RECOMMENDATIONS FOR EXPANSION OF HOSPITAL FACILITIES IN LEBANON: A SURVEY OF ONE HOSPITAL'S NEEDS

A Research Topic

Presented to the Graduate Faculty

Beirut University College

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

in

Business Management

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BEIRUT UNIVERSITY COLLEGE

P. O. BOX 13 - 3053

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APPROVAL OF RESEARCH TOPIC

NADA KARANOUH
Name of candidate

780387 ID# December, 1986

Date submitted

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The following faculty member, appointed to serve as advisor to the named candidate, has approved this research study.

	Robert B. Polhill	12/1/87	
	Name of advisor	Date	
Ī			
-	Signature		>
L	Mitheleshwar Singh		
0	Name of Division Chairman	Date	
	Si gnature		

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CHAPTER 1

INTRODUCTION

Importance and Validity of the Topic

A hospital is an organization that brings together a group of people with a variety of skills, to coordinate their pooled efforts in a physical plant designed for and with the necessary equipment to:

- Care for the sick and injured,
- Educate physicians, nurses, and other personnel,
- Promote public health,
- Advance medical research.

The determination of particular hospital needs is a thorny problem and fundemental to this determination is the comparison of costs and available facilities. Planning facilities for the future is important not only to hospitals but also to chronic disease units, nursing facilities, visiting nurse services, and other supplemental care organizations.

Malcolm T. MacEachern, Hospital Organization and Management (Chicago, 1957), pp. 29 - 34.

In the last couple of years the population in the areas surrounding Makassed General Hospital has grown rapidly. Because of this, the hospital is suffering from a shortage of beds and patient care facilities. Now, in order to meet the increased need of its community, it is planning to expand its services.

Background

Makassed General Hospital is an Islamic institution that handles medical, educational and social affairs. The Association started its medical care in 1878. At the time, the medical care mostly consisted of doctors' visits to patients' homes.

In 1921, however, a committee of the members of the Association started seriously thinking of building an Islamic hospital. Makassed General Hospital was built in Tarik-El-Gedideh area which is known for its large population, from the middle and low classes of society.

In 1930 two floors were built and a committee named "The Committee of Islamic Hospitals in Beirut" administered it. The hospital started its operations until World War II, when the Ministry of Civil Defense took over part of the hospital for wounded.

In 1941 the Association took over the supervision of the hospital and selected a committee to handle the management matters.

In 1958 the hospital was financially unable to continue its functions. This led to the intervention of the Association through financial, personnel and technical support and direct supervision of the hospital matters by a committee selected

from the members of the Board of Trustees. 2

Today, Makassed General Hospital consists of six floors with a total of 216 beds. It has a variety of medical facilities like:

- General Surgery
- Obstetrics
- Gyneco1ögy
- Internal Medicine
- Pediatrics
- Intensive Care Unit
- Kidney Dialysis
- Laboratories
- Blood Bank
- Outpatient Care
- Private Clinics

According to the records of the Lebanese Ministry of Hëalth, the population of Lebanon was 3,692,731 persons in 1984. Beirut, East and West, has 516,352 registered persons.

Makassed Association, The Development of Makassed General Hospital (Beirut, 1984).

Lebanose Ministry of Health, "Views of Medical Situation in Lebanon", Records of Deliberations, 1985.

The hospital is surrounded by four main areas:

- · Horj,
- Tarik-El-Gedideh.
- Mazraa, and
- Mallaab.

There are 22,458 dwelling units in these areas. In developed countries the average number of persons per dwelling unit is 7. Therefore, the projected total population around the hospital is 157,206 persons.

Because of the Israeli invasion in 1982, three issues affecting the community of service have arisen:

- Palestinian hospitals stopped operating.
- The invasion of South Lebanon increased the number of refugees in the southern suburbs.
- There was an influx of refugees from downtown, Sodico and along the Green Line.

⁴Makassed Association, Statistical Department, <u>Number of Population in Beirut</u> (Beirut, 1984).

World Bank/International Monetary Fund, World Development Report (August, 1979), p. 159.

At present the 700,000 persons (including 300,000 Lebanese and Palestinian refugees) living in the southern suburbs are served by two hospitals with a total of 200 beds. 6

In Lebanan, there are 120 institutions that offer medical treatment. Twelve of these institutions are for specialized treatments only. 7

The remaining, 108 institutions are called "general hospitals" for medical and surgical treatment including heart surgery, kidney, pediatrics, obstetrics, gynecology, emergency services, laboratory and X-ray analysis.

Of the 120 institutions, 106 are private hospitals with 7,258 beds and 14 public hospitals with 613 beds (Table 1). The private hospital beds are distributed geographically according to Table 2.

⁶ A.H.Ladki, Assistant Manager for Financial Matters, Makassed General Hospital, Interview, January 1986.

^{&#}x27;7 Lebanese Ministry of Health, Committee of Physicians, "Views of Medical Situation in Lebanon", Records of Deliberation, 1985.

_Table_1

Beds in Public and Private Hospitals in Lebanon (1985)

Number of			Beds to Total	
<u>H</u>	ospitals	and Beds		
•	•			
Public				
Hospitals	14	613	8%	
Private				
Hospitals	106	7258	92	
Total	_120	7871	100%	

Source: Lebanese Ministry of Health, Committee of Physicians, "Views of Medical Situation in Lebanon," Records of Deliberations, 1985.

Table 2

Private Hospital Beds by Geographic Areas
(1985)

	Number of		Beds to	
	<u>Hospitals</u>	and Beds	<u> ∓ötal in Each Arëa</u>	
Beirut	24	2,392	33%	
Mount Lebanon	39	2,484	34	
South	17	1,072	. 15	
North	15	808	11	
Bekaa	11	505	7	
Total	106	7,258	100%	

Source: Lebanese Ministry of Health, Committee of Physicians,
"Views of Medical Situation in Lebanon," Records of
Deliberations, 1985.

Statement of Problem

Under normal conditions the capacity of Makassed General Hospital is more than adequate. However, because of the increase in refugees and the destruction of most Palestinian hospitals, Makassed Hospital estimated that it would be called upon to serve significant numbers of Palestinian and Lebanese refugees and residents of the southern suburbs.

As mentioned previously, the management of the hospital decided to increase facilities and thought of adding up to 315 beds. However, the management left the order of priorities to be decided by the actual needs of the population taking into consideration the amount of funds needed to be raised for expansion. At the beginning of this year, the expansion of the pediatrics department was completed and the beds were increased in number.

Thus, the problem was to decide in which direction, if any, to continue expansion.

Problem Questions

A need may be defined as a "requirement of the patient which, if supplied, relieves or diminishes his immediate distress or improves his immediate sense of adequacy or well-being." The following questions will be addressed in this research project:

- Is there a perceived (by potential patients and doctors) need for expanded facilities and services at Makassed General Hospital?
- If expansion is to occur, what direction should it take
 - more beds?
 - expanded existing services?
 - new services?
- Is there a favorable cost/benefit relationship in proposed expansion efforts?

⁸Ida J. Orlando, <u>The Dynamic, Nurse/Patient Relationship</u> (New York, 1961).

Hypothesis

The hypothesis of this research is that Makassed General Hospital should expand, to meet the present needs and desires of the community it serves, in the following ways:

- 1. Increase the number of beds in existing facilities:
 - a. General and Specific Surgery
 - b. Obstetrics
 - c. Gynecolgy
 - d. Internal Medicine
 - e. Pediatrics
 - f. Intensive Care Unit
 - g. Kidney Dialysis
- 2. Expand professional services already rendered:
 - a. Laboratories
 - b. Blood Bank
 - c. Electrocardiography and Electroencephalography
 - d. Physical Therapy
 - e. Pharmacy
 - f. Radiology
 - g. Pathology
 - h. Outpatient Care
- 3. Implement new facilities not previously available:
 - a. Special Burn Treatment Center
 - b. Cornea Transplant

- c. Open-Heart Surgery
- d. Microsurgery

Statement of Purpose

The reason for selecting this subject is to help the hospital determine its future direction. The determination of particular hospital individual needs is a thorny problem. The need for a facility, the development of existing facilities and services and the addition of new facilities and services are all fundamental to decide the course of action to be taken in the future. Thus, this research will help the hospital's management determine its future course of action in trying to meet the population's needs.

Performance Objectives

The performance objectives of this research are to

- obtain relevant data regarding surgical and medical services provided and capacity for the years 1983,
 1984 and 1985 from hospital records.
- obtain views of the Lebanese Ministry of Health concerning medical and surgical needs for the future.
- obtain data on geographical and population segments that are served by Makassed General Hospital.
- obtain views of doctors, patients and hospital administrators on the need for and the direction of expansion.
- synthesize and analyse data collected.
- recommend specific areas for expansion for Makassed
 General Hospital.

Definition of Terms and Symbols

The following terms and symbols will be used throughout this report:

- OPD is the abbreviation used for the Outpatient
 Department.
- OBS/GYN is the abbreviation used for Obstetrics and Gynecology.
- ICU is the abbreviation used for Intensive Care
 Unit.
- \bullet ENT is the abbreviation used for Ear, Nose.and Throat.
- <u>EKG and EEG</u> are the abbreviations used for Electrocardiography and Electroencephalography.

CHAPTER 2

REVIEW OF LITERATURE

In the <u>Hospital Audit Guide</u>, patient service revenue is comprised of three major classifications:

- Revenue from daily patient services classified as medical, surgical, pediatrics, intensive care, psychiatrics, obstetric and nurseries.
- Revenue from nursing services classified as operating,
 recovery and delivery rooms, central services and supply;
 intravenous therapy and emergency service.
- Revenue from professional services classified as laboratories, blood bank, electrocardiography, radiology,
 pharmacy, anesthesiology and physical therapy.⁹

The same categories will be used throughout this research excluding psychiatric services.

⁹American Institute of Certified Public Accountants, <u>Hospital</u>
Audit Guide, (New York, 1983), p. 29.

In the medical magazine, <u>Hospitals</u>, Dr. Joe M. Inguanzo and Mark Harju conducted a study of the reasons that make patients select a particular hospital. ¹⁰ They found that consumers prefer good medical care as the main reason for selecting one hospital over another. Their survey included the following questions:

- Why is a hospital preferred?
- Other than for an emergency, what factors are the most important when choosing a hospital?
- Why is a particular hospital actually used? Is it for
 its new technology or equipment available, staff courtesy, specialist availability, doctor's recommendation,
 near their home or because it's less costly?

After collecting the answers, the two researchers, came up with the following percentages:

• Good Medical Care	47.7%
• Location	23.2%
• Tradition	13.2%
 Doctors recommendation 	8.3%
• Other Reasons	7.7%

¹⁰ Dr. Joe M. Inguanzo and Mark Harju, "What Makes Consumers Select a Hospital?" Hospitals, 59 (March 16, 1985), pp. 90-94.

The study by Dr. Inquanzo and Harju is a good basis to adopt in this research, but the first question is too broad in scope to be appropriate here, however, the third one, which is more specific, will be used in the questionnaire for interviewing patients.

In another issue of <u>Hospitals</u>, the same authors found that, in some instances, marketing the price of specific services to target audiences could prove beneficial. Il Therefore, this rease search will collect data concerning the sensitivity of patients to hospital costs.

Furthermore, emergency care is the form of treatment that most consumers associate with a particular hospital followed by pediatrics and maternity services. Thus, part of this research is to collect data from households with previous hospital experience.

Dr. Joe M. Inguanzo and Mark Harju, "Are Consumers Sensitive to Hospital Costs?" <u>Hospitals</u>, 59 (February 1, 1985), pp. 68 - 69.

Malter J. McNerney, in his book <u>Hospital and Medical Eco-nomics</u>, ¹² says that the association between availability and use of facilities having been established, it is only natural that the next matter of concern should be whether there are more or less beds than necessary. One purpose of this research is to measure beds needs by employing crude formulas like citing the existing supply of beds, examining plans for expansion and stressing the implications of these data.

The same procedure will be adopted concerning beds needed, the existing supply of beds and plans for expansion of other hospitals, too.

¹²Walter J.McNerny and Study Staff, <u>Hospital and Medical Economics</u>,
vol. 1 (Chicago, 1962), p. 39.

CHAPTER 3

METHODOLOGY

Data Collection Techniques

Approaches and techniques used in this research to resolve the problem are:

- Obtaining selected information from hospital records regarding the capacity of the hospital and number of cases served during the past three years.
- Gathering data from patients, doctors and hospital administrators regarding the need for expansion and its direction.

The data, after collection, will be analyzed to develop the trend of usage and the need for the facility or service.

These trends will support recommendations concerning the direction of expansion.

Data, regarding views of patients, doctors and hospital administration will be gathered through interviews using questionnaires prepared for this specific purpose. The reason for selecting this method is that a personal interview permits and encourages more lengthy exposition of ideas.

The questions are easy to answer. They call for check mark

answers that don't need much thinking or recall and won't embarrass the respondent by seeming to call for "right" or "wrong" answers. 13
The questionnaires are included in Appendix C.

^{13&}lt;sub>Bertram</sub> Schoner and Kenneth P. Uhl, <u>Marketing Research</u>:

<u>A Short Course for Professionals</u> (1976), p. 13.

Sampling Plan

The population of Lebanon was 3,692,731 persons in 1984; Beirut numbered 516,352 at the time. Based on dwelling units in the four areas surrounding Makassed General Hospital there were 157,206 inhabitants in the immediate vicinity. Considering the 350,000 Palestinian and Lebanese refugees, the total would be about 500,000.14

If a 90% confidence level is expected for our sample, or a 90% probability that the population lies under the normal curve, and an estimated standard deviation equal to 3% is required, then the size of the sample for each year is 52.15 Since the population figure for 1984 is the only one available, subsequent years were estimated based on a 2.9% increase in population occurring each year. 16 If we apply this rate throughout the period,

¹⁴ Makassed Association, Statistical Department, Number of Population in Beirut (Beirut, 1984).

¹⁵Alvin Arens and J. Loebbecke, <u>Auditing: An Integrated Approach</u> (New Jersey, 1985), pp. 402 - 404.

World Bank/International Monetary Fund, World Development Report (August, 1979), p. 159.

the total population will not change much. Therefore, the same sample size is used for each of the four years.

The source from which the sample of patients was selected was the chart of daily admissions of patients used by the hospital. A five-digit random number table was used. Since a year is 365 days, the first three digits of the random table were assigned to days. January 1st has the number 001 and December 31st the number 365. For the current year, the last number selected from the table is for June 30th, 1986 which is 181.

The last two digits were assigned to patients admitted to the hospital. The maximum patients admitted per day is 100, therefore, the first patient number is 01 and the last is 99.

The selection of numbers began from a randomly selected starting point and every number in the table was included conec secutively in the sample.

The hospital has 60 doctors on its staff. Two doctors were selected from each specialty from hospital records. Former doctors interviewed were those who had a contract for three years with the hospital and were considered "full timers". They had left the hospital even though they had attractive conditions and terms included in their contracts.

Reasons for continuing sampling plan through mid-1986 are explained on Page 42.

Interview Presentation

When the interviews were held with patients, they weren't informed that their names were obtained from hospital records but rather were told that a study was being conducted for the hospital on a "no name" basis. They were asked if they, or any member of their family, had been in a hospital in the last three years and which hospital they had used. If the answer was positive and they told the name of the hospital (Makassed) the interview continued. If they didn't say that they had used Makassed's services in the past three years, the interview was terminated.

The reason for this was the interviewer's unwillingness to tell the patients that their names had been obtained from confidential hospital records.

Analysis of Data

After the data was gathered, the Chi square technique was used to test the significance of the results. This technique permits testing for the significance of divergence of observed frequency of responses from that expected on the basis of an equal probability hypothesis.

The formula for Chi square is:

$$\chi^2 = \sum \left[\frac{(f_o - f_e)^2}{f_e} \right]$$

where $(f_0 - f_0)^2$ is the squared differences between the observed and expected frequencies, f_0 is the expected frequency in terms of some hypothesis about population, and Σ means the sum of. 17

The result of the calculation is compared to a table of significance at a variety of probability levels to determine whether the pattern of responses should be attributed to chance or had true significance.

¹⁷John C. Townsend, <u>Introduction to Experimental Method</u> (New Jersey, 1985), pp. 156-159.

The purpose behind using both the random sample and Chi square techniques is that, there was no guarantee that every member of the population surrounding Makassed Hospital had an equal chance of being included in the sample. If any person walking in the street was picked, they may not have been patients of or have had useful information for Makassed Hospital. Since the patients of the last three years were the target, hospital records were used for our sample selection, thus excluding a large number of potential patients.

The use of the Chi square technique tested the significance of our results and compared the observed results according to a hypothesis stating that "chance" would result in a 50-50 distribution of responses.

CHAPTER 4

SURVEY RESULTS AND ANALYSIS

A variety of data was collected during this research. These data are presented and analysed according to the "Performance Objectives" discussed earlier in Chapter 1.

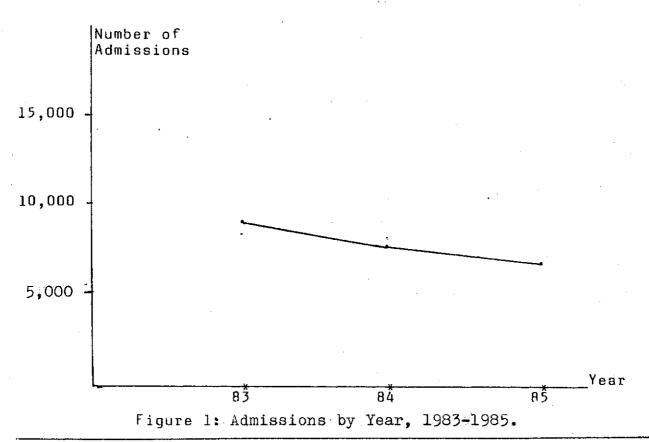
- 1- Data regarding surgical and medical services provided and capacity for the years 1983,1984 and 1985.
 - a. Admission by Year (Table 3 and Figure 1). The first analysis is about admission. It is definitely clear that over the last three full years the admissions at Makassed Hospital were decreasing. In 1983, the ratio was 38%; by 1985 it had dropped to 30%.
 - b. Admission Rate by Service Centers (Table 4 and Figure 2). The three major service centers are: Emergency Room, Doctor's Clinics and OPD. During the three years under study, the Emergency Room had the highest rate of admission of the three service centers. The Emergency Room during these years had increased from 47% to 51% while, on the other hand, the Doctor's Clinics had decreased from 44.5% to 39%. However, OPD stayed about the same.

Table 3

Admissions by Year

(1983-1985)

Year	Number of Admissions	Admissions to Total
1983	9,917	38%
1984	8,463	32
1985	7,853	<u>30</u>
Total	<u>26,233</u>	100%

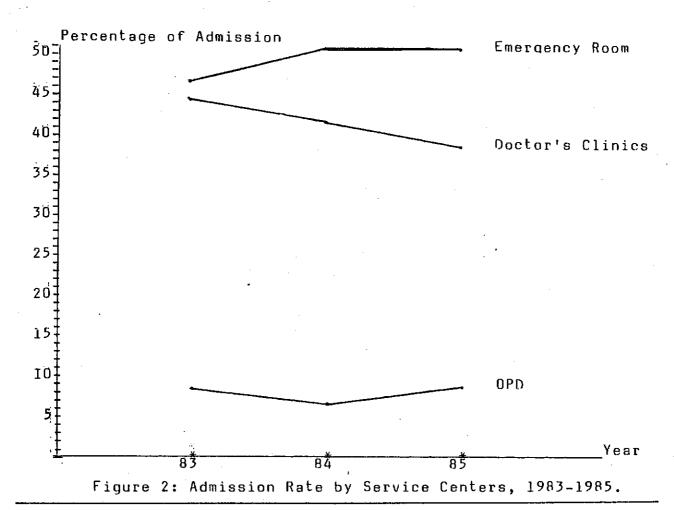


Source: Makassed General Hospital, Statistical Department, Yearly Statistical Reports, 1983-1985.

Table 4

Admission Rate by Service Centers
(1983-1985)

<u>Year</u>	Emergency Room	Doctor's Clinics	<u>0PD</u>	<u>Total</u>
1983	47%	44.5%	8.5%	100%
1984	51	42	7	100
1985	51	39	9	100
		·		•



Source: Makassed General Hospital, Statistical Department, Yearly Statistical Reports, 1983-1985. c. Admission by Clinical Departments (Table 5 and Figure 3). Table 5 shows the number of patients admitted by each department. Each of these departments reveals a downward trend in admissions over the last three full years.

Of the four departments, the surgery department has the highest number of admissions. It is important to note here that the hospital increased the number of rooms for the Pediatric department, even though the patients in this division were decreasing. It started with 37% in 1983 and dropped to 29% in 1985.

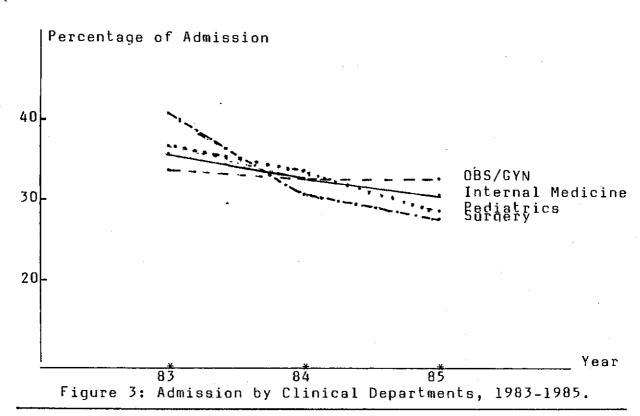
- d. Admission by Nationality (Table 6). In 1983, the rate of Palestinian patients was 11.87% of the total admissions. On the other hand, 1984 and 1985 had the same ratio of 9.9%. There was no explanation for the reason behind the decrease in rate during 1984, but for 1985, the Camp's War that started in June, made the Palestinian patients and injured unable to go outside the camps and they used the medical facilities that were available for them there.
- e. Occupancy Rate (Table 7 and Figure 4). Occupancy rate is the rate of occupancy of beds by patients, that is to say, the percentage of avail-

<u>Table 5</u>

<u>Admission by Clinical Departments</u>
(1983-1985)

Internal

Year	OBS/GYN	Ratio	Surgery	Ratio	Medicine	Ratio	Pediatrics	Ratio
1983	2,090	34%	4,280	41%	2,288	36%	1,259	37%
1984	. 2,027	33	3,238	31	2,086	33	1,182	34
1985	2,055	_33_	3,008	_28_,	1,916	_31_	986	_29
	6,172	100%	10,526	100%	<u>6,290</u>	100%	3,427	100%



Source: Makassed General Hospital, Statistical Department,
Yearly Statistical Reports, 1983-1985.

<u>Table 6</u>

Admission by Nationality

(1983-1985)

Year	Lebanese	Palestinian	Other	Total
1983	87.46%	11.87%	.67%	100%
1984	89.74	9.83	.43	100
1985	89.70	9.94	.36	100

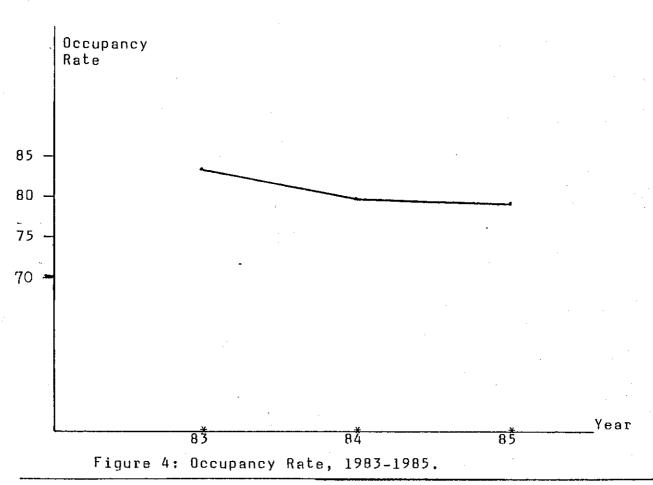
Source: Makassed General Hospital, Statistical Department,
Yearly Statistical Reports, 1983-1985

<u>Table 7</u>

<u>Occupancy Rate</u>

(1983-1985)

<u>Year</u>	•	Rate
1983		83.00%
1984		79.55
1985		78.99



Source: Makassed General Hospital, Statistical Department, Yearly Statistical Reports, 1983-1985.

- able beds used by patients. The occupancy rate has declined over the last three full years, however, the decline from 1984 to 1985 was relatively insignificant.
- f. Outpatient services (Table 8). Services rendered by the OPD and Emergency Room are treated separately from other clinical departments. Table 8 shows Outpatient and Emergency Room Services provided and hospital admissions through the Emergency Room. In 1984, there was a sharp decrease in the total number of patients that used the Emergency Room; but the decrease in 1985 was considerably less. In contrast, OPD cases were increasing throughout the period. It started with 9,781 patients in 1983 and reached 13,864 in 1985.
- g. Specialized Treatment Sessions (Table 9 and Figure 5). This treatment has to do with Kidney Dialysis, Physical Therapy and Laser. Kidney Dialysis and Laser treatments increased during the period. On the other hand, Physical Therapy declined drastically after it began service in 1984.
- h. <u>Professional Services or Procedures (Table 10</u> and Figure 6). Professional services and pro-

Table 8

Outpatient Services (1983-1985)

Year	Outcase	OPD.	Emeraency	E.R. Admission
	Visits		Room	· · · · · · · · · · · · · · · · · · ·
1983	••	9,781	28,785	4,676
1984	978	12,250	20,319	4,298
1985	1,193	13,864	19,560	4,020

Source: Makassed General Hospital, Statistical Department,
Yearly Statistical Reports, 1983-1985.

<u>Table 9</u>

<u>Specialized Treatment Sessions</u>
(1983-1985)

Year	Kidney	Rate	Physical	Rate	Laser	Rate".
<u></u>	Dialysis		Therapy	· 		
1983	6,115	28%	-	0%	137	33%
1984	7,683	35	1,458	83	57	14
1985	8,278	37	291	_17	219	_53
	22,076	100%	1,749	100 %	413	100%

Source: Makassed General Hospital, Statistical Department,
Yearly Statistical Reports, 1983-1985.

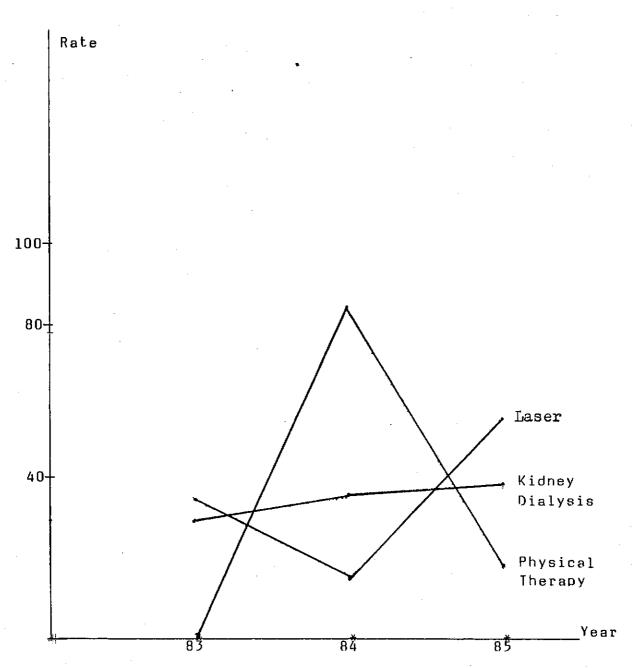


Figure 5: Specialized Treatment Sessions, 1983-1985.

Source: Makassed General Hospital, Statistical Department, Yearly Statistical Reports, 1983-1985. 100%

9,527

100% 19,856 100% 782 100% 63,646 100%

675,603

Table 10

Professional Services or Procedures

	Rate	33%	32	35
	Pathology	3,141	3,090	3,296
	Rate	œ 89	47	45
	X-Ray	4,863	30,185	28,598
35)	Rate	% O	57	43
983-198	EEG	1	12 36 444 57	338
리	Rate	92 25%	36	39
	EKG	4,992	7,112	7,748
	Rate	. 47	47	49
	Laboratories	28,169	315,321	323,113
	Year	1983	1984	1985

Source: Makassed General Hospital, Statistical Department, Yearly Statistical Reports, 1983-1985.

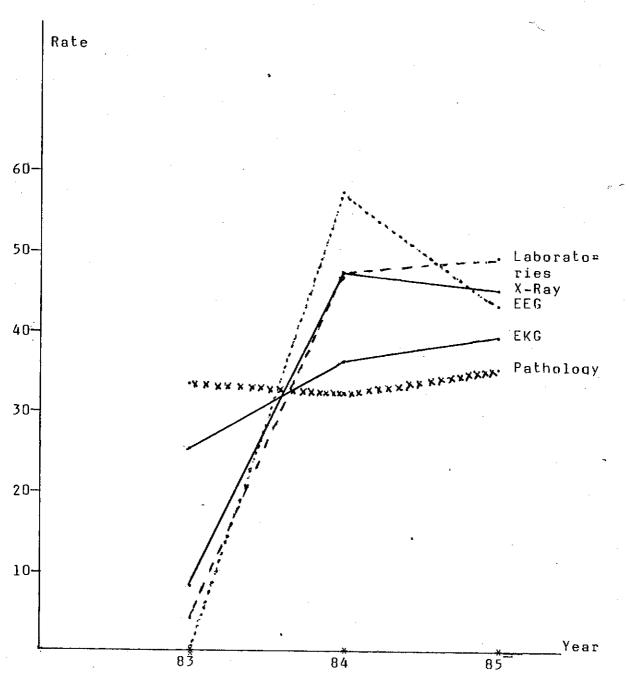


Figure 6: Professional Services or Procedures, 1983-1985.

Source: Makassed General Hospital, Statistical Department, Yearly Statistical Reports, 1983-1985. cedures are those performed by Laboratories, EKG & EEG, X-ray and Pathology. EKG and Pathology had their highest rates in 1985.

Throughout the period the usage of the Maka...ssed Hospital Laboratory increased tremendously. The reason behind this was the purchase of
new advanced equipment for laboratory tests.

Views of Lebanese Ministry of Health concerning medical and surgical needs for the future.

An interview was held with Dr. Mohammad Mouhanna from the Ministry of Health, who was asked
his opinion on the medical and surgical needs
of the country. He declared that the Lebanese
society should be concerned more with proper
medical care in clinics and doctors' offices
than about hospital facilities expansion. He
belives that some doctors send their patients
directly to the hospital before diagnosing the
illness properly. Dr. Mouhanna also belives
that patients like to be checked into the hospital for treatment. He estimates that 70% of
all medical costs in Lebanon are paid to
hospitals.

Finally he said that medical care is

not measured by the number of hospitals but rather by educating people and making them know when to go to a hospital. To him, the important thing is to have good health care, and after that no hospital will consider expansion.

According to recent statistics in <u>The World Almanac</u>, ¹⁸ most of the countries that surround Lebanon have a lower number of beds per capita. For example, Iraq has 177 beds per 100,000 while Syria has only 74 beds. There are some other countries that have higher numbers such as Cyprus where the number is 600 and the United Kingdom has 896 beds.

So compared to most international standards, Lebanon, with 384 beds per 100,000 population, seems relatively well served.

3. Views of patients, doctors and hospital administrators on the need for, and direction of, expansion.

a. Patients

In the sampling plan explained in Chapter 3, the size of the sample for each year is 52. Thus the total number of the sample is 208 patients. Out of this total, 120 patients

¹⁸ The World Almanac and Book of Facts (New York, 1986).

were interviewed. The remaining were excluded because they had no known address, they lived outside Beirut or disqualified themselves as discussed in Chapter 3. Table 11 shows the number of patients interviewed for each year. The reason for adding the year 1986 to 1983-1985 data and sample was to find the present opinions of patients, since more equipment has been added and more progress has taken place within the hospital.

<u>Table 11</u>

Number of Patients Interviewed

Year	Selected Patients	Respondents
1983	52	15
1984	52	25
1985	52	30
1986	52	50
Total	208	120

Source: Patients Selected from Makassed General Hospital's
Admission Records for Years Listed. (First Six Months
of 1986.)

After analysing and classifying the data collected from patients, the following information is reported.

Summary of Patient Responses

	Number of
	Responses
1. Where do you live?	
a. Tarik-El-Gedideh and surrounding	42
areas (Palestinian Camps)	
b. Museitbeh, Borj Abi Haidar,	54
Basta, Mar Elias, Zarif	
c. Ras Beirut	12
d. Southern Suburbs	12
Total	120
2. How many in your family?	
a. 1-3 persons	36
b. 4-7 persons	54
c. 8-14 persons	30
Total	120
3. Through which facility did you enter the hospital?	
a. OPD	20
b. Emergency	52
c. Doctor's Clinics	16
d. Normal procedures	32
Total	120

	Number of
	Responses
4. You chose Makassed General Hospital because:	
a. Near your home	40
b. Cost lower than others	30
c. Specialists available	22
d. New technology and equipment available	24
e. Doctor's recommendation	54
f. Other	30
Total	200*
5. Would you like to have these existing services	
expanded?	
a. General Surgery	38
b. Internal Medicine	24
c. OBS/GYN	26
d. Pediatrics	36
e. Kidney Dialysis	18
f. ICU	30
g. Bhysical Therapy	12
h. Laboratories	4
i. Pharmacy	12
j. Pathology	4
k. Blood Bank	44
1. EKG & EEG	б
m. OPD	.: 6

	Number of
	Responses
n. Other:	
● Hospital in general	10
• Miscellaneous Other	10
• No need	28
Total	308°*
	
6. Would you like to see these non-existing services	
developed?	
a. Special burn treatment center	80
b. Cornea transplant	68
c. Open heart surgery	60
d. Microsurgery	76
e. Other	8 .
f. No answer	10
Total	302*

^{*} Includes multiple responses.

The questions asked are of great significance to the research. The first question, "Where do you live?" showed that 45% were from areas far from the hospital although the aim of this question was to find whether the hospital was used because of its close proximity to their own homes.

The third question, concerned the way in which those patients came to the hospital. The aim behind this question was to see the percentage contribution of each department's admissions to the total for the year. The highest rate is for the Emergency Room which is 43.3%.

The fifth question was to help us know why the patients selected the Makassed General Hospital instead of another. 45% chose the Makassed on doctors recommendation. The second reason was its location.

The last two questions dealt with the preference of patients whether to expand the existing services or to implement new ones.

As explained in Chapter 3, the Chi square is used to test the significance of the patient's responses. In applying the Chi square, the observed results are compared with the expected ones according to a 50-50 hypothesis in which fifty answers for expansion and fifty answers against are to be expected based on pure chance.

Those items with greatest significance in question 7 were:

•	Blood bank	44
9	General surgery	38
•	Pediatrics	36
•	ICU	30

The Chi square is also applied to test the significance of developing new facilities.

The results are presented in Table 12.

Table 12

Significance of Patients' Responses

Hypothesis	Positive	Value of	Degrees of	Conclusion
	Responses	Chi square	Freedom	
-Expansion of			·	
General Sur-				
gery	3 8	16.30	1	Reject *
-Expansion of				
Blood Bank	44	8.52	ı	Reject *
-Expansion of				
Pediatrics	36	19.20	1	Reject *
-Expansion of				
ICU	30	30.00	ı	Reject *
-Development	of			•
Open-Heart S	ur-			
gery	60	0.00	1	Reject **
-Development	of			
Special Burn			•	
Treatment Ce	nt-			
er	80	13.30	1	Accept *
-Development	of			
Microsurgery	76	8.53	1	Accept *
-Development	of			
Cornea Trans	-			
plant	68	2.13	1	Accept ***

^{*} Significant at 1% confidence level

^{**} Significant at 99% confidence level

^{***} Significant at 10% confidence level

b. Views of Present Doctors

The doctors affiliated with the Makassed General Hospital are 60) in number. Since the population is small, no statistical sampling method was applied. Two doctors of each speciality were chosen for interview.

There were twelve interviewees and the duration of affiliation with the Makassed General Hospital varied between one and fifteen years. These doctors chose the Makassed General Hospital because of the community it serves, the available equipment and the staff.

These doctors were asked if they had ever been forced to send patients to other hospitals or postnone non-critical treatment because of lack of space or facilities at Makassed. They were almost unonimous in responding positively to both questions. Ten of the twelve recommended additional beds. The Chi square for this response is significant at a 20% confidence level.

Summary of Present Doctors' Responses

•	Number of
	Responses
1. Where do you practice?	
. a. Near hospital	4
b. Far from hospital	8
Total	12
2. How long have you been affiliated with Makassed	
General Hospital?	
a. 1-5 years	4
b. 11-15 years	8
Total	_12
3. Why did you choose Makassed General Hospital?	
a. Community, equipment, staff	4
b. Located near your office	2
c. Other reasons	2
d. No answer	4
Total	_12
4. Have you ever sent any of your patients	
to a hospital other than Makassed because of:	
a. Lack of treatment facilities	0
b. Lack of beds	8
c. Other	4
Total	12
	

	Number of
	Responses
5. Have you postponed non-critical surgery or	
treatment for your patients because the	
Hospital did not have available beds?	
a. Yes	10
b. No	2
Total	12
6. Do you think that the Hospital should expand?	
a. Yes	10
b. No answer	2
Total	12

e. Viewssof Doctors--Former

The same questions were put to four doctors who had left the Hospital's staff in recent years. With this group, too, the respondents were unanimous in recommending additional beds. These doctors were also asked why they had left the Hospital but the responses showed no direct correlation between those reasons and the need for expansion.

Summary of Former Doctors' Responses

•	
	. Number of
	Responses
1. Where do you practice?	
a. Near hospital	0
b. Far from hospital	4
Total	4
2. For how long did you remain affiliated with	·
Makassed General Hospital?	
a. 1-2 years	0
b. 3-5 years	4
Total	4
3. Why did you choose Makassed General Hospital?	
a. Good offer	4
b. Other	0
Total	4
4. Have you sent any of your patients to a hospital	• .
other than Makassed General Hospital?because of:	
a. Lack of treatment facilities	0
b. Lack of beds	2
c. Other reasons	2
Total	4

		Number of
		Responses
5. Ha	ve you postponed non-critical surgery or	
	eatment for your patients because the hos	nital
	d not have available beds?	
	a. Yes	4
1	b. No	0
	Total	4
6. Do	you think that the Hospital should expan	
es	pecially in the quantity of beds?	
;	a. Ýes	4
!	b. No	0
	Total	4
7. Wh	y did you leave the Makassed General Hosp	ital
(m	ore than one reason)	
	a. Contract treminated	4
	b. Opened private clinic	. 4
	c. Other	3
	Total	
		

d. Views of Administrators

Interviews were held with the assistant managers of the hospital for Administration and Nursing.

These interviews were unstructured. The two administrators were, however, advised of the results of the interviews of patients and doctors. The main idea expressed by the administrators was to increase the number of beds to 350 in order to meet the needs of the community and to improve the quality control check for medical, nursing and administration to make the Makassed General Hospital a first class hospital.

Of the four most frequently mentioned needs by patients (see Seciton a, above), the hospital adminaistrators considered only Kidney Transplant as a possibility. As to the other three:

- Special Burn Treatment Center -- no specialist available
- Open Heart Surgery Center-- cost too high
- Microsurgery Center -- considered too difficult to operate.

The hospital administrators are not the ultimate decision makers. Their job is to find the needs by collecting information related to the subject of expansion. They will present their ideas and suggestions supported with necessary studies and data to a committee that will study the project. Later on the Board of Trustees will meet and decide what to

e. Overall Summary of Responses

Table 13 summarizes all responses on the need to expand existing Hospital services; Table 14 summarizes all responses on the need to extend Hospital services into areas beyond those presently existing. The following paragraphs highlight those responses considered to be most significant.

The respondents showed a strong preference for implementing these new services:

- Special Burn Treatment Center
- Microsurgery
- Cornea Transplant

Moreover, they expressed a desire for expanding these existing services:

- Increase the number of beds:
 - General Surgery
 - OBS/GYN
 - ia ICU
 - Pediatrics
- Expand the capacity of Blood Bank

On the other hand, little interest was shown in expansion or implementation of:

- Internal Medicine
- Kidney Dialysis
- Physical Therapy

- Laboratories
- Pharmacy
- Pathology
- EKG & EEG
- 0PD
- Open Heart Surgery

The administration, apparently agrees with the views of the other respondents with respect to the increase in the number of beds, since this course of action involves the least risk. However, they are continuing to consider expansion of other existing services and development of new competitive services. The recommendations which follow in Chapter 5 are intended to help them in their decision making process.

Table 13

SUMMARY OF ALL RESPONSES

EXPAND EXISTING SERVICES

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SERVICES

미	-	4	4	4	16	28
이		2	2	2	4	10
디		-	H	2	9	10
티		С	0	0	9	9.
۳I		0	2	0	4	9
갋		8	10 10	9 .	20	77
·പ		0	0	0	4	7
إجا		4	0	0	8	12
드		0	2	0	2	4
미		0	Ö	-	12	12
4-1		4	4	2	20	30
Φį		2	М	4	9	38
미		2	2	· 80	24	36
ပျ		2	2	W	17	2.6
의		4	0	0	20	24
σ		7	4	ω	22	38
	PATIENTS	1983	1984	1985	1986	SUBTOTAL
	۵.					•

DOCTORS

Ö.	0	
0	0	
0	0	0
0	0	
0	0	
0	0	0
0	0	
0	0	
0	0	2
0	0	2
ლ	Т,	2
2	0	2
7		2
٣	0	2
~	~	2
~	~	2
PRESENT	FORMER	ADMINI S TRATORS

28

의

Source: Tabulation of interview responses

macy; j. Pathology; k. Blood Bank; 1. EKG & FBG; .m. OPD; n. Hospital in gee. Kidney Dialysis; f. ICU; g. Physical Therapy; h. Laboratories; i. Phar-Key: a. General Surgery; b. Internal Medicine; c. OBS/GYN; d. Pediatrics; neral; o. Miscellaneous other; p. No need.

Table 14

SUMMARY OF ALL RESPONSES

SERVICES	
NEW	
ADD	

RESPONDENTS	BURN CENTER	CORNEA	OPEN HEART	MICROSURGERY	OTHER	NO ANSWER
		TRANSPLANT	SURGERY		-	
PATIENTS						
1983	12	12	10	14	~	2
1984	7	10	2	εο	5	7
1985	18	12	12	16	-	. 2
1986	746	34	36	38	2	2
•						
	B)	8.9	. 09	76	œ	10
DOCTORS		· .				
PRESENT	2	2	2	0	2	4
FORMER	red .	~	1	. .	0	C
ADMINISTRATORS					0	0
	·					
	84	72	64	7.8	10	14

Souree: Tabulation of interview responses.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

The data gathered showed there is a perceived need for expansion of Makassed General Hospital. Patients favored more the development of non-existing facilities than was the case for existing services. But there is an element of bias in the data collected from patients for two reasons. First of all, most of the patients questioned were uneducated and didn't know exactly what was meant by "expansion."

Another reason was that some couldn't recall exactly through which facility they were admitted to the hospital.

Some opinions, given gratuitously by patients, concerning nursing services and medical care, are included in Appendix A for consideration by the Hospital's administration.

As to the opinions of doctors, all of them stressed the importance of increasing the number of beds. It was found that most of them had postponed treatments or transferred their patients because of lack of beds at certain times.

Finally, hospital administrators were concerned most with expansion that will yield higher profit at minium risk. Thus their interest was more investment than needs oriented.

Hospital records show that the number of patients was decreasing. This may be because the years 1983-84 were critical years while in 1985 the situation was a little bit better.

As was stated in Chapter 1, our hypothesis was that Makassed General Hospital should expand, to meet the present needs and desires of the community it serves, in the following ways:

- 1. Increase the number of beds in existing facilities:
 - a. General and Specific Surgery
 - b. Obstetrics
 - c. Gynecology
 - d. Internal Medicine
 - e. Pediatrics
 - f. Intensive Care Unit
 - g. Kidney Dialysis
- 2. Expand professional services already rendered:
 - a. Laboratories
 - b. Blood Bank
 - c. Electrocardiography and Electroencephalography
 - d. Physical Therapy
 - e. Pharmacy
 - f. Radiology
 - g. Pathology
 - h. Outpatient Care
- 3. Implement new facilities not previously available:
 - a. Special Burn Treatment Center
 - b. Cornea Transplant
 - c. Open-Heart Surgery
 - d. Microsurgery

Our problem questions addressed in the research and mentioned in Chapter 1, were:

- Is there a perceived (by potential patients and doctors) need for expanded facilities and services at Makassed General Hospital?
- If expansion is to occur, what direction should it take
 - •• more beds?
 - •• expanded existing services?
 - •• new services?
- Is there a favorable cost/benefit relationship in proposed expansion efforts?

Here is a summary of the research methodology used to test the hypothesis and address the problem questions:

- Information was gathered from Hospital records regarding the capacity of the hospital and the number of cases handled since 1983. In addition, the opinion of patients, doctors and Hospital administrators was gathered concerning their views on the need for expansion of existing services and the implementation of new services.
- The information was collected from the three survey groups by personal interview structured by "Interview Guides" which focused questioning on elements of the hypothesis.
- The data collected was tabulated, tested for statistical significance, analyzed and interpreted.
- The interpretations are presented in the form of specific recommendations for consideration by the Board of Trustees of Makassed General Hospital.

Recommendations

As a result of this research, the following recommendations are presented for consideration by the board of Makassed General Hospital.

- 1. Certain assumptions used by Makassed Hospital in determining the need to increase the number of beds seem to be insupportable based on subsequent experience and research into the Hospital's records. Most notably the predicted influx of Palestinians has not, in fact, caused a rise in the number of Palestinian patients entering the Hospital over the three years but, rather, a decline (see Table 6). In addition, expansion of the Pediatrics Department in 1985 was followed by a drop in admissions to that department (see Table 5). Also, views presented by the Lebanese Ministry of Health and recent statistics of The World Almanac, showed that Lebanon is relatively well served. The Board should carefully review all its assumptions before making further decisions based on that data.
- 2. The Hospital should expand by implementing a center for the treatment of serious burns. The data gathered showed that this center got the highest rate of preference (80 responses). It's understood that the physical facilities for this center are already available and can be opened as soon as a specialist doctor can be recruited.
- 3. The Hospital should consider implementing a center for Microsurgery. The data gathered showed that 76 respon-

dents wished to have such a division to restore lost limbs.

- 4. The Hospital should consider the development of a center for cornea transplant. The data gathered showed that 68 respondents wished to have such a division.
- 5. The Hospital should disregard consideration of developing an open-heart surgery division. There were only 60
 responses (50%) favoring this course of action. In any
 case, the hospital administrators are not considering
 this matter because the cost/benefit relationship is not
 favorable.
- 6. The Hospital possibly should consider increasing the number of beds in certain existing facilities based more on the opinions of doctors and administrators than of patients but after reviewing all assumptions.

The departments which should be considered for added beds are:

- General Surgery Department
- OBS/GYN Department
- Intensive Care Unit
- 7. The Hospital should not consider the expansion of the following divisions because the responses in each case did not have positive statistical significance. These divisions are:
 - Internal Medicine
 - Kidney Dialysis
 - Physical Therapy
 - Laboratories

- Pharmacy
- Pathology
- EKG & EEG
- OPD

Abstract

This research project was undertaken to explore the problem of whether Makassed General Hospital should expand its facilities and services to respond to the needs of its community. A further purpose of the project was to try to determine the direction of such proposed expansion.

The major elements of the hypothesis set for the research were:

Makassed General Hospital should expand its existing facilities to meet the present needs and desires of the community. it serves in the following ways:

- Increase the number of beds in existing facilities
- Expand professional services already rendered
- Implement new services not previously available

Interviews were conducted with patients, doctors and Hospital administrators to collect the data responsive to the hypothesis. The data were tabulated, tested for statistical significance, analyzed and interpreted.

These specific recommendations resulted:

- 1. Review all assumptions before making decisions,
- 2. Implement a special burn treatment center,
- 3. Consider implementing a center for microsurgery,
- 4. Consider implementing a cornea transplant center,
- 5. Disregard consideration of implementing an openheart surgery division,
- 6.- Add beds in four specified departments of the existing facilities,
- 7. Do not consider implementation or expansion in eight specified areas or departments.

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Appendix A

Several patients gratuitously told the researcher that they felt nurses had an improper attitude towards the patients' needs in terms of prompt attention and responsiveness to physical and psychological needs.

Specifically they said:

- There were long delays in nurses responses to patients' calls for assistance.
- There were long periods of inattention following surgical procedures.
- Little consideration was given to the psychological well-being of patients and their families.

More specifics can be found in the following copies of research interview.notes.

	ا۔ فی ابد خطفیہ سکس ،
	۲ ـ هدد انسراد عائلتنك : ۳
(ضع علامة × في المربع المناسسب)	٣- فن أي طريق دخلت إلى المستشفى :
	العيادات الخارجية
	الطــــــــــــــــــــــــــــــــــــ
	العيادات الخاصة
في المال المترتب علياً.	الطريئة الدادية مرد
شغى ٢ ما هي الندة : ﴿ فُورِ ا مُ	٤ ـ هـل انتظرت طويلا كي تدخل الى الست
	هـ ما نوعالمرفرالذي كنت تعانيسه :
معلامة × في المربع المناسب) ويمكن اختيار اكثر من سبب واحد)	٦- هل اخترت ستنفى المناصد لانها (ض
	النها تريبة الى النــزل
	كلفتها اتل من باتي المستشفيات
	توفر الاخصائييسن
	رجود مدات حديثة

÷ .			بناء لطب الطبيب المعالج	
سالا جي	, vin	لأن	اسباب اخرى (الرجاء ذكرها)	
جـــواب)	•		لن أن المستشفى بحاجة الى توب (الرجساء وضعفلامة × في المرب	ـ دل نف
			دائرة الجراحسة العامسة	
			الطب الداخلييي	
			جراحة وامراض النسساء	
		·.	طـــبالاطنــال	
,		Ļ	رحدة العناية الفائلة وجراحة الثل	
			سم فسيل الكلسسي	· 🗆
•			لتدليك الطبيعي الغيزيائي	
		-	لمختبرات وقسم التخطيط	· 🗆
			لميد ليــــة	· 🗀
			نسك السسدم	4
			: ~ [allo] 1.1.a	. 1-7

	العيسادات الخاصة الم
مرالطعم البشري زيدة الترب وفه مهلة وتأكم المرمدة الثانة	آرا اخرى (الرجسا و ذكرهسا) إنرا كاهد لعم مرسيف أمام م س عل نظن أن سنشغى المقاصد بحاجة إلى أيجاد انسام جديدة مثل
، ن جواب)	(الرجاء وضع علامة × في المربع المناسب ، ويمكن اختيار أكتر من
•	
·	المالجة الحروق السعبة
	تسم لمعالجة دبكة العين
	تسم لعطيات التلب المنتج
	تسم لتركيب الاطراف (اليدين والقدمين)
انا ولىسى ھىلى:	انسام لم ترد (الرجاء ذكرها) العلب على إل
اعى لوجم الله والباتي	الموم المارة الازيانة والعرافاد

ا - ني ايذ خطفة نسكين ، المعييطية
٢ ـ مدد انسراد عائلتسك : ﴿ رَبِعِهُ ﴾
٣ ـ عن اى طريق دخلت الى المستشفى : (ضع علامة × ني السيع الناسيب)
العيادات الخارجيــة
الطــــــــــــــــــــــــــــــــــــ
الميادات الخاصة
الطريقية الماديسة
٤ - هل انتظرت طويلاكي تدخل الى المستشفى ؟ ما هي المدة ، لكم ، اربعة المراح
هـ ما نوراللورالذي كنت تعانيـه ، حُمَّاتَى
 ٦- هل اخترت مستنفى المقاصد لانها (ضع علامة × في المربع المناسب) ويمكن اختيار اكثر من سبب واحد)
لانها قريبة الى المنــزل
كلفتها اقل من باقي المستشفيات
توفر الاخصائييسن
رجود مدات حديثة

بناء لطلب الطبيب المعالج	X
اسباب اخرى (الرجاء ذكرها)	
نظن أن المستشفى بحاجة إلى توسيع أى من الانسام التاليسسة : (الرجساء وضع علامة × في المربع المناسب ، ويمكن اختيار اكثر من جسواب)	ـ دل:
دائرة الجراحية العامية	
الطبالداخلسي	
جراحة وامرافرالنسساء	
ســـالاطنــال	
رحدة العناية الغائلة وجراحة التلب	X
قسم غسيل الكلسسي	
التدليك الطبيعي الغيزيائي	
المختبرات وتسم التخطيط	
الميدليسية	
ينسك السسدم	X
العبادات الخارحيسة	

•	"الميسادات الخاصة
شرچار بالمرض،	[] آرا اخری (الرجسا ، ذکرهسا) الرس
· · · · · · · · · · · · · · · · · · ·	 ل تظن أن مستشفى المقاصد بحاجة إلى أيجا الرجاء وضع علامة × في المربع المناسب
	تسم لمعالجة الحروق السعبة
	تم لعالجة شبكة العيسن
	سم لمسليات التلب المنتج
(تم لتركيب الاطراف (اليدين والقدمين
	اتسام لم ترد (الرجاء ذكرهـــا)

	ا ـ ني اية منطقعة نسكسن ،
	۲ مدد انسراد عائلتسك :
علامة × ني المربع المناسب)	٣ ـ من اى طريق دخلت الى الستشفى ، (ضع
	العيادات الخارجية
	الطــــوارى،
	العيادات الخاصة
المصارف .	🗓 الطريقة العاديدة مرضع كا
٢ ما هي المدة : ﴿ خُورًا *	٤ - هل انتظرت طويلاكي تدخل الى السنشفى
	ف ما نوعالمرفرالذي كنت تعانيسه ؛ ســــــــــــــــــــــــــــــــــ
ة × في المربع المناسب) ويمكن اختيار اكثر من سبب واحد)	٦ - هل اخترت مستشفى المناصد لانها (ضع علاه
	النها قريبة الى النسزل
	كلفتها اتل من باني المستشفيات
	توفر الاخصائييسن
	وجود مدات حديثة

الكا بناء لطلب الطبيب السالج	
الم اساب اخری (الرجه ذکرها) لأنه ستفی (سابی و نحب تشبیعه ،	
هل تظن أن المستشفى بحاجة إلى توسيع أى من الاقسام التاليسيسة ، (الرجساء وضع علامة × في المربع المناسب ، ويمكن اختيار اكثر من حسسواب)	Y
دائرة الجراحسة العاسة	
الطبالداخلسيس	
جراحة وامرا فرالنسساء	
الاطنــال	
رحدة العناية الفائقة رجراحة التلب	
قسيل الكليسي	
التدليك الطبيعي الغبريائي	
المختبرات وتسم التخطيط	
الصدليــــة	
بنـك الـــدم ا	
العيادات الخارجيــة	Ţ

		•	
•	•	العيسبادات الغامسة	
تباج للقاصر	مر للرم النساسي	آراء اخرى (الرجساء ذكرهسا)	
•	، ایجاد اتسام جدیدة مثل : ناسبه ویکن اختیار اکتر من جواب) •	ظن ان مستشفى المقاصد بحاجة الى (الرجاء وضع علامة × في السهم الم	بہ مل ت
	•	قسم لمعالجة الحروق الصعبة	X
		تسم لمعالجة شبكة العيسن	
		تسم لعسليات التلب المنتح	
	مین)	تم لتركيب الاطراف (اليدين والقد	X

الله المرض الأوراليا المرض المرض المؤرن المرض المؤرن المرض المؤرن الدين يوتولا المرض المؤرن الباهدة والدين يوتولا أصل دفول المستشفى إذا لم ميرنعوا التا ويذا الملكوب منهم لذلك من رهو الخدمة الاسانية لهذه الفئم و ذلك لوف الله نقال ،

	· 🚗	۔ څردان	١١ ني ابة منطقمة بسكس ،
	حل ت	(a)	۲ ــ مدد انسراد عائلتسك :
لناسب)	ية × في السيعا	تشفی ، (ضععلا	۳۔ عن ای طریق دخلت الی السنا
	· .	•	العيادات الخارجية
			الطــــرارى٠
			العيادات الخاصة
			الطرينة المادية
78	ا ه ي الد ة ،	لى الستشغى 1 ،	٤ - هل انتظرت طويلاكي تدخل اا
			هـ ما نوعالمرفرالذي كنت تعانيــه
سب) ويمكن اختيار اكثر من سبب واحد)	في السيعالمنا.	نها (ضععلامة ×	٦- هل اخترت ستشفى المناصد لا
			الانها تريبة الى النسؤل
		سنشفيات	كلفتها اقل من باتي الس
			توفر الاخدائيين
			رجود مندات حديثة

	إلى بناء لطلب الطبيب المعالج
	الباب اخرى (الرجاء ذكرها)
	 المستنفى بحاجة الى توسيع اى المربع المناسد الرجساء وضع علامة × ني المربع المناسد
	كاثرة الجراحسة العاسة
• ,	🔀 الطبالداخلييي
	جراحة وامراض النسساء
	الطـــال
	وحدة العناية الفائقة وجراحة القلب
	الكلسي أسم غسيل الكلسبي
	التدليك الطبيعي الغيزيائي
	المختبرات وقسم التخطيط
	الصيدلية
·	بنسك السدم
	 المادات الخارجية

الميسادات المخاصة
ا آرا اخری (الرجسا دکرهسا)
٨ - هل تظن أن ستشفى المقاصد بحاجة إلى أيجاد أقسام جديدة مثل : (الرجاء وضع علامة × في المربع المناسب ، ويمكن اختيار أكثر من جواب
🗓 تسم لمعالجة الحروق الصعبة
🔀 ئے لمالجۃ شبکۃ المین
🛛 تسم لعمليات القلب المفتح
🛛 قسم لتركيب الاطراف (اليدين والقدمين)
انسام لم ترد (الرجاء ذكرهـ)
المنتفى عاجة الى تلاد وتنسية
المعاملة الاب نبية

۱- ني ايد منطقه نسكهن ؛ هميرا
۲ - مدد انسراد عائلت ؛ ۹ بستمامی
٣- عن أى طريق دخلت إلى المستشفى ، (ضع علامة × ني المربع المناسب)
الميادات الخارجية
الطــــوارى.
[العيادات الناصة
الطريقة الدادية
 ٤- هل انتظرت طويلا كي تدخل الى السنشغى ١ ما هي المدة : معرر أو
ه ما نوع الموض الذي كنت تعانيه: اجما به برصاحت طائث
 ٦- هل اخترت ستشفى المناصد لانها (ضعطامة × في المربع المناسب) ويمكن اختيار اكثر من سبب واح
النها قريبة الى المنسؤل
كلفتها اقل من باني السنشفيات
توفر الاختمالييسن
وجود ممدات حديثة

•	
	يناء لطلب الطبيب المعالج
	اسباب اخرى (الرجاء ذكرها)
	٧- هل نظن أن المستشفى بحاجة إلى توسيع أي
سبه ويمكن اختيار اكثر من حـــواب)	(الرجسا • وضع علامة × في المربع المنا
	الدائرة الجراحية العاسة
	الطبالداخليي
كالم	احة وامرافرالنساء
	الاطنال
	وحدة العناية الغائقة وجراحة التلب
	قسم غسيل الكليب
	التدليك الطبيعي النيزيائي
	المختبرات وقسم التخطيط
•	الميدليــة
	ا بنك المسدم
	: Statistated [7]

الميسسادات الخاصسة	
آرا اخری (الرجساء ذکرهسا)	

لمد هل تظن أن مستشفى المقاصد بحاجة إلى أيجاد أتسام جديدة مثل : (الرجاء وضع علامة × في المربع المناسب ، ويمكن اختيار اكتر من جواب) .

🔀 نسم لمعالجة الحروق الصعبة

🗓 تم لسالجة شبكة العين

X تم لعطيات الغلب النتيج

لك تم لتركيب الاطراف (البدين والقدمين)

انسام لم ترد (الرجاء ذكرهـــا)

هنائ نفطه ادر طرح وهي الم الطبي بعد الد قام با شهال الرصاحه، نم عيل موه ثانيه وقد المبت باشته بات بات بات بات من جراد الرستهار

APPENDIX B

List of Patients Selected for Interview

Name	Re-	Re-	De-	Moved	No	Outside
· 	sponded	fused o	ceased	<u> </u>	Address	Beirut
Adadah,Moh'd	X					
Abdallah,Asaad			•	X		
Alaeddin,Najwa	X					
Alloush,Moh'd			X			
AbouHosn,Moh'd		X				
AbouShallah,Maha					X	
Awada,Rajeieh	X			* *		
Abdulhak,Wassim		X .				
Abbas,Maysara	X		•	٠.		•
Ashhab,Ibrahim			•		X	
Akkawi,Ibrahim		-	X		•	
Akkawi,Wahida	X,					
Akkawi,Hadi	X					
Akkawi,Amira	X					
AbouAli,Hasan				X .	•	
Anouti,Moh'd	X					
Alwan,Moh'd			X			
Assi,Wafa	X					
Amouni,Maha	X					
Akkawi,Haifa	X		· · ·			
Amkieh,Zahra	x		•			
		0.7				

Name	Re-	Re⊷	De-	Moved	Nο	Outside
	sponded	fused	ceased		Address	Beirut
Aboud, Yousra		X				
AbdulWahab,Samir	X	ı				
AbouFarwa,Sobhi					X	
Abadi,Fatme			•		X	
Adra,Rabee	. X					
Abed, Saeed					X	
Ali,Moh'd	X					
Assaf,Nancy	x					
Abdallah,Rashida	X			•	·	
Azmi,Mostapha	X					
Arab,Halima					χ	
Asouma,Meheddin			٠		Χ	
Assaf,Zainab	X					
Alyan,Aida		χ				
Bashir,Saadat		· .			X	
Bitar,Darwish					, X	
Bakkar,Dima	. X					
Bader, Mahmoud	χ				. *	
Balaa,Salah	X					
Badawi,Nahla					· X	•
Barraj,Nada	X					
Bostani,Mirvat	X					
Badawi,Ahmad					X	
Banna,Fadi	X		•			
Basha,Aida	X		•			

Name	Re⊶	Re-	De-	Moved	No	Outside
	sponded	fused	ceased		Address	Beirut
Bilani,Souhail		X		•		
Barish,Hasan	X					
Bohsali,Abed			X		•	£ *
Bawab,Layla	X	•				
Bekdash,Saad	X					·
Bekdash,Wahida	X					
Chehab,Fatme	X					
Chammaa,Mosbah	Χ	•				
Diab,Tarfa		-			X	
Danash,Zamzam				X		
Dimashkieh,Nizar	Χ					
Daees,Rihab	Χ					
Daouk,Mona					X	
Dagman,Mahmoud					X	
Dimashk,Yousef						x
Daher,Wafa	X					
Faour,Meheddin	·			X	•	
Farhat,Hammam	X			÷		
Fatash,Husein						X
Faraj,AbdulKarim	X			•		·
Fares,Basima	X		-			
Fouaani,Ahmad		· -	•			X.
Freij,Hamdan					X	
Freij,Nada					X	
Farhat,Samir			•1.1	-	X	
	•	-				

Name	Re→	Re-	De-	Moved	No	Outŝide
	sponded	fused	ceased		Address	Beirut
Fawaz,Sabah	X					
Fawaz,Husein	X					
Gotaymi,Khadije				X		
Goson,Naser	X					
Gadieh,Sana	•					X
Galayini,Nerva			X			
Gazal,Karimeh	X					
Gannam,Merii	٠					X
Gannam ;Zena	X					
Harb, Fadl	X					
Hammoud,Souheil	X	·				
Hasan,Badawieh		•			X	
Harir,Dalal	X					
Habib,Bashir	· X					
Halawi,Reslan	X .					
Halawi,Naeem	X	. •		•		
Halabi,Anis	X				•	·
Hasan,Moh'd	X					
Hamama,Iman					X	
Hasan,Samia	X					
Huseini,Husein		·				X
Huseini,Ahmad	X		•			•
Habbal,Mona	X					
Hatab,Mazen	X		·			
Hamdan,Ali			•		X	

Name	Re-	Re - ·	De-	Moved	No	Outside
	sponded	fused	ceased	***************************************	Address	Beirut
Hammoud,Mousa	X					
Hajjar,Ahmad	X					
Ido,Talale	X				•	
Imam, Jamileh	X					
Ibrahim,Wael		-	·			X
Ibrahim, Monerah	X	,				
Ibrahim,Wafa		-		•.		X
Ibrahim,Layla	X					
Itani,Hana	X					·
It ani, Souhair	X	4		÷		
Jeezi,osman	X					
Jibawi,Rida	X				•	
Jaber,Fadl	X			•	·	
Jamal,Moh'd	X					
Jahin,Arar			•		X	·
Jallad,Hana	X	•				
Janoun,Ahmad	X		٠.		•	
Jaroudi,Nora	X					
Jawhari,Afif			x	• •		•
Khaled,Amira	X					
Koleilat,Habiba		X				
Kaisi,Iman		X				
Koush,Basima	X					
Kabbani,Houda	٠	χ				
Kronfol,Meheddin	×		•			

Name	Re⊷	Re-	De-	Moved	No	OUtside
	sponded	. <u>fused</u>	ceased	:	Address	Beirut
Kayouf,Najat					X	
Kalb, Fayez					X	
Kayyal,Ibrahim				•	X	
Khateeb,Muafac					X	
Kobtan,Rajab			X			
Kalash,Nadia					X	
Khazaal,Amira	X			·		
Khaled,Fawz i èh	X					
Karanouh,Bassam	X					
Kourdi,Moh'd					X	
Kadri,Khouloud	χ					
Kheshen, Jihan	, X	÷				
Kaoun,Abda	x					
Kourdi,Zahra					X	
Karanouh, Abed	X		•		•	
Karaje,Mona	X					
Karimeh,R.A	X			•	10 	
Lahia,Sobheih			-		X	
Mirza,Afif		χ			. •	·
Maarouf,Montaha	X					
Mezraani,Ibtisam		X				-
Mneimneh, Mahmoud	X					
Mahmoud, Jamal	X		•	·		
Masri,Saad			<u>.</u>			X
Mograbi,Mahmoud	•		Y Y		X	

Name	Re <u>⊸</u> -	Re⊶	De-	Moved	No	Outside
	sponded	fused	ceased		Address	Beirut
Moussa,Nisrine					X	
Mishlawi,Saleh					X	
Nasrallah,Khalil	X					
Naser,Zouhair			X			
Naser,Maha	X	•				
Naser; Amin	X					
Nahas,Salah	X					
Nemeh,Wafica		X				
Osman,Bahia	X .					
Omran,Maha	X			•		
Okasha,Kasem			·			X
Okaili,Yousef					X	
Rahawi,Ahmad	X					
Remmo,Rajab					X	
Rabah,Ayman	X					
Rawas,Monirah	X					
Romani,Wisam	X				•	
Rawas,Wael	X					
Ramadan, Moh'd	X		,			
Sayegh,Rahme	x					
Sreis,Safia				X		
Shatila,Hala	X					
Saadi,Fawzi				Χ.		
Samra,Samar		X				
Saleh,Wafica	X		,			

Name	Re=	Re-	De-	Moved	No	Outside
· 	sponded	fused	ceased	·	Address	Beirut
Shamsedine, Maysar	a	X				
Safa,Aziza	X					
Sharif,Majida	. x					
Shanouha, Saad					y	X
Sarhan,Jamileh	X					
Saed, Said	X					
Salame,Hisham					X	
Sreis,Kasem			•			X
Sleem,Souad	Χ	•				
Sleem,Hassan				•	X	
Sawan,Marwan	X				•	·
Saadi,Wisam	X					
Salam,Khalil		X				
Salam,Abdallah	X		÷			
Tannir,Souzan	X					
Tarhini,Husein	X					
Tahan,Samar	X				•	
Tarraf,Moh'd				•	X	
Tabbarah,Hasan			X			
Watwat,Issa		• • •				X
Yasin,Sana	X			•		
Yasin,Sawsan	X					
Yasin ,Fatmeh		X				
Yaman,Wafa	X					
Yheq,Farah				·	X	

		•				
Name	Re-	Re-	De-	Moved	No	Outside
	sponded	fused	ceased		Address	Beirut
Zein,Salah	X			-		<u> </u>
Zein,Jamil		· X			٠.	
Zaatari,Ahmad		X		•		
Zaarour,Khodor			X			
Zaza,Akram	-				X	
Zouhairi,Maher		X .			•	
Zaidan,Moh'd	X	-				
Zouain,Akram	X					
Zarif,Moh'd	X					
Zeid,Ahmad			X			
Zoubair,Layla	<u> </u>		: 			
Totals	120	_18_	11_	7	39	
Grand Total	208				•	

Source: Patients selected from Makassed General Hospital's admission records for 1983, 1984, 1985 and first six months of 1986.

<u>List of Doctors Selected for Interview</u> (Former and Present)

FORMER DOCTORS

Name

Abdlnour, Edward

Nousouli, Gazi

Sidani, Mostapha

Shaaban, Hoda

PRESENT DOCTORS

Name

Chehade, Issam

Diab, Adnan

Itani, Walid

Itani, Saed

Kharma, Khalil

Naja, Ziad

Rifaii, Rafic

Rajab, Mariam

Raed, Ali

Shehab, Haitham

Source: Doctors selected from Makassed General Hospital's records, 1986.

Appendix C

MAKASSED GENERAL HOSPITAL NEEDS SURVEY

INTERVIEW GUIDE

PATIENTS

- 1. Where do you live?
- 2. How many in your family?
- 3. Through which facility did you enter the hospital:
 - a. OPD?
 - b. Emergency?
 - c. Doctor's clinics?
 - d. Normal procedures?
- 4. Did you have to wait to be admitted to the hospital? If so, how long?
- 5. What was wrong with you?
- 6. You chose Makassed General Hospital because
 - a. It was near your home?
 - b. Its cost is lower than the other hospitals?
 - c. Specialists available?
 - d. Doctor's recommendation?
 - e. Other? (please explain)
- 7. Would you like to have these existing services expanded:
 - a. General Surgery?
 - b. Internal Medicine?
 - c. OBS/GYN?

- d. Pediatrics?
- e. Kidney Dialysis?
- f. ICU?
- g. Physical Therapy?
- h. Laboratories?
- i. Pharmacy?
- j. Pathology?
- k. Blood Bank?
- 1. EKG & EEG?
- m. OPD?
- 8. Would you like to see these non-existing services developed?
 - a. Special Burn Treatment Center?
 - b. Cornea Transplant?
 - c. Open-Heart Surgery?
 - d. Microsurgery?
 - e. Any other not listed, please describe:

MAKASSED GENERAL HOSPITAL NEEDS SURVEY INTERVIEW GUIDE PRESENT DOCTORS

- 1. Where do you practice?
- 2. How long have you been affiliated with Makassed General Hospital?
- 3. Why did you choose Makassed General Hospital?
- 4. Have you ever sent any of your patients to a hospital other than Makassed because of:
 - a. Lack of treatment facilities? Please explain:
 - b. Lack of beds?
 - c. Other? Please explain:
- 5. Have you postponed non-critical surgery or treatment for your patients because the Hospital did not have available beds?
- 6. Do you think that the Hospital should expand? Please explain:

MAKASSED GENERAL HOSPITAL NEEDS SURVEY INTERVIEW GUIDE FORMER DOCTORS

- 1. Where do you practice?
- 2. For how long did you remain affiliated with Makassed General Hospital?
- 3. Why did you choose Makassed General Hospital? .
- 4. Have you sent any of your patients to a hospital other than Makassed General Hospital because of:
 - a. Lack of treatment facilities? Please explain:
 - b. Lack of beds?
 - c. Other? Please explain:
- 5. Have you postponed non-critical surgery or treatment for your patients because the hospital did not have available beds?
- 6. Do you think that the Hospital should expand, especially in the quantity of beds?
- 7. Why did you leave the Makassed General Hospital?
 - a. Contract terminated?
 - b. Opened private clinic?
 - c. Other? Please explain: