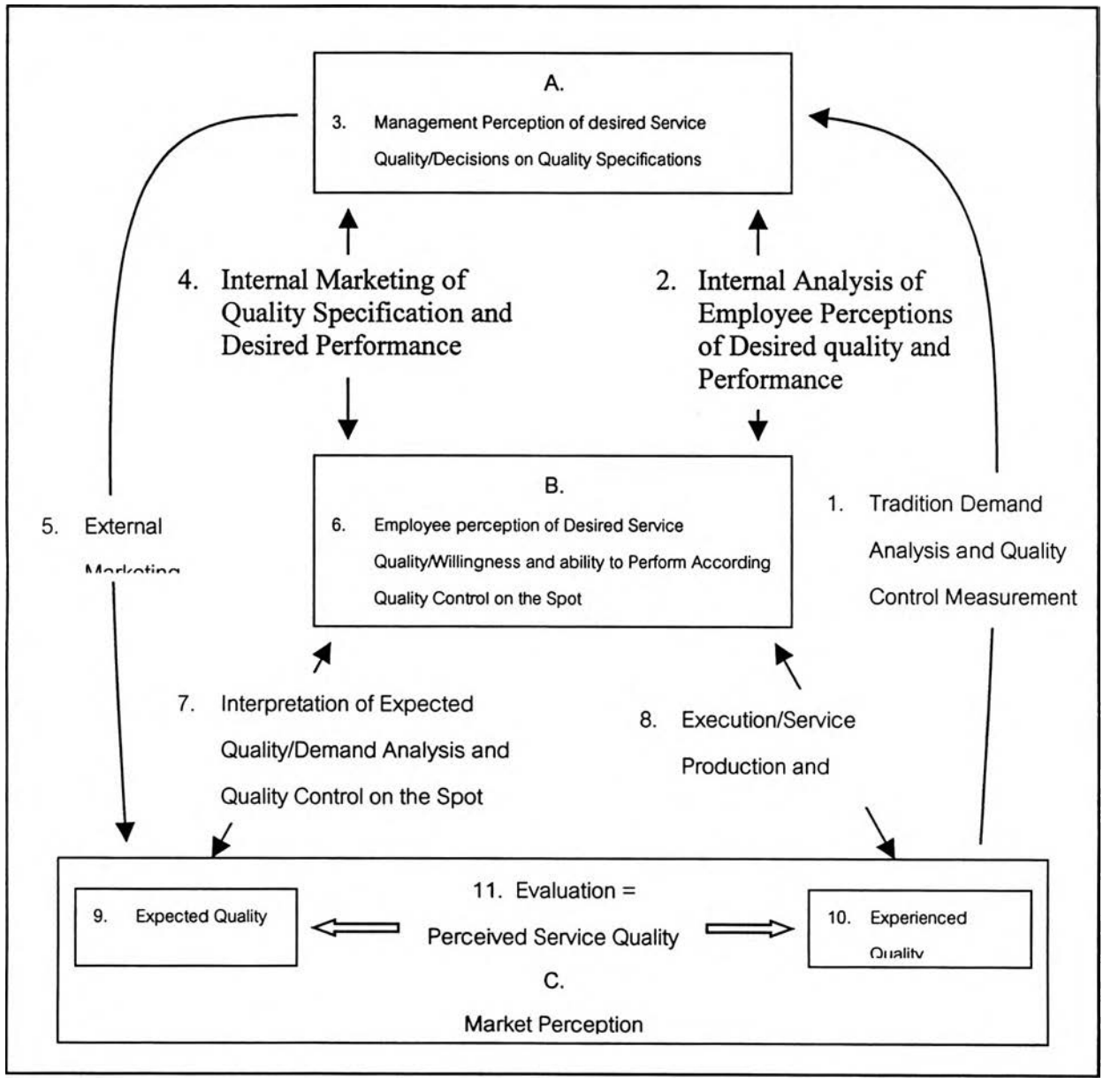
'Continuous Quality Improvement principles evolved from various theories related to systems, to leadership, and to behavioral and statistical process control methods' (Baur, 1993). It can be described as an integrated approach to doing work, which underpinned by a knowledge of business and management . It is based on particular beliefs about people, and suggests a set of tools and techniques for solving problems. At its simplest, it is an approach to problem solving which will address quality issues and facilitate improvements where is found necessary. In order to make improvements in care, it is necessary to understand the systems which involve.

Lehtinen (1983 cited in Gronroos, 1990) said that "...A services is an activity or a series of activities which take place in interactions with a contact person or a physical machine and which provides consumer satisfaction"

Besson (1973 cited in Gronroos, 1990) said that "...For the customer, services are any activities offered for sale that provide valuable benefits or satisfaction; activities that he cannot perform for himself or that he chooses not to perform for himself"

In Figure 2.2, a general framework for managing service quality is illustrated in a schematic form (Service management and marketing, 1990). There are three groups of actors involved: management, employees, and customers.

Figure 2.2 A service Quality Management Framework



On the *management* level, the policies to follow are set. Analysis of market demands and requirements concerning quality (1) and of internal perceptions of quality level and performance among employees (2) are initiated. This knowledge is needed so that quality specifications can be decided upon (3) and internal marketing of such specifications and of desired performance can be implemented (4). Moreover, external marketing programs (5) are planned on this level, and expose factor quality control measurements (1) are made.

On the *employee* level the quality and performance standards are to be met by the way the organization operates. Employees in various functions perceive the quality specifications and, to a certain extent, are willing and be able to perform according to the specifications (6). The employees interacting with customers see and feel signals from the market and have an opportunity to immediately and flexibly adjust to customer demand. They are in a position to follow up (analyze) the customer demands and wishes as well as to immediately control the quality of the service rendered in the buyer-seller interactions when changes in the initial demand and quality problems occur (7). At the same time they are, of course, involved in producing and delivering the service (8).

Finally, on the *customer* level, it is decided whether the quality is "acceptable" or not. Customer expect a certain quality (10), depending on what they received and how they received it in the interactions with the organization. The quality is evaluated by the customers, and the result of this evaluation is the total

perceived quality, or, if we only look at service operations, the total *Perceived Service quality* (11).

2.3 Service management

Table 2.2 describes the Six Principle of Service Management by Gronroos (1990)

Table 2.2 Principles of Service Management

Principle		*Remarks*
1. The profit equation and the business logic	Customer- perceived service quality drives profit	Decisions on external efficiency and internal efficiency (customer satisfaction and productivity of capital and labor) have to be totally integrated
2. Decision-making Authority	Decision-making has to be decentralized as close as possible to the organization-customer interface	Some strategically important decision have to made centrally

Principle		*Remarks*
3. Organization focus	The organization has to be structured and functioning so that its main goal is the mobilization of resources to support the frontline operations	This may often require a flat organization without unnecessary layers
4. Supervisory focus	Managers and supervisors have to focus on the encouragement and support of employees	As little legislative control procedures as possible, although some may be required
5. Reward systems	Producing customer-perceived quality has to be the focus of reward systems	All relevant facets of service quality should be considered, although all cannot always be built into a reward system
6. Measurement focus	Customer satisfaction with service quality has to be the focus of measurements of achievements	To monitor productivity and internal efficiency, internal measurement criteria may have to be used as a well; the focus on customer satisfaction is,

Source: ***Service management and marketing,*** **1990**

2.4 Service process

Flocken (1988 cite in Gronroos 1990): described that the service process comprises of three basic elements which, from a managerial point of view, constitute the process:

1,) Accessibility of the service;

2.) Interaction with the service organization; and

3.) Consumer participation.

Accessibility of the service depends, among other thing on:

- The number and skills of the personnel;
- Office hours, time tables, and the time used to perform various tasks;
- Location of offices, workshops, service outlets, etc.;
- Exterior and interior of offices, workshops, and other service outlets, etc.;
- Tool, equipment, documents, etc.; and
- The number and knowledge of consumers simultaneously involved in the process.

And the accessibility issue could be broken down into four parts. The following variables were identified for each of the four aspects of accessibility:

1. *Site accessibility*
    - The convenience and ease of access from a major street
    - The amount of parking available adjacent to the facility
    - The number of medical facilities located nearby
    - The relative ease of locating the laboratory inside the building

- Office hours
- The ease of getting an appointment
- The size of the waiting room

2.) *Customer ease of use of the physical resources*

- The attractiveness and condition of the exterior and interior of the medical building where the laboratory is located
- The exterior of the laboratory facility
- The waiting room
- The patient rooms
- The bathrooms

3.) *Frontline personnel's contribution to accessibility*

- The response time to phone calls
- The number of employees
- The skills of employees
- The response time to people walking in the front door
- The response time to patients in the back room
- The professionalism of the employees
- The care taken to reduce unpleasantness of drawing blood
- The billing procedures
- The types of payment accepted
- The insurance arrangements available

4.) *Ease of customer participation*

- The number and difficulty of forms to fill out
- The instructions given to patients concerning procedures the patient must participate in or do alone
- The difficulty of these procedures

Interaction with the service organization can be divided into the following categories:

- Interactive communication between employees and customers, which in turn depends on the behavior of the employees, on what they say and do, and how they say and do it
- Interaction with various physical and technical resources of the organization, such as vending machines, documents, waiting room facilities, tools and equipment needed in the service production process, etc.
- Interactions with systems, such as waiting systems, seating systems, billing systems, systems for deliveries, maintenance and repair work, making appointments, handling claims, etc.
- Interactions with other customers simultaneously involved in the process

Customers have to get in touch with employees, they have to adjust to operative and administrative systems and routines of the organization, and they sometimes have to use technical resources like teller machines, vending machines, and documents. Moreover, they may get in contact with other customers. All these

interactions with human as well as physical resources and systems are part of the service perception.

And the interaction between the organization and its customers was broken down into the following parts:

- Interactions with medical personnel (their attitudes, attention to the customer, skills in drawing blood)
- Interactions with customer service department (attitudes, phone answering promptness, prompt and accurate answers to questions)
- Interactions with waiting room environment (space, cleanliness, crowdness)
- Interactions with other customers (communication between patients)
- Interactions with payment or billing system (means of payment available to choose from, readability, understandability of invoices and receipts)
- Interactions with scheduling systems (waiting time for service)
- Interactions between physicians (referring patients to the laboratory) and customer service department (attitudes, phone answering promptness, prompt and accurate answers to questions, calling results, follow-up)
- Interactions between physicians and courier (attitudes, promptness, helpfulness)

Customer participation means that the customer has an impact on the service he or she perceives. The following aspects of customer participation could be identified:

- Are patients knowledgeable enough to identify their need or problem?
- Do patients have a reasonable understanding of the time constraints involved?
- Is the patient willing to cooperate in the process?
- Can additional information be obtained quickly enough from physicians?

Thus, in buyer-seller interactions the core service, facilitating services, and supporting services of the basic service package are perceived in various ways, depending on how accessible the services are, how easily and attractively the interactions are perceived, and how well customers understand their role and tasks in the service production process.

2.5 Consumption Process

Lehtinen (1983 cite in Gronroos, 1990) defined the consumption into three phases:

1. The joining phase
2. The intensive consumption phase
3. The detachment phase

The Joining phase is the first stage of the consumption process, where the customer gets in touch with the service provider in order to buy and consume a core service, for example, elevator maintenance. In this phase mainly facilitating services are required.

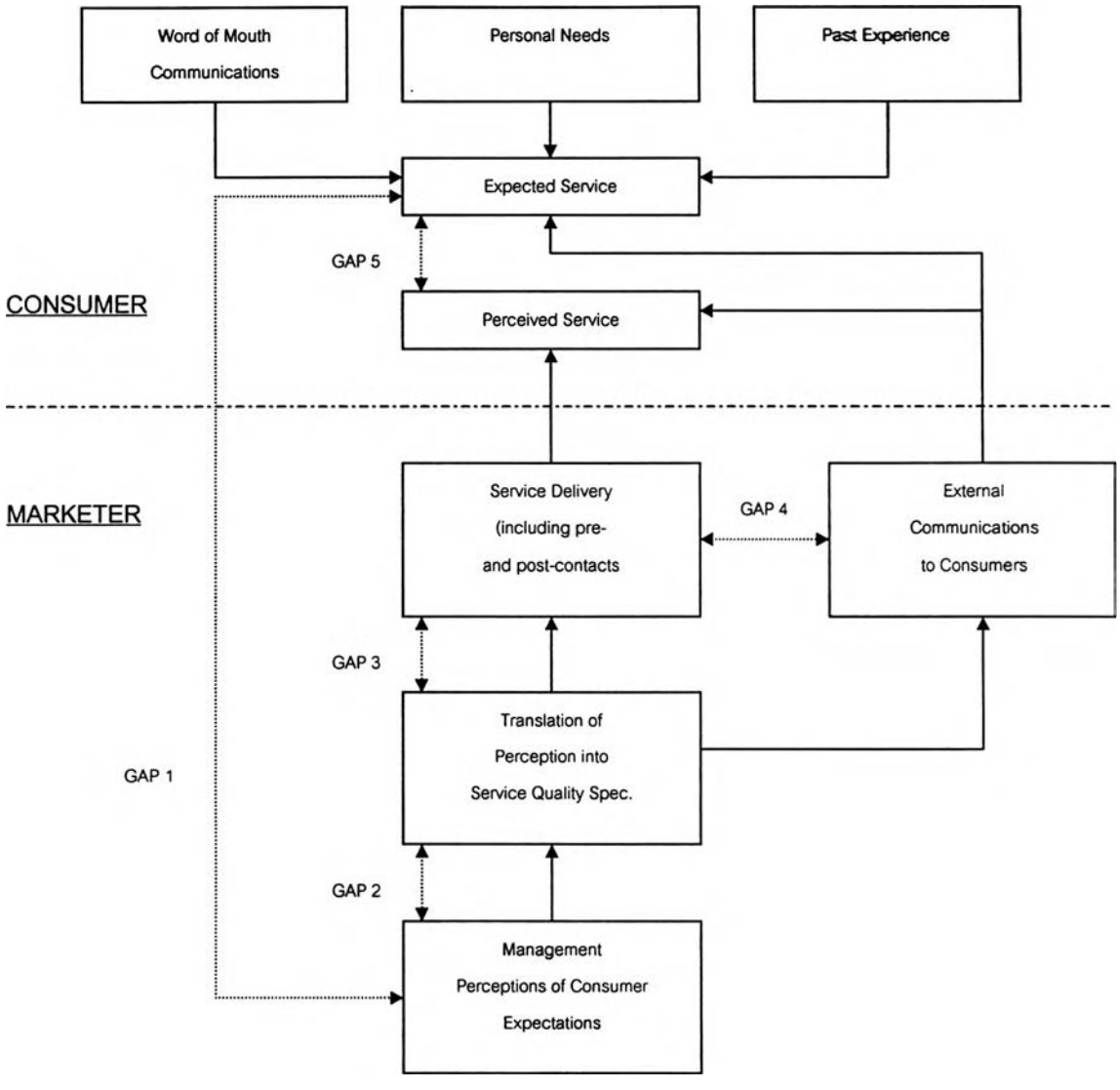
The intensive consumption phase is the main stage of the total service consumption process. In this phase the needs of the customer have to be satisfied, or his or her problem has to be solved.

The detachment phase the customer leaves the Service Production system. This often requires some facilitating services.

For the OHC service, time and convenience in each phase is important. In joining phase, registration, waiting time, magazines for patients while waiting, facilities in waiting room, etc. is concerned. In the intensive consumption phase, information about further actions, information of illness and care, etc. is considered. In the detachment phase the registration for next visit or payment is of interested.

Berry & Parasuraman (1988 cited in Gronroos, 1990) have developed a so-called *Gap Analysis Model*, which is intended to be used for analyzing sources of quality problems and for helping managers understand how service quality can be improved. The model is illustrated in Figure 2.3.

Figure 2.3 Conceptual Model of Service Quality – The Gap Analysis Model



Source: Zeithaml, V.A., Berry, L.L. & Parasuranman, A. (1988)

The management Perception Gap (Gap 1)

This gap means that ***management perceives the quality expectations*** *inaccurately.* This gap is, among other things, due to:

- Inaccurate information from market research and demand analysis;
- Inaccurately interpreted information about expectations;
- Nonexistent demand analysis;
- Bad or nonexistent upward information from the firm's interface with its customers to management; and
- Too many organizational layers which stop or change the pieces of
- information that may flow upward from those involved in customer contacts.

The cures may be of various natures. If the problems are due to bad management, obviously either a change of management or an improvement in the knowledge of the characteristics of service competition on the part of management is required. Most often, but not always, the latter action is more appropriate, because normally the problems did not occur due to a lack of competence but rather to a lack of knowledge or of appreciation of the nature and demands of service competition among managers.

Part of any cure is always better research, so that the wants and wishes of customers are better observed and appreciated. The information that is obtained through market research and from internal flows of information from the customer interface is perhaps not good enough or only partly information channels have to be

taken in such cases. This may even have implication for the organizational structure of the firm.

The Quality Specification Gap (Gap 2)

This gap means that *service quality specification are not consistent with management perceptions of quality expectations.* This gap is result of:

- Planning mistakes or insufficient planning procedure;
- Bad management of planning;
- Lack of clear goal setting in the organization; and
- In sufficient support for planning for service quality from top management.

Depending on the size of the first gap, the potential planning-related problems vary. However, even in a situation where there is enough and sufficiently accurate information on customer expectations, planning of quality specifications may fail. A fairly normal reason for this is a lack of true commitment to service quality among top management. Quality is not considered an issue of highest priority. An obvious cure in such a vital success factor today, certainly in service competition, that is imperative that commitment to quality rank high on the priority list of management. An obvious cure in such a situation is to change the priorities in service competition, that it is imperative that commitment to quality rank high on the priority list of management.

The Service Delivery Gap (Gap3)

This gap means that *quality specifications are not met by the performance in the service production and delivery process.* This gap is due to:

- Too complicated and/or rigid specifications;
- The employees do not agree with the specifications, as, for instance, good service quality seems to require a different behavior;
- The specification are not in line with the existing corporate culture;
- Bad management of service operations;
- Lacking or insufficient internal marketing; and
- Technology and systems do not facilitate performance according to specifications.

The reasons for this gap can be divided roughly into three categories namely, management and supervision, employee perception of specifications and rules and customer needs and wits, and lack of support by technology and systems of operation.

Firstly, management and supervision-related problems may be many for example, the method of supervisions may not be encouraging to and supportive of quality behavior, or the supervisory control systems may be in conflict with good service and even with quality specifications. The cure here involves changes in the way managers and supervisors treat their subordinates, and the way supervisory systems control and reward performance. The second reason is the problem about employees. The employees may feel that their role as service provides is ambiguous.

The cure is to remove all reason for ambiguity on the part of the personnel, which require changes in the supervisory systems, or require a better training of employees. Another problem in this case is that there may be people who cannot adjust to the specifications and systems that guide operations. The cure is to improve the recruitment routines. Workload perceived by employees may be another problem in this case. There may, for example, be too much paper work or other administrative tasks involved, so that quality specification cannot be fulfilled. The cure is then to clarify the tasks of the personnel. Finally, the technology or the systems of operating, including decision-making and other routines, may not fit the employees. They may not support quality behavior, or they may be appropriate but not properly introduced to the employees. The cure is either to make proper changes in the technology and systems so that they are supportive of the execution of quality specifications or, again, to improve training and internal marketing.

The Market Communication Gap (Gap4)

This gap means that *promises given by market communication activities are not consistent with the service delivered.* This gap is due to:

- Market communication planning is not integrated with service operations;
- Lacking or insufficient coordination between traditional marketing and operations;
- The organization fails to perform according to specifications, whereas market communication campaigns follow these specifications; and
- An inherent propensity to exaggerate and, thus, promise too much.

The reason for occurrence of a Market Communication Gap can be divided into two categories. Firstly, planning and executing of external market communication and operations do not go hand in hand. The cure is to create a system that coordinates planning and execution of external market communication campaigns with service operations and delivery. Secondly, an inherent propensity to over promise in all advertising and market communication often occurs. The cure may be better planning procedures, and closer supervision from management also helps.

The Perceived Service Quality Gap (Gap5)

This gap means that *the perceived or experienced service is not consist with the expected service.* This gap results in:

- Negatively confirmed quality (bad quality) and a quality problem;
- Bad word-of-mouth;
- Negative impact on corporate or local image; and
- Lost business.

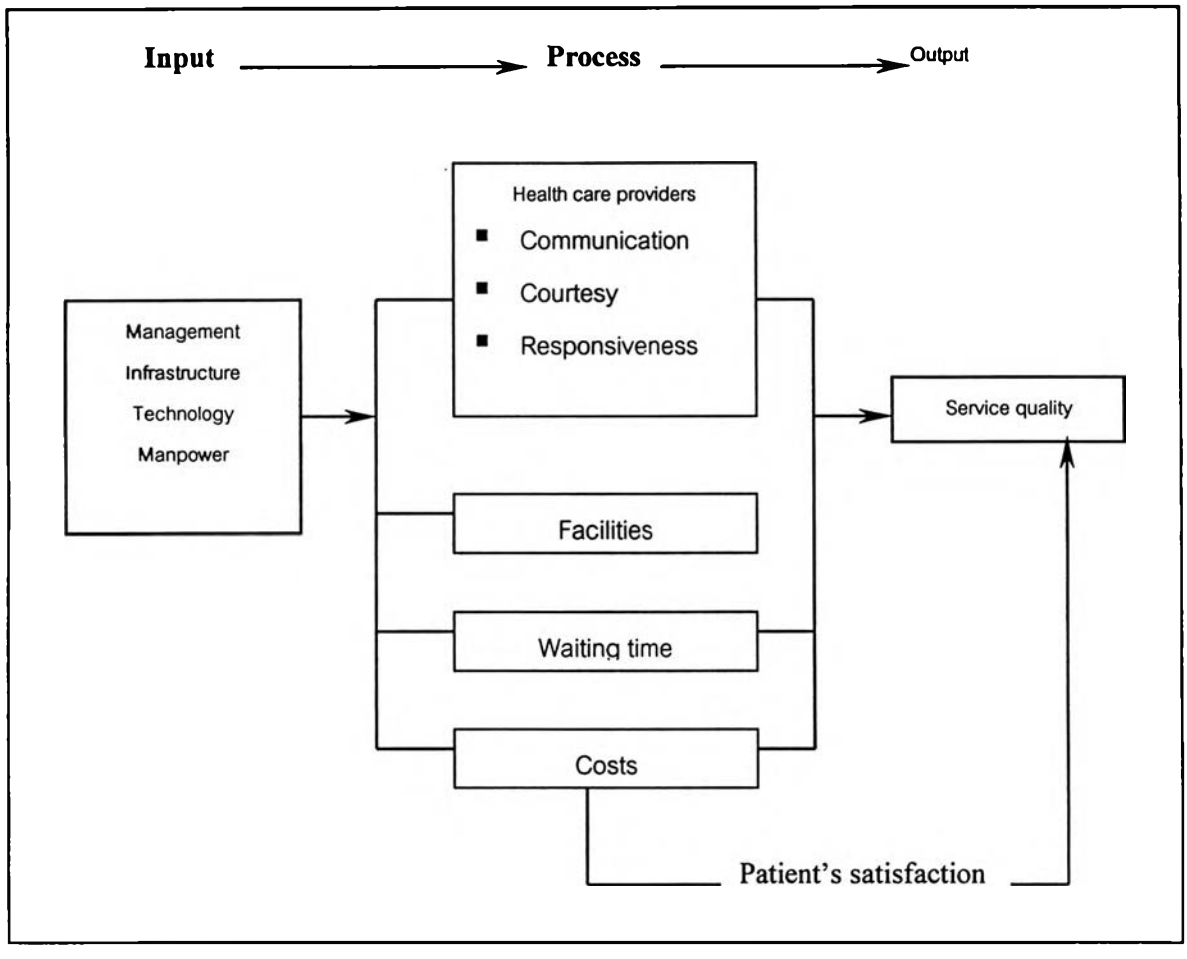
The fifth may also be positive, which leads either to a positively confirmed quality or overquality. If a Perceived Service Quality Gap occurs, the reason could be those discussed above, or any combination of them. There may also be other reasons in addition to those mentioned here.

Gronroos (1990) noted that the Gap Analysis Model should guide management in finding out where the reason (or reasons) for the quality problem is an in discovering appropriate way to close this gap. As Brown and Swartz (1989) concluded, after having studied quality gaps of professional services,"...gap analysis is a straightforward and appropriate way to identify inconsistencies between provider and client perceptions of services performance. Addressing these gaps seems to be a logical basis formulating strategies and tactics to ensure consistent expectations and experiences, thus increasing the likelihood of satisfaction and positive quality evaluation"

Therefore, there is a need to assess the environment (external and internal) of OHC, Chulalongkorn hospital in terms of input, process, and output. For this study, the gap analysis model is used in the process of action research. As an introduce changes for improvement service quality in OHC, Chulalongkorn hospital.

For this study, the service quality revolves around four domain factors, i.e., 1) management, (2) infrastructure, (3) technology, and (4) manpower. These domains, intern, directly or indirectly contribute to the patients' satisfaction with the health care services in OHC. (see Figure 2.4)

Figure 2.4 Relationship of patient's satisfaction and services quality



Management plays an important role in the issue of patients' satisfaction toward health care services which consist of planning, decision-making, organizing, staffing, directing and controlling.

The infrastructure of the hospital may be important to consider for the comfort and environment of the waiting room such as temperature, light, space, cleanliness, and facilities such as seating, audiovisuals, magazine or document, public telephone which contributing to patients' satisfaction.

Technology might be one of the key factors affecting patient's satisfaction because the technology may help to reduce the waiting time for example, use computer program for appointment, x-ray, laboratory equipment, or overuse of equipment might be the factor to delay service which contributing to patients' satisfaction.

Manpower, skill, attitude and idea of service mind to care and concern the clients, willingness and readiness to actively approach clients and take care of their problems may be important as contributing factors to the issue of patients' satisfaction toward service quality in OHC.

Moreover, payment of services were the factor which will affect the patient satisfaction with services provided by OHC, Chulalongkorn Hospital.

2.6 Patient satisfaction and service quality in health care

Patients satisfaction is now gaining more attention from social scientists concerning delivery of health service. LoGerfo & Brook (1988) have described that patient satisfaction is a measure that can reflect the outcome, process, and structure of care. Satisfaction has been viewed as a multidimensional concept involving the cost, convenience, technical and interpersonal aspects of care and outcome of care.

As written by Brody (1989), patient satisfaction might reflect both the types of intervention patients felt they received during a medical visit and / or the congruence

between the interventions they desired and those they received. He added that patients' satisfaction with their physician is an important component of the quality of health services. This is also agreed by Gozi that the patient satisfaction is also related to the behavior of the service provider (Gozi, Francis, & Korch, 1966). In addition, Zastowny (1989) found that most frequently given of dissatisfaction reasons were experienced high cost, unfriendly office help, inconvenient location, long waiting time, and lack of physician interest and concern. If thinking of a hospital as a producer, patient is therefore the consumer. However, hospital staff often forget that their main purpose is to serve patients and institutions success or survival depends how well that is done (Pena, Valerie, Glesner, & Andersen, 1985).

Logefo and Brook (1994) also pointed out the importance of satisfaction, which is that it is positively correlated with patient adherence to prescribed therapeutic regimens. It may positively affect subsequent care-seeking behavior, and probably has some impact on the propensity to file a malpractice claim.

Ware (1975) identified four main dimensions of satisfaction : access to care, continuity of care, availability of services, and physician conduct.

Becker et al (1972) used items concerning satisfaction with medical care in general, as well as satisfaction with the respondent's personal physician in particular, in an attempt to understand the effects of continuity of care in a hospital outpatient service.

Aday and Anderson (1978) have suggested about choices to use medical service. They are:

1. Characteristics of the population such as sex, age, education, occupation, income etc.
2. Consumer satisfaction about: courtesy, medical information, convenience, quality of care, co-ordination, out of pocket cost.

Ramathibodi Hospital survey on satisfaction of clients with service at off-hour clinic (1995) found that:

Positive - 78%	Negative - 22%
- Special services	- Long waiting time
- No need for absence from work	- Inconvenience at pharmacy
- Better environment	and finance service
- Good service from personnel	

It is quite reasonable to expect that satisfaction brings people to health service, and if the situation is satisfactory, compliance results and satisfaction will increase. On the other hand, it is possible for a vicious cycle to set in, to keeps persons away from potentially useful health services, so that encounters are made difficult, resulting in poor compliance, increasing dissatisfaction, and so on. Satisfaction may also be part of a positive feedback mechanism keeping people in or out of the health care system until such time as something happens, either inside the system itself or outside of it, to break the cycle.

Satisfaction may be with the outcome of the treatment, expectation of the patient, relationship between the health care providers and the patient, and cost effectiveness which is closely related to the quality of service. While discussing about the satisfaction level to the health care services, the issue of quality of services directly or indirectly considered because quality of health care services may affect the satisfaction level of patients.

Evaluation of the OHC program at Chulalongkorn Hospital is needed with the issue of patient's satisfaction to the service in order to find out the expectation and satisfaction of patient with OHC services. This information then will enable evaluator and use to monitor the performance of services of OHC. This will be used as a recommendation by patients for planning for improvement of the service quality of OHC.

2.7 Action Research

Titchen (1992) stated that fundamentally, action research is a strategy which brings about social change through action, developing and improving practice and at the same time, generating and testing theory. Many definitions have been offered in the literature, representing the various interpretations of this fundamental definition, but overall, there are two main orientations namely "insider" and outsider" research. He described that the notion of self-reflection by "insider" researchers is being widely promoted in mainstream education and is beginning to influence action research in nursing.

Kemmis (1986 cited in Titchen, 1992) have proposes perhaps the most widely quoted definition of this orientation in action research:

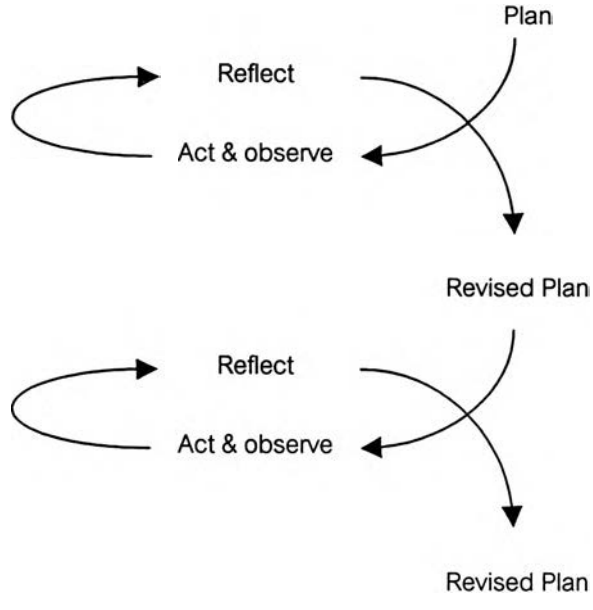
> "Action Research is simply a form of self-reflective inquiry undertaken by participants in social situation in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situation in which these practices are carried out"

Brown and McIntyre (1981) noted that the definition of an "outsider" is;

> "By 'action research' we mean research where the emphasis is on the researcher's role as an actor in a situation which he is endeavouring to improve (if that were not the case the wore 'actor' would not be used), where hypotheses are being testes about how to improve practice and those hypotheses re based on theory (if they were not, the word 'research' would not be used) and where the extent to which the problems and hypotheses are generalization to other situation is expired"

Lewin (1946) described action research as a spiral of steps. Each step has four stages of planning, acting, observing and reflecting, as shown in Figure 2.5.

Figure 2.5 The Action Research Spiral



Source: Kemmis & Mc taggart (1988)

Brown and Mc Intyre (1981 cited in Titchen, 1992) suggested that action research can be directed at generating explanatory principles for action. A set of tentative general principles is first derived from the prior observational study and then brought to bear on the situation. In other words, the tentative principles are tested, refined and re-tested through the action research. It is likely that the following questions will need to be addressed as principles are developed:

(1) in what kind and range of situations are they applicable?

(2) how precisely should they be formulated?

(3) how abstract or concrete should they be?

(4) to what extent should they be prescriptive or explanatory?

They also agreed that although precise prescriptive rules might seem to be most valuable to the innovator. The very distinctiveness of the particular innovation, and its context, means that research can not provide the individual with such rules.

Instead, research must be directed towards the formulation of relatively abstract principles to guide the innovator. Unfortunately, abstractness is frequently accompanied by vagueness and that is an unacceptable characteristic for such principles. If the innovator is to make use of the principles then he will have to use his professional judgement on their validity for his own situation. That will only be possible if the principles are formulated sufficiently clearly to sensitize him effectively to both the kinds of situations to which they are relevant and the kinds of action appropriate in these situations.

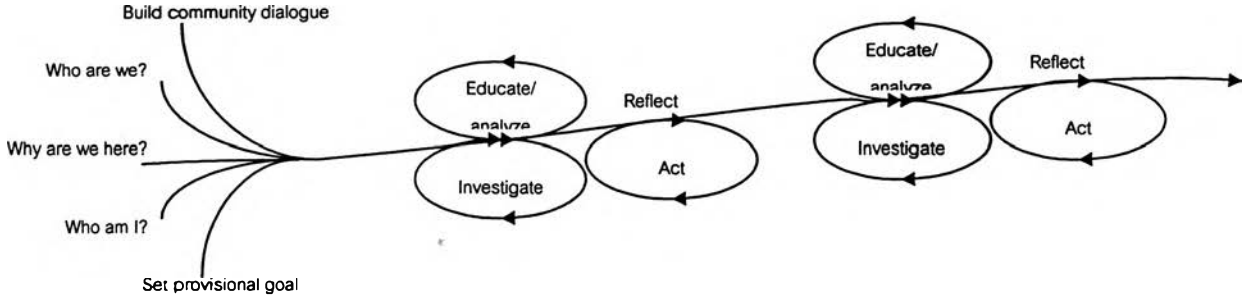
Participatory action - research for health

Smith, Pyrch, & Lizardi (1993) said that, health participatory action research is developed primarily by peoples of the Third World. It combines adult education with investigation and sociopolitical action. With the goal of personal and social transformation it builds on the capacity of people to think and work together for a better life and the equitable sharing of knowledge, skills and resources so as to support fair social structures, which, ultimately, are health determinants.

Community action for development

Smith et al (1993) said that in participatory action-research, individuals with common concerns from groups in order to achieve specific goal. It is vital to have continual dialogue in a climate of mutual trust, openness and cooperation. So long as a group remains in action with no outstanding changes in individual participation, the process can continue. Continuing participation induces the growth of self- and group awareness.

Figure 2.6 The process of participatory action-research



Source: Smith S.E., Pyroh T., Lizardi A.O. (1993)

The creation of a sense of community among the participants is essential. The building and maintenance of a partnership requires a range of important questions to be answered. Who are we?, Why are we here?, What do we believe?, How can we work together? and so on. The evolving combination of mutual support and questioning and the organization of joint action promote the "awakening" nature of participatory action-research. The figure in his work outlines how the approach works.

In a liberation situation, people may develop competence provided that they have:

- correct information and an understanding of its meaning;
- adequate skills, including those necessary for the performance of talks in the fields of communication, organization, planning and group activity;

- participation in decision – making, together with the means to change what is undesirable and maintain the desirable;
- critical analysis of situations, such that the consequences of actions can be anticipated;
- confidence and resources in sufficient measure to permit action to be taken

These tightly interlocking factors, vital to the building of competence, also provide essential support for development. Development is a capacity – building process in which people become aware of achievable individual and collective life-style and move towards an improved quality of life. It involves political, economic and social change, not necessarily with economic growth, and flourishes in communities with humane, just and viable characteristics. People – centered development requires mutual self-help and seeks to broaden political and economic participation.

There is a dynamic relationship between people – centered development and participatory action research. Neither is completed without the other. Participatory action research moves communities to become more developed, more human, and help them to grow in confidence and enter new learning cycles.

For this study, OHC is a new program for Chulalongkorn Hospital, to serve as a private organization. The OHC mission is to provide a highest service quality to the patients within the resources available. This needs an evaluation of the resources available both in external and internal environment of the OHC at the Chulalongkorn

hospital. The action research will then be implemented to introduce changes to improve service quality of obstetric clinic in the OHC. In order to make a decision to put this action research into practice, the gap analysis must be carefully considered. As a result, health staff is a key to success of the project.

2.8 Prenatal care

Gorrie et.al (1994) noted that from the moment of conception, significant changes occur in the expectant mother's body that is necessary to support and nourish the fetus, to prepare herself for childbirth and lactation, and the maintain her health. Women with pregnancy are often puzzled by the physical changes and unprepared for the discomforts that sometimes accompany them. Many pregnant women rely on nurses who will provide accurate information and compassionate guidance throughout their pregnancies. To respond effectively, nurses must understand not only the physiological changes but also how these changes affect the daily lives of expectant mothers. There are changes in reproductive system, cardiovascular system, Respiratory system, Gastrointestinal system, Urinary system, Integumentary system, Musculoskeletal system, and Endocrine system.

2.8.1 Physical Examination

Gorrie et.al (1994) noted that many women have never had a physical examination until they become pregnant, a through evaluation of all body system is necessary to detect previously undiagnosed physical problems that may effect the

pregnancy outcome. A complete examination also allows the examiner to establish baseline levels that will guide the treatment of the expectant mother and fetus throughout pregnancy.

Vital signs

Blood Pressure. Systolic BP should be in the region of 100 to 125 mmHg. and should remain relatively stable throughout pregnancy. Diastolic BP normally decreases during the second trimester to 60 to 70 mmHg.

Any increase over baseline pressure of 30 mmHg in systolic BP or 15 mmHg in diastolic BP indicates pregnancy-induced hypertension and warrants medical evaluation and management.

Pulse. The normal pulse rate is from 60 to 90 BPM and may increase by 10 BPM as the pregnancy progresses. Tachycardia is associated with anxiety, hyperthyroidism, or infection and should be investigated.

Respiratory Rate. Respiratory rate during pregnancy is in the region of 16 to 24 breaths/minute. Tachypnea may indicate respiratory infection or cardiac disease.

Temperature. Normal temperature during pregnancy is 36.2 to 37.6 °c (98 to 99.6 °F. Increase temperature suggests infection that may require medical management.

Cardiovascular System

Venous Congestion. Venous congestion is most commonly noted in the legs, vulva, or rectum.

Edema. Edema of the face or hands may indicate serious problems involving pregnancy-induced hypertension and should be carefully evaluated by physician.

Respiratory System

Breath sounds should be equal bilaterally, chest expansion should be symmetrical, and lung fields should be free of all abnormal breath sounds.

Musculoskeletal System

Posture and Gait. Observe body mechanics as well as changes in posture and gait that may produce strain on the muscles of the lower back and legs.

Height and Weight. An initial weight is needed to establish a baseline for weight gain throughout pregnancy. Compare weight to the ideal-weight-for-height charts to determine whether the expectant mother is under weight or overweight and to identify nutritional needs.

Pelvic Measurements. To determine whether the diameters are adequate to permit vaginal delivery.

Abdomen. Assess the abdomen for contour, size, muscle tone separation of abdominal muscle, and location of uterine fundus.

Neurologic System

Assess deep tendon reflexes for hyperreflexia, which is associated with pregnancy-induced hypertension. If hyperreflexia is noted, perform careful assessments for edema, hypertension, and proteinuria.

Integumentary System

Skin and Nails. Skin color should be consistent with racial background. Pallor may indicate anemia; jaundice may indicate hepatic disease. Examine the skin carefully for lesions, bruising, or areas of hyperpigmentation that are related to pregnancy. Observe the breasts, abdomen, and thighs for striae. Nail beds should be pink with instant capillary.

Endocrine System

The thyroid enlarges slightly during the second trimester; however, gross enlargement or tenderness may indicate hyperthyroidism and requires further medical evaluation.

Gastrointestinal System

Mouth. Check the condition of the mouth and teeth. Mucous membranes should be pink, smooth, glistening, and uniform. The lips should be free of ulceration; the gums may be red, tender, and edematous as a result of the effects of increased estrogen, which produces hyperplasia. The teeth should be in good in repair.

Intestine. Bowel sounds may be diminished because of the effects of progesterone on smooth muscle. This is an excellent time to ask if there are problems with constipation. Bowel sounds are often increased if a meal is overdue or if diarrhea is present.

Urinary System

Obtain a midstream urine sample at each prenatal appointment to test for glucose and protein. The presence of glycosuria necessitates additional assessment for pregnancy-induced glucose intolerance; the presence of proteinuria may reflect contamination of the specimen by vaginal discharge or may indicate pregnancy-induced hypertension. Medical follow-up is required to make a diagnosis.

Reproductive System

Breasts. Examine the breasts for lumps, dimpling of the skin, or asymmetry of the nipples at the initial assessment.

External Reproductive Organs. Enlargement, tenderness, redness, or discharge of Bartholin's glands or Skene's glands may indicate gonorrheal or chlamydial infections. The examiner should obtain a specimen for culture of any discharge from lesions or inflamed glands to determine the causative organisms and to provide effective care.

Internal Reproductive Organs. The cervix feels relatively firm except during pregnancy, when marked softening is noted. If lesions or unusual discharge is observed, the examiner obtains a specimen of the discharge so that infections can be diagnosed. The examiner also collects a specimen for a Papanicolaou (Pap) smear, a screening test for cervical cancer.

Laboratory Data

Hemoglobin electrophoresis, to assess for sickle cell trait, is recommended for African-American women.

2.8.2 Assessment for the Common Discomforts of Pregnancy

- Nausea and Vomiting
- Heartburn
- Backache
- Urinary Frequency
- Varicosities

- Hemorrhoids
- Constipation
- Leg Cramps

2.8.3 Subsequent Assessments

Ongoing prenatal care is important to the successful outcome of pregnancy. The recommended schedule for prenatal assessment in an uncomplicated pregnancy is as follows:

Conception to 28 weeks - every 4 weeks

29 to 36 weeks - every 2 weeks

37 weeks to delivery - weekly

The major components of subsequent assessments are

Vital Signs. To obtain accurate information, measure BP using the same arm with the mother in the same position each time. Report significant deviations from the baseline value, pulse, or respiratory rate to the physician, nurse-midwife or nurse practitioner. Temperature should remain within normal limits.

Weight. Report weight loss; plot weight gain to validate that the expected patter of weight gain is being attained. Inadequate weight gain may signify thought; sudden, rapid weight gain may indicate fluid retention, and further assessment for pregnancy-induced hypertension is indicated.

Urinalysis. Test urine for protein and glucose levels; proteinuria may indicate contamination of the specimen by vaginal secretion, or it may be an indication of pregnancy-induced hypertension. Glycosuria may be due to alterations in the glomerular filtration rate and consequent "spilling" of glucose into the urine, but the client should be referred for further evaluation.

Fundal Height. From 22 weeks until near term, the fundal height, measured in centimeters from the symphysis pubis to the top of the fundus, is equivalent to the gestational age of the fetus in weeks. If fundal height foes not correlate roughtly with weeks of gestation, additional assessment is needed to confirm EDD, to rule out or confirm more that one fetus, or to determine whether intrauterine growth retardation of the fetus is possibility. To be accurate, the bladder must be empty before the measurement is taken. The woman lies on her back with knees slightly flexes; the top of fundus is palpated, and a tape is stretched from the top of the symphysis pubis over the abdominal curve to the top of the fundus.

Leopold's Maneuvers. A systematic method for palpating the fetus through the abdominal wall, these maneuver provide valuable information about the fetus.

Fetal Hart Rate. The fetal heart rate may be heard in early pregnancy with a Poppler examination or, in later pregnancy, with a fetoscopic. The fetal heart rate should be between 110 and 160 BPM; the site provides information that may help determine in what position the fetus is entering the pelvis. For instance, fetal heart

tones heard in an upper quadrant of the abdomen suggest that the fetus is in a breech presentation.

Fetal Activity. First noticed by the expectant mother at 16 to 20 weeks of gestation, fetal movements gradually increase in both frequency and strength. In the last trimester, the woman may be asked to count fetal body movements. To do this, she lies on her left side following a meal and notes how long it takes for ten fetal movements to occur. If more than 2 hours is required, additional assessments are necessary.

Maternal Serum. Many physicians check the serum at 16 to 18 weeks for the presence of abnormal levels of alpha-fetoprotein, which may indicate fetal anomalies.

Glucose Screen. Many health providers order a 50-g glucose screen at 24 to 28 weeks. If the plasma glucose level is elevated, a follow-up glucose tolerance test is usually recommended.

2.8.4 Role of the health care provider

Andolsek (1990) noted that specific approaches are comprised of the following items:

1. The provider should use the "special feeling" about the provider has to enhance the patient-physician relationship.
2. Use a team approach; coordinate medical and community resources.

3. Discuss the frequency of office visits. Propose visits every 1 or 2 weeks, rather than monthly.
4. Inquire about transportation to prenatal appointments.
5. Identify, if possible, a responsible adult, parent(s), or friend who is stable and supportive of the continuation of the pregnancy.
6. Consider use of the family circle to identify resources the mother-to-be sees as valuable. Kertesz describes the procedure to obtain a family circle. The physician draws a large circle on a plain piece of paper and says:

"Inside this circle I would like you to place a series of smaller circles that represent members of your family. The circles you place inside this family circle should include anyone or anything that you consider to be part of your family. You also place a circle that represents you. Make larger circles for family members whom you consider to be more important and smaller circles for family members whom you consider to be less important. Place the circles of family members who are emotionally distant far apart from each other. This task is sometimes difficult for people to do, so take your time and allow yourself to make changes if you so desire."

7. Involve the baby's father to the extent it is possible and helpful to the mother.
8. Decide if prenatal classes are useful. The provider might want to design a separate series of prenatal instructions if the adolescent would find the group intimidating. If the practice includes more than one pregnant adolescent, consider group instruction or similar scheduling of appointments.

9. Provide information on cesarean section.
10. Ask about "old wives tales" and myths she might have heard regarding pregnancy, labor and delivery.
11. Identify a labor and delivery partner.
12. Inquire how and when she picked the baby's name.
13. Discuss the expected (or desired) sex of the baby.
14. Identify the infant's prospective caretaker. What are the logistics involved? Try to help the mother be specific.
15. Discuss plans for a baby-sitter and what requirements to look for in a baby-sitter.
16. Stimulate " reality testing" regarding baby care, parenting, career, and school goals, and postpartum expectations.
17. Begin family planning advice during pregnancy. Does the adolescent understand how she got pregnant? Discuss contraceptive plans after delivery.
18. Encourage her to discuss her anxieties in detail. Asking about her dreams might reveal her anxieties.

Andolsek (1990) described that "one of the factors contributing to infant mortality and low birth weight is the lack of adequate prenatal care. Delay in obtaining prenatal care or a lower number of prenatal visits is directly related to an increased risk of poor obstetrical outcome. The provider must always perform a through history and physical examination. Physicians should be sensitive and non-judgmental. They must assure the patient about confidentiality, educate her in

reproductive physiology and sexuality, relieve her anxieties and fears, develop a therapeutic relationship with her, and ask her opened questions. If a pregnancy is suspected, the physician must order appropriate diagnostic tests. The obstetric management of the pregnant must be intensive and continuity of care is important. The physician should also advocate for the confidentiality of the pregnant-physician relationship crucial to the development of an environment in which the pregnant perceives open discussion of the topics as possible.

Prenatal care should have as a principal aim the identification and special treatment of the high risk patient-the one with pregnancy, because of some factor in her present pregnancy history, previous pregnancy history, medical history, laboratory test, maternal height and weight, blood pressure, fundal height, fetal heart tones, edema, fetal size and position, nutrition in pregnancy or significant development during pregnancy, is likely to have a poor outcome. The purpose of prenatal care is to ensure, as far as possible, an uncomplicated pregnancy and the delivery of a live healthy infant. There is evidence that mothers who received prenatal care have a lover risk of complications.

2.9 Conclusion

The reason why a patient come to hospital is that he / she feels and is aware of the illness. Then he / she will need treatment. Patients have choices of where to go for treatment, such as private hospital, clinics, off-hours clinic at public hospital, or even off-hours clinic at the Chulalongkorn hospital.

Accordingly, at the health care service in OHC, Chulalongkorn hospital patients need quality of the service. Since the patient must pay a higher fee, they expect a great value for their money. This preliminary analysis is base on my own perception and experience as a part of health personnel which is concerning in the issue of patients' satisfaction towards hospital services. There is a need to evaluate the OHC program in Chulalongkorn Hospital on the issue of patient's satisfaction to the services. This aims to find out the patient's expectation and satisfaction with OHC services in order to monitor and evaluate the service provided by OHC which can be used as recommendation for planning for the improvement in the service quality in OHC. This issue will be important to consider for improvement of service quality, because as a services quality cannot be determined by management alone, it has to be based on customer need-satisfying service and wishes. Moreover, service quality is not what has been planned in objective measure, rather it is how customers more or less subjectively perceive what has been planned.

Since satisfaction is varied depending on different factors in different clinics chose to study in the obstetric clinic in OHC . I also realized that one of the factors contributing to infant mortality and low birth weight is the lack of adequate prenatal care. Delay in obtaining prenatal care or a lower number of prenatal visits is directly related to an increased risk of poor obstetrical outcome. And the purpose of prenatal care is to ensure, as far as possible, an uncomplicated pregnancy and the delivery of a live healthy infant. There is evidence that mothers who receive prenatal care have a lower risk of complications. Pregnancy is not a disease, so the issue of satisfaction toward health services should be concerned because it is important for pregnant

women to receive a continuous prenatal care which decrease risk of prenatal mortality.

In order to obtain the best result in this study, I need to assess both external and internal resources. This will enable me to apply the action research to introduce any necessary improvement.

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