

CHAPTER 3

THE PROPOSAL

3.1 Introduction.

This study is an action research to find out the strategic issues relating to long waiting time in the OPD of JDW National Referral Hospital to improve the services. In this study I would like to find out the perception of the stakeholder in terms of the problems in the OPD and their perception of issue of long waiting time. The satisfaction level of the patients with the services and the staff behavior in five main areas of the OPD (registration, physicians' chamber, pharmacy, X-ray and laboratory section) will be measured on the Likert- scale of alternatives. This will be compared with the actual measurement of time done through time motion analysis. The result may provide a crude indication of the areas where the patients seem to be mostly dissatisfied and where they seem to wait the most for the services in these five sections. Based on these findings the hospital management may be able to identify the areas that need support for improvement of health care services in the OPD.

The research design proposed for this study is a cross-sectional descriptive study with qualitative and quantitative methods using both primary data and secondary data.

3.2 The purpose of the proposed study.

Firstly, to investigate the "problems" in the out patients department and identify ways to improve health care services by reducing the out patients' dissatisfaction with health care services in JDW National Referral Hospital.

Secondly, the result of this study is expected to be used as recommendation for the development of strategies and specific programs by the hospital management team for improving health care services in the hospital.

Thirdly, the study result can be used as a basis for the hospital management to increase the effective use of resources to improve the quality of health care services in the hospital.

3.3 The justifications of the proposed study:

The hospital is in the process of finding ways to face the challenge of changing environment, demands and health care system. This study can contribute to identify certain key factors to prepare for the change for improvement.

This study is a part of research and development activity encouraged by the hospital to find out basis for priority setting and resource allocation.

It is important to identify the problems in the OPD involving all the stakeholders and their perspectives to find some realistic and sustainable solutions to the problems and the result of this study can contribute to this process.

This study is first of its kind in the hospital and can encourage others to do such studies which can contribute substantially to the overall development of the hospital.

3.4 Objectives of the proposed study.

The short, medium and long term objectives of this study are described below.

3.4.1 Short term objectives.

(1). To identify the strategic issues for improving the quality of waiting time in the out patient department of JDW National Referral Hospital to improve patient satisfaction with the health care services.

(2). To analyze the behavior, attitude, and experience of the stakeholders (both external and internal) towards the health services provided through the OPD of JDW National referral Hospital.

(3). To identify the constraints to improve the quality of the patient waiting time in the OPD and find out alternatives how these constraints can be overcome and suggest what actions could be undertaken to solve this problem.

3.4.2 Medium term objectives.

1. To identify other areas for action research to improve/ develop the hospital management system.

2. To provide information and guidance to the other hospitals in the country on problem identification and action research as an essential component for improvement or development of health care system in the hospitals.

3.4.3 Long-term objectives.

(1). To provide a rationale and develop guidelines for improvement of 'Hospital Management system in the country.

3.5 Research Questions.

The following research questions were formulated:

(1). What are the strategic issues which may effectively improve the quality of waiting time?

(2). How long do the patients actually wait to avail health care services in the OPD? Is the time spent appropriate?

(3). What are the factors contributing to the quality of waiting time in the OPD?

(4). What are the perspectives of those involved or the stakeholders?

3.6 Methodology.

3.6.1 Sample population:

The sample population for the study will include:

The respondents will be selected from the stakeholders who play a particular role in hospital development. These are the (1) patients attending the OPD, (2) Health staff providing services and hospital administrators, (3) Potential patients.

(a) all Patients attending the OPD of JDW National Referral Hospital; (b) All the staff working in the OPD; (c) Health administrators from the Department, such as: Director of Health Services, Planning Officer, Research Officer, Director of IECH (Information, Education and communication in Health); and (d) Randomly selected Potential patients from the community. These groups are, as a whole, the significant stakeholders with regard to the operation of the OPD.

3.6.2 Sample size

In this proposed study 50% of all the patients attending the OPD of JDW National Referral Hospital will be included in the study. All (100%) of the

relevant staff working in the OPD will be selected for the study. Being the National referral Hospital, it will be difficult to clearly identify the potential customers of the hospital. Therefore 100 randomly selected respondents from the local community will be included in the study.

In JDW National Referral Hospital the average daily OPD attendance is about 1000 cases in summer months (June, July and August). Random selection of the patients will be done in this study. Every second patient attending the OPD will be selected for the study. To ensure better coverage data will be collected on different days and different times of the days.

The respondents will be explained about the proposed study, its objectives, the purposes and the duration of the study. Only the subjects who are willing to be respondents will be selected for the study. This is to ensure the personal rights of the respondents and the cooperation of the respondents during the course of the study.

3.6.3 Research Techniques

Observational studies in the Out patients department. A qualitative study to study the events in its natural setting and natural treatment. Taxonomy of the people in terms of their behavior, attitudes, and interactions. The physical set up and its affect on the patients. The main purpose of

this is to find the key factors which could be used in reducing the waiting time and improving the patient satisfaction with the OPD services.

Personal interviews and focus group discussions with the medical staff, hospital administrators, and patients to get their views, perceptions and experiences on the problems in the OPD. To make them realize that their participation is very essential for the success of the study.

Data collection with the questionnaires from the respondents. Questions on the general profile of the respondent, perception of problems in OPD and level of satisfaction are asked as self administered questions.

Time motion study or flow process analysis of the OPD. Actual measurement of the time spent by the patients at each process of the service such as registration, physicians chamber, pharmacy, laboratory, and x-ray will be done. This could enable us to identify the "bottle neck" in the flow process on which the management could focus the corrective measures to bring improvement in the system.

Secondary data collected from the JDW national referral hospital OPD records, annual reports, and Annual Health Bulletin of Ministry of Health & Education will be used in the study.

Self-administered Questions on the general profile of the patient in terms of their age, sex, and occupation are asked. Their perception of the problem in OPD is asked to get an idea what exactly is the problem in OPD. The respondents are asked to indicate their level of satisfaction with waiting time, services, attitude of physicians, pharmacist, receptionist, technicians and comfort of waiting rooms. The level of satisfaction is based on the 5-point Likert type scale of alternatives. (see Appendix)

3.6.4 Data Analysis.

As part of a Time motion analysis of the flow process will be measured as the actual time taken at each service point by calculating the:

(i) mean service time,

(ii) mean waiting time, and

(iii) ratio of service time to total time which is defined as the service efficiency as indicated by the following formula (Pei Likun, 1993):

$$\text{Service Efficiency} = \frac{\text{Mean Service Time}}{\text{Mean waiting time} + \text{Mean service time}} \times 100$$

For the time motion analysis of the flow process 10% of the respondents from the patients will be used. The actual measurement of the time at each service point will be done by following the patient individually using a stop watch. The patients are in fact not aware of being observed. The surveyor stays at a distance and moves along with the patient during the process.

Average waiting time over the day, from 9AM to 3PM.

Average waiting time over the week, from Monday to Saturday.

This data can be used as guidance for hospital management in decision making for resource mobilization (manpower and material) in the OPD to improve services.

3.7 Management of the proposed study.

All the staff working in the OPD of JDW National Referral Hospital will be involved either directly or indirectly. The study will be a combined effort by all the hospital administrators (director, Matron, Administrative officer, Finance officer), other staff in OPD (Physicians, nurses, pharmacists, technicians) and patient representatives. A series of brainstorming sessions will be held with representatives from all levels. The problem definition in the OPD context will be finalized. An action committee will

be formed which will function as the management body for the study. Certain key decisions like planing, resource mobilization and supervision will be dealt through this body.

Ten students from the Royal Institute of Health Sciences (RIHS) will be selected to be trained as surveyors for two days. Since this institute is affiliated to JDW National Referral Hospital there no logistical or administrative problems expected to arise. This students are unknown to the hospital especially in the OPD, so that false results or biases can be minimized to get the real situation as it exists.

The budget provision can be made available from the Health Division, research section or through International donors like WHO and DANIDA. The action committee will work out the amount required for the study and forward to the relevant sources. Since all the regular employed staff and health school students will be involved, it is not expected to have a huge financial implication.

This committee will be responsible for regular supervision and monitoring activities during the study period. On completion of the data collection the committee will be responsible for data analysis, the record keepers and computer assistants of the hospital will be involved in this process. Finally the action committee will draw up the conclusions and make recommendations for the hospital management

towards improvement of services in the out patients department.

The study will be conducted in the summer months when the OPD case load is at highest and problem situation is at its peak. See Table 3.1 for work plan including activities, responsible persons, time period and approximate budget.

3.7.1 Work Plan of the proposed study

In this action research study, all the staff working in the OPD will be represented in the work plan, so that it is a combined effort rather than individual show to improve health care services in the hospital. This would make the study more successful in terms of cooperation, sense of responsibility and implementation of the solutions. A brief description of this plan is shown in Table below.

Table 3.1

Activity	Persons Responsible	Time	Budget Nu.*
Staff meeting to introduce the action research study.	Researcher, Director of the hospital.	1-7 July 1996	500.00 = US\$15.00
Formation of the action committee ,decide on problem definition, objectives, methodology and resources, etc.	Action committee representing all levels, researcher, Director of health services.	7-21 July 1996	5000.00 = US\$143.00
Modification of questions and printing of questionnaires	Action committee, Researcher,	22-29 July 1996	5000.00 = US\$143.00
Request Director/principal of RIHS for the 10 students 2and start training program for the surveyors with a pilot study.	Action committee members, researcher, IECH & Research section for assistance.	1-7 Aug 1996	7000.00 = US\$200.00
Actual data collection	Surveyors, researcher, committee members.	7-21 Aug 1996	9000.00 = US\$257.00
Data analysis	Committee members, record keepers, computer assistants, researcher.	1-14 Sept 1996	5000.00 = US\$143.00
Conclusions and recommendations.	Committee members, researcher.	21-28 Sept 1996	3000.00 = US\$86.00

NU = Ngultrum (Currency of Bhutan) 1USD = 35NU

This budget is subjected to changes based on the action committee decisions and various activities.

3.8 Budget.

The budget required for the proposed study may be allocated from the research and development budget of JDW national referral hospital. In case of further requirements certain international organizations, such as, WHO, DANIDA and UNICEF can be approached for financial support of the action research. Since most of the activities will be undertaken by the regular staff of the hospital and the health school students during the working hours, the financial implications will be minimum. This may be one of the main advantages of the action research as it is undertaken as a part of day to day work rather than as a separate activity which involves extra budgetary requirements. The approximate expenditure of the proposed study by activity is indicated within the work plan shown in Table 2.1. The needed funds in terms of the budget headings normally used for the project accounting in Bhutan are indicated in the following Table.

Table 3.2

1. Personnel enrollments	Nu. 11,000.00
2. Travel and daily allowances	Nu. 9,500.00
3. Utilities/ Material	Nu. 8,000.00
4. Miscellaneous/ refreshments	Nu. 6,000.00
	<u>Total = Nu. 34,500.00</u>
	Total US\$ = 967.00

3.9 Delimitation of the proposed study.

As a qualitative or perspective research the findings of this study cannot be generalized as the factors considered in the study are specific to a particular setting as it exists.

3.9.1 Limitations of the study.

Due to time and resource constraints the sample size used in the pilot study is small to represent the proposed population categories. This limits the use of the tested instruments and their applicability in the proposed study. This suggests that the instruments should be further tested, especially for clarity and applicability, in Bhutan prior to the actual research study.

This action research will cover only one of the many problems in the OPD: The quality of waiting time. More in-depth studies may be required to obtain a broader view of the problems so as to find appropriate holistic and sustainable solutions within the available resources.

The factors considered in the questionnaire for satisfaction level may not be complete as this reflects primarily the providers view more than the patients view. This indirectly limits the validity of the measurement of satisfaction levels of the respondents.

It may be appreciated that, while this study may not be enough to improve the quality of waiting hours in the OPD and possibilities for other studies and methods may be explored.

3.10 Summary

In this main objective is to identify the critical factors relating to waiting hours in the OPD and compare it to the satisfaction level of the patients. The waiting time at the various service processes in the OPD, such as, registration, physicians' chamber, pharmacy, x-ray, and laboratory section are used actually measured to calculate the efficiency of the services. This result is further compared to the perception of problems of patients and their satisfaction levels with the services at these various points. Based on the result of all

these findings the actual "bottle neck" in the flow process can be identified along with problematic areas in the service delivery system in the OPD. This finding can be used by the hospital management to improve health care services in the OPD by focusing problem solving activities including resource mobilization in these identified areas.