

The Point of view of the Faculté de Médecine
of the Université Saint-Joseph on the
HEALTH PROBLEMS in LEBANON

This point of view is hereby stated at the request of the
Development and Reconstruction Council .

It takes into consideration the priorities in this domain,
as viewed by the Faculté de Médecine of the Université Saint-Joseph
These observations should be combined into a general survey in col -
laboration with the Faculty of Medicine of the American University of
Beirut .

It is a fact that in what concerns health problems, the
situation in Lebanon is at present deficient in several domains. Those
that deserve prior attention, according to our point of view, are the fol-
lowing :

1/ Ministry of Health

The Ministry of Health, like other governmental admini-
strations, lacks actually all the means that permit it to fulfill the tasks
which are required of its department .

The statistics informations necessary to establish a health
policy are either inexistant, or contain considerable errors due to the fact
of not being regularly revised, a reason for which it is not possible to
give an exact idea of the number of the doctors, pharmacists, and dentists
in practice today in the whole area, wether in private or in public organi-
zations ; or of the number of the para-medical active professionals ; of the
number of available beds in hospitals, the degree of qualifications of these,
as well as the number of health centers for preventive or medical care .
There is not either a study on an outlook for the needs of the country in
personnel and sanitary goods or material .

It seems therefore urgent to proceed on a reorganization of
the Ministry of Health by endowing it with an administrative team fully
aware of the local Health problems, to examine and evaluate availabilities
at all levels.

A new outline to define aims, means, and purposes, namely
in terms of budgets, should be worked out in the various fields of the
Ministry of Health. In that matter, the composition of the High Council
of Health and the part it has to assume should be recons idered in view of
a more effective participation and elaboration of a Health policy .

2/ Care Centers and Foundations

One of the most obvious deficiency in the lebanese sanitary system is seen in the present state of governmental hospitals which , aside from being rather few, namely in certain parts of the country, and unadequately equipped , wether materially or in qualified personnel, were already functioning poorly, even before the recent disastrous events ! They are now in a state of almost complete paralysis.

Actually, there are projects to give governmental hospitals autonomy of management in collaboration with the Faculties of Medicine. What would be most desirable in the immediate present is :

1/ to hasten legal procedure leading to such an autonomy and to the newly suggested prospects .

2/ Pursue the efforts already started for the remake of the buildings. At the same time to take notice of whatever is needed in equipments in these localities and foundations, which need seems to be considerable at present .

It is desirable that the care given in such public hospitals might be of a quality such as to give confidence to the lebanese patient, who , otherwise, is liable to discredit governmental institutions .

However, taking notice of Central Hospitals must not divert the efforts that are now being taken in collaboration with International Organizations, to create Health Centers in other districts where the population is in need of it .

3/ Medical Training and Education

Training medical doctors in order to maintain professional qualifications on a high level is not without certain major problems which are not always generally known .

Only part of the doctors in Lebanon are graduates from the two Schools of Medicine in the Country . Between the years 1971-1975, the number of the new doctors registered at the Ministry of public Health was 729, 281 of which, meaning 38, 5 % were trained in Lebanon (192 at the Faculté de Médecine of the University St. Joseph , and 89 at the American University of Beirut.)

The other doctors are graduates : mostly of the Western European countries :

32 % (24 % in France)

Other from Middle East countries :

15, 5 % (11, 5 % from Egypt)

Others, in countries of Eastern Europe :

13 % (10, 3 in U.R.S.S.)

The remaining 1 % are graduates from various countries, such as Australia - India - Latin America

In most countries where medicine is on a high standing, admission to schools of Medicine or Faculties, has become most difficult. One must not expect medical students (outsiders) to graduate from the U.S.A., Canada, France, Germany. These countries reserve whatever available places they have to their own students. On the other hand, we get more and more doctors from countries where medical training is of a system considerably different from our own; many of these doctors who study in those countries are graduates from special Faculties destined to teach foreign students and train them to become doctors rather of secondrank.

In 1977, there is a tendency which is obvious in percentages as follows :

From among 123 registered doctors, 39 graduated in Lebanon (33 from the Université St. Joseph, and 6 from AUB), which is 31,7 % a number already inferior to previous years. The percentage of doctors who are graduates from western Europe is still maintained at 33,3 % -25 % out of which were in France. But it is to be foreseen that this number will drop in the coming few years. On the other hand, the number of graduates from Eastern Europe is 34 for the year 1977, which is 27,6 %.

Several lebanese medical students are now studying in certain faculties or schools of medicine abroad, the programs and level of which are unknown to us, such as Pakistan or the Philippines.

The acknowledgement of a doctor's diploma is subject to another official state examination: the colloquium. However, one fears that, much as it presents an obstacle, this colloquium, even if directed in most strict and austere conditions, will not prevent trained doctors from practising medicine. It is very difficult, if not impossible in a colloquium to fail the candidate more than 2 or 3 times, once they have been admitted as graduates in their final studies. Their insufficient knowledge means they would need a renewed post-graduate training.

Various solutions are taken into consideration :

To establish all along the period of regular medical studies several tests enabling the students to be aware of the extent of knowledge expected from them. This is the system of Board I and II applied in the U.S.A.

Furnish a substantial aid to the Lebanese schools of medicine so that they can admit a greater number of lebanese students, and to give scholarships to those who would need it , otherwise they will be obliged to pursue their studies in such countries where education commodities are free of charge .

This means that we need an estimation of a number of doctors to be trained yearly , a problem which till now has not been taken into consideration .

It is not enough for us to discuss studies in the medical field without also considering post-graduate training . The difficulties arising from going abroad for a specialization course may prove in the near future to have a deplorable effect on the scientific standing of the lebanese medical corps .

The Physicians Order and the Medical Faculties are putting great efforts to solve these problems . All agree that the solution will be greatly facilitated when public hospitals would have been sufficiently improved in order to give a hand to University education , post-graduate education, as well as to scientific research , which is essential for a high quality in medicine .

4/ Para-medical Professions (Professions related to Medicine)

These professions are in a calamitous state . The number of nurses, laboratory assistants, and other technicians in Public Health , is very low . It is urgent to encourage the establishing of nursing schools and to help to a maximum the already existing schools, especially those that have the following criteria :

- 1/ Training lebanese students who want to work in Lebanon .
- 2/ Having a good standing .

It is evident that results may be more quickly obtained in this field than in medical education . Results will show few years after the government would have undertaken the following points :

- 1/ Sponsor studies for nurses , laboratory assistants, mid-wifery, etc
- 2/ Ensure better salaries for these para-medical professionals to prevent their seeking job abroad .

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HEALTH IN LEBANON

Agenda Paper Submitted to the Council
of Development and Reconstruction

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HEALTH IN LEBANON

Part I - Health Services

- A. Official: The Ministry of Health is in theory the main official agency responsible for the planning, organization and delivery of health care, both curative and preventive, to the Lebanese population. In practice, this responsibility is shared to a greater or lesser extent by many other official and voluntary bodies. At present, the main functions of the Ministry of Health are restrictive in scope and hampered by several limitations.

The present organization of the Ministry is self-centered, disconnected to a large extent from the provincial health services at all levels, and is handicapped by poor communication with other official agencies that deal with health. The State still allows an autonomous status to the city of Beirut where health legislation and execution are the exclusive concern of the Municipal Health Division without even a partnership with, let alone direction control by the Ministry. There is practically total dissociation between the Ministry and the National Social Security Fund. The staffing of the Ministry, in spite of the efforts and good will of the present officers, is extremely inadequate both in quantity and in quality. This is a major problem. Employment is not normally sought by the intelligent, competent, qualified and ambitious person. There are many reasons for this but most important is the low salary scale currently in force. Thus, there are several positions and more than one department vacant although budgeted for. The Office of International Health is not as active as it should be. The following few examples are cited to illustrate the ill-effects of the points raised above. No one knows who is responsible and has the authority to supply safe and sufficient drinking water to the Lebanese population. Long ago the US/AID stopped its activities in the field of health mainly because the Ministry did not employ the personnel it said it would after they had been trained through AID support. The Office of Social Development independently undertakes health functions that are beyond its competence. The Department of Health Statistics at the Ministry, one of the most needed and vital, has been nonfunctional for more than four years and has no staff at present. The Supreme Council of Health, the only advisory body to the Ministry, has not been called

to one meeting for a long time. World Health Organization Fellowships for training all levels of the needed health manpower, are if at all, rarely used.

On the curative level, the Ministry's main activities are divided between the running of the Government hospitals, clinics, dispensaries, and between the privately owned hospitals serving the Ministry on contractual basis. Programs aimed at prevention and control of infectious and non-infectious diseases are either not commensurate with the magnitude of existing health problems, or lack precision in planning and implementation. This is well seen in the overall pattern of such endemic diseases as enteric infections, respiratory infections, food and water-borne diseases, etc. An exception to this state of affairs is the eradication of malaria which was accomplished in 1964.

The Governmental hospitals are inadequate with regard to standards and quality of care, distribution in different parts of the country, and availability of needed hospital beds; the Government hospitals in North and West Lebanon are not functioning; the only one in Beirut is in the process of renovation; the Baabou Hospital, the main one before the troubles, has been severely hit; hospitals in the Bekaa provide only a few beds. At no time did the Ministry of Health formulate a well-defined policy on hospitalization to regulate its own as well as the private hospitals. Some attempts to correct this situation, in respect of the Government hospitals, may have positive results and may lead to significant improvement of the situation.

Curative services offered at the clinics and dispensaries sponsored by the Ministry of Health are far from meeting the actual needs, and follow a pattern of services which has become ineffective and obsolete. The comprehensive method of health care delivery, i.e. both curative and preventive care, is not practised. Only a "health center" in its true meaning can perform these functions properly. In the whole country, there is not one modern health center that is run by the Ministry. The Haiba Health Center in N. Lebanon, initially established as a model several years ago, proved a frustrating experience.

- B. Voluntary: There are several voluntary agencies in the country that engage in health work. While this is desirable and healthy in a developing country like Lebanon, yet these agencies can defeat their purpose if their activities are not well coordinated with those of the Ministry of Health or other concerned official bodies such as the Ministry of Social Affairs; and/or if through their philanthropic approach they lead to a state of false security. This is well illustrated in the type and style of assistance offered by the Lebanese Red Cross, undoubtedly a respectable organization: the distribution of "drugs" to a group of villagers or visiting haphazardly such groups creates such a state of false security. The correct answer to the primary health needs of the population, in particular that which lives in the more undeveloped parts of the country, is through the establishment of modern health centers which offer comprehensive curative and preventive care. The process of adequate and proper health offerings is a "right" of a population that knows what its demands and needs are, it is not a "gift" to be donated by anybody except that body which is responsible and has the authority to do so.
- C. Effects of the Recent Crisis: The recent troubles obviously have affected the health sector, official and otherwise, to a great extent. Most of the problems (organizational, administrative, availability of manpower, curative and preventive health services, etc.) that have faced the Ministry of Health before 1975 have become more pronounced. Thus the need for greater corrective efforts. The influence of the troubles on the pattern of disease, be it infectious or non-infectious, was not studied. Only impressions can be given. Probably infectious conditions such as tetanus, tuberculosis, enteric infections have increased. Nutritional and mental health problems are perhaps the main untoward effects.

The official health services were at a stand-still during the troubles. Here the private sector, including voluntary health agencies, was active especially with regard to curative services. This was best seen in the load carried by some private hospitals. Preventive programs were administered to some extent mainly by voluntary national and international agencies. The International Red Cross was quite active in this respect.

Physical damage was inflicted in varying degrees to official and private health establishments and facilities. The extent and

effect of this damage need to be properly assessed. The same applies to the health manpower component, both official and private. The present status of the Government hospitals, in Beirut, Baabda, Ain Helweh (Sidon), are only examples of the outcome of the damage inflicted during the troubles.

D. Summary of Present Attributes of the Health Sector:

1. Lack of well-defined short and long term health policies, curative and preventive, and lack of set priorities.
2. Policies and priorities are not made intelligently and realistically for lack of (a) qualified and competent policy-makers and planners, (b) basic data and statistical information on which these policies are made.
3. The Ministry of Health is not playing the role it should, hence the confusion and emergence of numerous competing agencies that deal with health without any proper coordination or restraint.
4. There is no health delivery system, primary or otherwise, intelligently worked out to suit the health needs of the country.
5. Great deficiencies exist in the quality and quantity of health manpower needed, mainly in the official sector. There is improper utilization of the health manpower pool available in the private sector.
6. Insufficient use is made of international agencies that are functionally health-oriented such as WHO, UNICEF, UNDP and USAID.
7. The country still suffers from a variety of diseases, infectious and non-infectious, that can be completely prevented or controlled.
8. This state of affairs is reflected in part in the annual budget of the Ministry of Health which seems to be "fixed" at a low level (less than 4% of GDP) for the last several years, whereas it was 5% two decades ago.

Development of a National Health Sector

Two definitions, among others, may act as a guide to a national authority in process of developing its health sector:

1. Public Health is the art and science of preventing disease, prolonging life and promoting physical and mental efficiency through organized community effort (Wiaslow).
2. Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity (WHO constitution).

Three processes are involved in the attainment of the above:

1. The Process of Planning - 'Planning is the guidance of change within a social system.' It requires three essentials:
 - a. A political and social commitment to change
 - b. A clear knowledge of the direction in which change should occur.
 - c. An intelligence system to permit implementation, evaluate progress, and set the stage for the next change.
2. The Process of Priority Setting - To intelligently set priorities the following are needed:
 - a. A viewpoint of disease and death in the total defined community.
 - b. A model of medical care events - need, demand, utilization.
 - c. A set of measures of outcome - morbidity, infant mortality, case-fatality, complications, etc.
 - d. A concept of information that leads to the development of statistical, survey and encounter reporting systems.
 - e. A system concept of the interplay between resources and need.
 - f. A set of values about the importance of knowing the natural history of disease and the commitment to a target population (delivery of health care).
 - g. The process of establishing priorities is a cybernetic (feed-back) process between the needs and the options. This raises four questions:
 1. What are the needs?
 2. What are the options for allocating resources?
 3. How are the possible options evaluated?
 4. Which option/s will be selected?

3. The Process of Implementation - This can be illustrated by stating the components of a model of a health care system:
- a. Collection, processing and analysis of health information.
 - b. Dissemination of health information through different media.
 - c. Planning of health care programs.
 - d. Presentation of plans for consideration by the concerned bodies (community, political agreement ...), and achievement of a consensus on change.
 - e. Implementation of change.
 - f. Evaluation of change, and modification of program in the light of this evaluation.

Granted that the Lebanese Ministry of Health is the sole body that should be responsible and concerned with the above considerations and points, the following questions arise and demand clear and courageous answers:

- a. Are the currently employed officials, in particular those at the level of policy and decision making, sufficient and qualified, competent and motivated enough to undertake this responsibility?
- b. Is the Lebanese community, including its political representatives, ready or being prepared and educated to support morally and materially what is optimal for the development of its health sector?
- c. Is the present system, with all its health facilities and organization willing to accept change based on priorities and actual and potential needs, and what information system/s are needed to supply the essential data?
- d. Should this desired change be initiated by those who currently are in power or should it wait for national public pressure to develop and become effective?
- e. What role should be played by national and international institutions to assist in the introduction and continuous maintenance of the desired change?

Part II - The Health Education Sector

Medical Education: The Background and the Present Situation

Modern medical education in Lebanon was imported from America and France. The first school (the second in the Arab World) was established in 1867; the second came into being a few years later. Both schools are private.

For a very long time the two schools functioned in complete separation, sometimes to the point of antagonism. This was due to their different origins. Relations between them were either non-existent or limited to bare civility. There never was a dialogue on educational purposes, curricula, exchange of faculty or teaching facilities. This led to the creation of two opposing camps which, in our opinion, hindered development. However, it is fortunate to note that in recent years a change in attitude set in and is gaining momentum. Perhaps the fact that the two schools now realize that in spite of all their differences -- origin, emotional and psychological orientation, language of instruction --- they are essentially Lebanese, or at least to serve Lebanon and the Arab World. There is a definite rapprochement between them which augurs very well.

The schools were patterned after western models originally designed to meet local western needs. It seems that these western models with all the compromises they were subjected to in order to meet their own peculiar situations, were transplanted into Lebanon without sufficient adjustment or modification to suit the new environment. Thus, inadequate emphasis was placed on prevention and on the social aspects of medicine. Later on, western developments -- again evolving from or dictated by local western conditions -- were often adopted rather indiscriminately without proper evaluation as to relevance to the Lebanese scene; worse still, some significant western developments were introduced either too late or not at all.

There are many reasons for this strong western orientation but two deserve special mention: the private nature of the schools, and the lack of Lebanese standards for accreditation.

As private institutions, the schools had to maintain standards which were acceptable to their owners or trustees who were acquainted only with western standards. Although these standards are generally very good, they are not always relevant.

The Lebanese Government has never established the minimum requirements for accreditation of schools of medicine, including hospitals and other teaching facilities. The existing schools have been completely free to do as they saw fit, and although they have maintained a highly creditable record, they have not always come forth with the best for the country.

The Private Nature of the Schools of Medicine

Medical education is very expensive, possibly the most expensive form of higher education. The two schools have always faced serious financial difficulties which restrained their development and at times threatened their very existence. Thus, they had to defer implementation of many desirable programs which would have been of great value to the country. Also, in an effort to alleviate their financial burden, they have had to charge high tuition fees which will continue to rise. These fees are a burden heavily taxing the resources of the student's family.

One corollary of expensive medical education is that the schools have set rigid academic criteria for admission in an effort to ensure that their investment is well placed. Thus, there are two obstacles the student must surmount: academic and financial. A word about each is appropriate.

A. The Academic Problem:

With the increase in the number of secondary schools and of students who complete secondary education, there is a greater demand for university education which has come to be looked upon as a right and not as a privilege. This, at face value, is praiseworthy. Unfortunately, the purpose of such university education is not clear nor is there a defined plan for the optimum utilization of the university graduates. The avenues open to students are limited; hence a great demand for medicine and the other liberal professions. The existing schools cannot - and must not - accommodate all applicants, they must select those who seem best qualified academically. The rejects seek medical education elsewhere - or at least more blandly, anywhere else in the world irrespective of standards. There is a mass exodus of students in search of medical education; some of these gain admission to schools with acceptable standards of education, but the majority end up in third and fourth rate schools and return to Lebanon as doctors! Due to their poor education many fail to pass even the elementary level colloquium which is the Lebanese licensing examination. Although

this problem has acquired alarming proportions. In the last five or ten years, there is no evidence that remedial measures are being taken by the authorities concerned. Whereas between 1971 and 1975, 28% of newly registered physicians came from what we consider lower standard schools, the percentage has risen to almost 35% in 1977, and will rise further in the years ahead. In addition, about one third of these newly registered physicians were educated in western European countries, and only about one third in Lebanon. Besides the question of standards, the foreign educated physicians receive an education and training which do not really equip them to cope with the health problems in Lebanon.

Another danger of medical education abroad is that many of the students never return to their native country after completing their education. This is a very serious problem which needs urgent attention.

We are of the opinion that Lebanese physicians, or at least the majority of them, should receive their undergraduate medical education, and at least part of their specialization training in this country before they are permitted to go abroad for further training and specialization. If that were the case, the new physician will be acquainted with the health problems of his country and will be in better position to select relevant training abroad. In addition, his ties with his country will be stronger, and the risk of his not returning is lessened.

Discussion of the academic problem would not be complete without a word about premedical or preprofessional education. Elementary and secondary education in our country fails to inculcate in the student the right attitude of inquisitiveness and self instruction. The student is not interested in learning but seems to be interested only in clearing a hurdle be this called baccalaureat or anything else! The student is not taught how to study nor how to deepen his knowledge of any subject which might interest him. Here the fault lies with the whole system of education including the teachers associated with the young minds of our nation. Our teachers are not equipped to cope with the demands of the third quarter of the 20th century. This point cannot be over-emphasized because it is so essential and vital to medicine. No matter how excellent a school of medicine is it can never hope to teach its students everything about medicine. The most effective teacher is the student who teaches himself under the guidance of his preceptors. We see this in many western countries where the student enters medical school already knowing how to teach himself and how to learn. Our

students come to us with an entirely different frame of mind and attitude: they expect to be taught everything in the simplest way, they do not wish to find out for themselves. The medical school tries hard to correct this attitude and to emphasize the fact that the study of medicine is a never ending life long process.

B. The Financial Problem

The high cost of medical education deters many promising young students from entering medical school because they cannot afford the expense. This is indeed very unfortunate; some of those young people undoubtedly would have been good in school and would have become good physicians. One would have thought that at least for this group the State would provide full subsidy; unfortunately it is not so. Such students have only two alternatives open to them: either to forego the study of medicine, or to emigrate to a country where medical education is cheaper. Even opportunities to study one of the very badly needed paramedical professions are not available. Thus, valuable talent is lost. The ill-effects of the study abroad have already been discussed.

The financial difficulties of the schools have restrained the development and expansion of many programs with the effect that they, the schools, at times give the impression of standing aloof from the country's need. A few examples will serve to illustrate this point.

- a. It is a well established fact that the full-time teacher devotes more time to teaching and research than does the part-time teacher who has to earn his living from private practice. But a full-time faculty is very costly especially when one considers that salaries must be adequate to keep the faculty content. Both schools recognize this but have been unable to reach their goals in faculty development because of the financial implications involved.
- b. A school of medicine has a definite responsibility in conducting the research, or at least most of it, which is essential for establishing the health profile of the country. In addition, it has the obligation of sharing its knowledge with the authorities, of helping in drawing up a national health plan, and in establishing priorities for implementation. The schools in Lebanon have been remiss in this respect because they could not afford (financially) the personnel necessary for such research.

Research must also be carried out to determine the causes and the possible remedies for the maldistribution of health manpower, e.g.: the inadequate number of physicians in rural areas, the lack of qualified school health physicians, the lack of qualified family doctors, etc...

- c. A school's curriculum must be dynamic, evolving with scientific and technological advances, and with the needs of the country. Curricular changes are expensive and are optimally made after intensive evaluation and research in medical education. The schools have been rather slow-moving in this respect primarily due to the lack of specialists in medical education who would devote most - if not all - of their time to such work. True, each school has a curriculum committee but curriculum work in both is conducted on part-time basis; research in medical education and teacher training are non-existent; epidemiological research is scarce and does not seem to be attractive.

Thus the responsibility of the schools is clear: they must provide the necessary knowledge which makes them effective partners in national health planning, and with which they can design the optimum curriculum for medical education in Lebanon.

The schools must also clearly define the kind of physician they graduate: what he is expected to do, and where he is expected to function. This too is urgently needed.

At the same time, the schools must never forget that their primary role is to teach and do research; service is a byproduct of these two. They must resist any excessive demand for service that comes to them from the public sector. The schools cannot and must not replace the public sector for the delivery of health care.

To enable the schools to achieve their goals of teaching, research and service in the best way possible, the government and the community must be in constant communication with them for the discussion of mutual problems and the establishment of a plan of action. As far as can be determined such communication is non-existent. The schools act in almost complete isolation and try to guess what the community and the government need. The latter two seem to be completely oblivious of the needs and of the problems of the schools. All three are to blame.

Specialization

Opportunities for post-graduate medical specialization are limited quantitatively and qualitatively. Proper facilities are available in the two university hospitals, in one or two university-affiliated services in general hospitals, and in one psychiatric hospital. The number of available training positions is definitely inadequate to meet the needs of the large number of new medical graduates. The quality of the available programs varies depending upon the size of the clinical service, the adequacy of the hospital facilities, the number of qualified teachers, etc. There are no Lebanese standards for accreditation of these specialization programs. Even in-service evaluation of standards is mostly inadequate as the departments offering training lack the necessary skill and know-how for evaluation. Some departments have resorted to outside evaluations in an effort to maintain the highest quality possible.

It is the responsibility of the schools to create opportunities for specialization in such specialties which are undermanned and to encourage students to take up these specialties. But the schools cannot be effective if the community does not give due recognition to these specialties. The schools can also discourage training in over-supplied specialties by limiting the opportunity for study and training. An example or two will illustrate what is meant.

Lebanon is in need of family physicians who will be responsible for primary care and for referring patients to the appropriate specialists. This is a real need. Unfortunately neither school has provided a special training program in this specialty. In general, the few remaining family physicians had no further training beyond the one year of internship the law requires for practice. The family physician or the general practitioner of today should be a specialist in his own right, commanding the same respect and the same fees as the most sophisticated specialist. Definitely he should not be looked upon as a second or third physician who is paid half of what the specialist receives as is the case now.

Responsibility here lies not only with the school which should provide the training, but also with the public and government agencies who should recognize the family physician as a specialist in his own right. Even in the other specialties there are serious lacunae: Lebanon has large numbers of outstanding surgeons, cardiologists, neurosurgeons, obstetricians, but has too few pathologists, anesthesiologists and radiologists, to name only some. It is the school's

responsibility to encourage our young graduates to take up these specialties and it is the responsibility of the public to provide the proper incentives for them to do so. Most of our young graduates select the specialty which seems to offer security for their future; may the public sector provide this security in the specialties which our country needs.

The problem of specialization recently became acute due to the practical closure of the doors of American and West European training centers in the face of Lebanese graduates. It is imperative that proper facilities be made available immediately in Lebanon. The present teaching hospitals are not enough; additional hospitals, particularly the main government hospitals, must be brought into the picture. The problem is urgent; no time can be lost.

Effects of the Civil War in Lebanon

Damage to the medical education sector brought on by the civil war has been serious. Besides the major physical damage one of the two schools sustained, the worst damage has been in the emigration of significant numbers of qualified Lebanese teachers leaving major gaps which are still unfilled and which, in some instances, may remain so for a long time. This loss of manpower set back the quality of the education programs a number of years. Replacement is difficult and very expensive. We consider this to be the most serious ill-effect of the civil war; buildings and materials are relatively easy to replace, manpower is not. In addition, the financial resources of the schools are in worse condition than ever before due to limited revenues and increased expenses. Corrective steps are urgently needed and can come only from the State.

Education of Other Health Personnel

If the picture of the medical schools is not bright, that of schools of other health personnel is grim. There is one school of dentistry, one school of pharmacy, one school of public health and two schools of nursing which are of university level. The problems they face are identical to those discussed for the medical schools and need not be repeated here except perhaps to emphasize that their financial plight is even worse. There are a number of non-university schools of nursing, both private and governmental, two private schools

of laboratory technicians, one private school of radiographers, and one or two schools of physical therapists. Their quality is variable although efforts at improvement are being made; their output in general is inadequate to meet the requirements of the country.

Education and training facilities for the remaining categories of health personnel are non-existent and must be sought abroad. The shortage of these categories of personnel probably is due to the fact that the need for them has not been recognized, or that they are not properly remunerated to make careers attractive. As examples, the qualified hospital administrators can be counted on the fingers of one hand.

Part III - Recommendations

For convenience the recommendations which follow are made under three major headings: The Ministry of Health, The Health Services, and Education, although they are interrelated and bear directly on one another. Some are corrective and relatively easy to execute, others are long range requiring time and study. We believe immediate initiation of the whole process is essential for rectification of the present situation and for moving forward.

I. The Ministry of Health

1. An advisory body, the National Health Planning Commission, composed of persons qualified and well versed in the country's health problems, should immediately start assisting the Ministry. The main function of this group is to set comprehensive health policies and a time table for their implementation. The defunct Supreme Council of Health can be revived and commissioned with this task provided its membership is restructured.
2. Similarly, the Council for Development and Reconstruction should have a small consultative body composed of highly qualified members.
3. Reorganize the Ministry, on the central and provincial levels, on the basis of past experience and future expectations and developments. Departments and divisions should be revised with regard to functions, manpower needs, job descriptions, an attractive salary scale, continuing education and training of the staff, etc.

4. Revival of the Statistics Department on different basis from the previous pattern. The recent recommendations made by a WHO consultant could serve as a guide for this purpose. Besides its manpower needs, the Department ought to have clearly defined functions and be given the necessary equipment and supplies to carry them out. The Department should evolve to become the main information centre supplying essential data for the formulation of health policies and plans.
5. The Ministry needs a well run and active Office of International Health staffed with qualified personnel. This Office will perform the necessary liaison between the Ministry and all international health agencies interested and willing to offer assistance in various forms.
6. The Ministry cannot remain dissociated from the Medical Security Plan, but rather should become interested and actively involved in its functions and development.
7. Efficient coordination is needed between the Ministry and the other Official bodies dealing with health such as the Beirut Municipal Health Department, the Ministries of Water Resources, Interior, Defense, etc. Similarly, such coordination is needed between the Ministry and the voluntary and private organizations engaged in health work.
8. All vacant but budgeted positions should be filled with suitable personnel. Preparation and training of the needed but not currently available staff should start without any further delay.
9. Obviously, new ideas and plans cannot be executed without the necessary financial support; thus, the Ministry's annual budget must be raised to a level which is commensurate with its activities and responsibilities.

II. The Health Services

1. Epidemiologic studies, conducted by groups of experts, are essential to answer questions related to patterns of disease, causes of mortality, extent of disabling diseases and physical deformities, demographic information, actual and potential needs for hospital beds, and relevant information needed for the establishment of health centers, etc.

Initially and until national experts become available, these studies require the assistance of specialized international agencies.

2. Collection, processing, presentation and dissemination of health data should become the primary concern of an Information Centre which will replace the Statistics Department. Besides its monitoring and surveillance activities, this Centre will also be involved in the collection of basic data essential for the formulation of health policies and for the requirements for their implementation.
3. There is an urgent need to meet the immediate curative demands especially of the medically indigent sector of the population. Availability of well-run hospital beds, government or contracted with private hospitals, upgrading of the quality of services offered by the existing Government-run clinics and dispensaries are examples of these demands.
4. Removal of constraints facing the proper running of current preventive programs. Of greater importance is the setting of well-defined preventive programs that relate to environmental health, mass immunization campaigns, public education, attack on specific diseases such as tuberculosis, schistosomiasis, cancer, and the development of country-wide programs in the areas of school health, maternal and child health, occupational health, etc.
5. Assistance in various forms must be given to the private and voluntary institutions engaged in health work or in the care of specific conditions such as the physically handicapped persons, the blind and deaf, the mentally ill, etc. This assistance should be offered by the official sector, or through it by international agencies.
6. There should be more effective utilization of all forms of assistance available at the international level, including the proper use of training fellowships for health workers of various levels.

7. Laboratory facilities are to be provided in all parts of the country including the main cities and towns. Obviously, health services cannot function properly without these facilities. It is also important to note that these diagnostic facilities ought to cover the needs at the individual level (clinical pathology) and at the community level (water analysis, food safety, etc.)
8. Primary health care, a concept when implemented would cover a variety of the services stated previously, can best be accomplished through the establishment of "Health Centres". The activities of these centres are comprehensive covering both curative and preventive services.

For this primary health care system to succeed and attain its objectives, there should be established at the central level of the Ministry of Health a separate department responsible for its overall administration, preparation of the manpower needed, provision of an attractive salary scale and other professional incentives, and a financial commitment to provide for the construction and equipping of the health centres.

9. It need not be stressed that health services cannot function adequately without the motivated and qualified workers. Hence, the urgent need to start preparing and recruiting these at all levels of competence, on the basis of clear and intelligent plans.

III. Education

Recognizing that the primary role of the school is teaching and training of the manpower needed; that good teaching and research are inseparable; that service is an essential by-product of teaching; and that the school must be a partner in any health planning, we recommend:

1. The task of the National Health Planning Commission, as far as education is concerned, will include:
 - a. Determination of the manpower needs in all categories of health workers,

- b. working with the schools to create the education and training program to meet these needs,
 - c. evolving with the schools the standards of quality and the methods for ensuring the maintenance of these standards,
 - d. evolving the standards of care and the mechanisms for ensuring same.
2. The schools (particularly medicine) to re-examine and re-define their objectives in the light of the national health plan and to evolve their curricula accordingly for both undergraduate education and post-graduate specialization.
 3. The State, the schools, and the community to establish the necessary safeguards (criteria) for the ensurance of the quality of education/^{and}specialization by improving the licensing examination, and possibly by introducing check points during medical studies.
 4. The State to support the schools in providing adequate funds for:
 - a. Epidemiological research necessary for health planning,
 - b. research in medical education,
 - c. programs necessary for training the required manpower such as specialists in primary care and other personnel needed to run the health services,
 - d. affiliation of government hospitals with the schools to expand the teaching and training facilities, and to improve the quality of care in these hospitals.
 5. The State to help the students by supporting in full the schooling of those who will fill positions in accordance with the national health plan. As long as there are no Health Professions Schools in the Lebanese University, students in private schools must be supported.

6. The State to create the necessary incentives to attract and to retain the specialists needed be they physicians or auxiliary personnel. Training grants must be made available and the salary scales for health personnel completely revised.
7. The training and education of auxiliary health personnel is primarily the responsibility of the public sector; the training of teachers is primarily the responsibility of the schools and universities with support from the State.

Beirut, April 1978

COUNCIL OF DEVELOPMENT AND RECONSTRUCTION

HEALTH SITUATION IN LEBANON

by

Micheline Khalaf

OUTLINE

الجمهورية اللبنانية
وزارة الصحة العامة
مركز البحوث والدراسات
القسم الثاني

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I - INTRODUCTION

While health is a primary need for man and his society for the achievement of a total and integrated life, it is actually regarded as of secondary importance by the Lebanese Government.

Some Lebanese have no access whatsoever to health care and many of those who have, are receiving inappropriate care which does not answer their needs.

Since the rapid development of Lebanon cannot be separated from the health of the individual Lebanese, new ways of thinking about the problems of health and health services ought to be developed in order to improve the well-being of the people, in other words increase their social fitness and productivity.

Adequate health care provision is associated with adequate resources: man, money, materials and adequate planning to reach a supply-demand balance on the fulcrum of productivity.

Therefore to start with, any developmental Health plan needs enlightened decision-makers, responsible for Health manpower and budget planning on one hand, and responsive and motivated population on the other hand.

The complexity of the situation as it exists in Lebanon makes it necessary to consider organization for community health in at least two dimensions: The various levels of "Government as one dimension referred to as the public sector and the second dimension or private sector including the various auspices, official and non official.

II - General Situation

The World Health Organization, estimated roughly the Lebanese population in 1975 to be around 3.25 millions, nearly 65% of these are mothers and children meaning a high dependency ratio. In 1973 the registered crude birth rate was 24.5 per thousand, the crude death rate 4.3 per thousand indicating a remarkable underregistration.

To be able to assess the health situation in Lebanon, we have to study the following:

- A) The Ministry of Health which is the official body for care provision and policy making.
- b) The General health service structure revealing two important problems: the inequity of the Private and the public Sector and the geographical maldistribution of health manpower and facilities.
- C) The levels of preventable diseases because Health cannot be defined in exact measurable terms, therefore morbidity data are useful as health indicators.
- D) The Medical and paramedical education and training in order to analyze the manpower supply of the country.

A) Ministry of Health1* Objectives

The objectives of the Ministry of Health listed in the decree No. 8377 Article No. 2 officially declared in 1961 and amended in 1963, are:

"to protect and improve the Public Health by preventing diseases and treating needy patients and by supervising the Private Health facilities according to the law specified for the above mentioned. Also to prepare suggestions for Legislation and modification of the Laws and Policies related to all the Public Health fields."

Is the Ministry of Health fulfilling its objectives?

The answer to this question is self evident after evaluating the Health situation of the country.

2* Organization, staff, budget

Theoretically the Ministry of Health consists of the following:

a - Organization* At the National Level

1. Directorate General
2. Three directorates

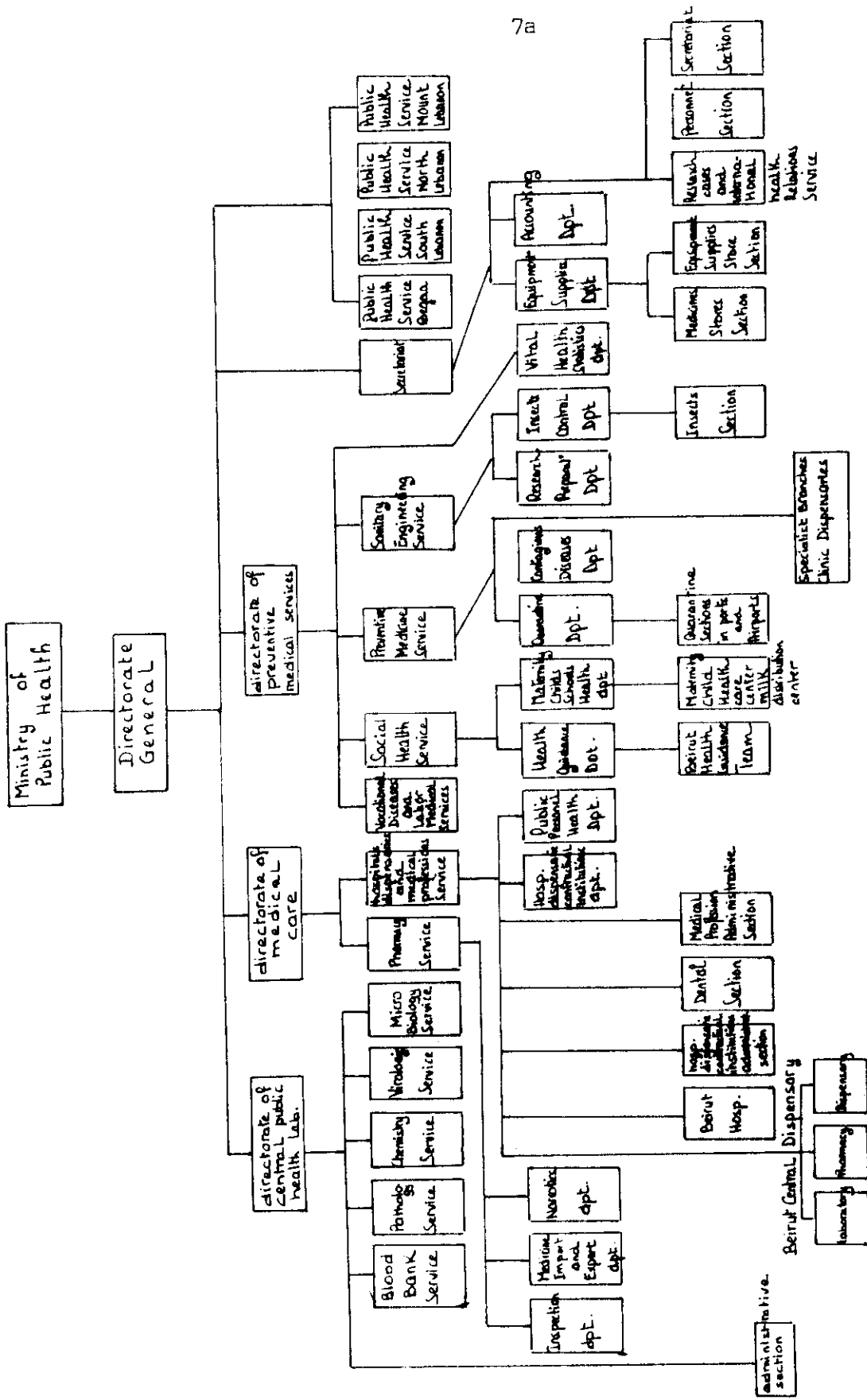
- a - directorate of Preventive Medical services
- b - directorate of Medical Care
- c - directorate of the Central Public Health Laboratory

* At the regional level

1. A regional health service for every Mohafazat except for Beirut because health Legislation and execution are the responsibilities of the Municipality without any control by the Ministry.

2. A Health Section directed by a doctor of the Caza and directly related to the regional health service of the Mohafazat.

A more detailed explanation is shown in the chart:



b - Staff

Many of the subdivisions and departments shown in the chart, lack the adequate Personnel in number and credentials for example the vital and Health statistics department has at present two employees who are not qualified, despite our knowledge that this department is very important for the establishment of any health planning and Policy.

The strong centralization of the Ministry as it is the case in many other developing countries reveals a state of poor economy and low standard of living.

Since the Ministry of Health is in theory responsible for the provision of treatment as well as protection of the Lebanese population it should have been the center of expertise at all levels but instead of this we find it poorly staffed with many vacant positions although budgeted for and a low salary scale which results in lack of motivation and job dissatisfaction among the already existing personnel.

The staffing of the ministry is a real major problem which hinders its functions at all levels and reflects poor organization.

c - Budget

The budget of the Ministry reflects health as being not only of secondary importance but the least important among

the other sectors like the economy, Education, Postes, telephone and Telegraphs (PTT) etc.

A time trend of the budget of Health is significant here because it shows the status quo condition of the ministry instead of its development. It's percentage budget out of the total budget did not change since the 60's despite the development of an increasing number of techniques based upon new scientific knowledge for the development of organized Public Health programs.

These give rise to new responsibilities at the decision-makers level who seem to be relaxed because the budget of the Ministry of Health has increased in terms of crude amount of money but percentage wise it is still the same:

The Budget of the Ministry of Health
and its percentage out of the total budget

<u>Year</u>	<u>Total Budget (Million LL.)</u>	<u>Health Budget (Million LL.)</u>	<u>Percentage</u>
1962	375,000	13,673	3.7
1963	425,400	13,833	3.3
1964	476,400	15,189	3.2
1965	514,790	16,463	3.2
1966	590,735	24,175	4.1
1967	632,881	24,055	3.8
1968	648,500	23,502	3.6
1969	660,600	22,013	3.3
1970	736,625	22,611	3.1
1977	1,851,574	67,802	3.7
1978	2,398,456	55,903	2.3

In 1978 the percentage out of the total budget has decreased to 2.3%.

Here important questions can be raised:

- Is Health becoming more neglected in Lebanon?
- Is our health situation bright enough that it does not deserve more attention?
- Is it because of the war that the other problems in the country have the priorities?
- Is all the damage which occurred in Lebanon restricted to the other sectors? (No injured people, no epidemics, no handicapped?)
- Is the Lebanese Government relying more and more on the Private Sector?

And last but not least:

- Are our decision-makers aware of the Health development in the world?

In other words, the Ministry of Health in Lebanon is spending nearly LL.17.00 or nearly \$5 per inhabitant and used to spend in the 60's nearly \$2 per inhabitant compared to the United States of America which spent in the 60's nearly \$50 and nowadays over \$200 per inhabitant and per year.

The problem becomes more acute when even this low budget is badly spent for example in 1978 the LL.55,908 million are being spent as follows:

<u>Type of Expenditure</u>	<u>Amount in LL.</u>	<u>Percentage</u>
I. Salaries	21,465,400	38%
II. Indemnities, aids & grants	181,000	0.3%
III. Administrative needs	1,133,000	2%
IV. General Admin- strative needs	655,000	1.2%
V. Maintenance	275,000	0.5%
VI. Publicity & exterior communica tions	177,100	0.3%
VII. Aids (Private & Governmental hospitals)	30,020,000	54%
VIII. Undefined expenditures	643,000	1.2%
IX. Central Public Health Lab.	1,359,300	2.5%
<u>TOTAL</u>	<u>55,908,800</u>	<u>100%</u>

Out of the LL.3 millions allocated for the social and educational aids, LL.27.5 millions are allocated for the treatment in the private hospitals.

As a rough analysis we can say that - 42% of the total budget goes for salaries and administrative purposes, - 54% on the curative aspect, and hardly 4% on the preventive aspect of health care.

But if we consider that the employment of salaries, indemnities and maintenance are of curative basis, we can say that more than 90% is spent on the curative aspect of health care.

Comparing the cost of sickness to the Price of Health, one can say that effectively the Lebanese Government has under-estimated the role of Preventive Medicine and Health care especially when the developed world is emphasising Prevention, and we Lebanese are still having the big burden of the sick.

3* - Planning, implementation and supervision

There is no official committee for planning in the ministry of health, most of the planning is done on a personal and haphazard basis. The supreme council of Health, the only advisory body of the Ministry is not functioning since more than four years.

Despite the lack of planning which brings about a drastic situation in a developing country like Lebanon because of the scarce resources, the implementation of the very few planned programs gives us a more chaotic figure: Many of the plans can stay in the drawer like the plan for Tripoli Hospital in 1972, and many can be implemented at a later date which becomes badly influenced by the rate of inflation; the beds planned to cost LL.30 thousand will cost LL.100 thousand later and this is a main cause in disrupting the plans.

Any way, Health programming and planning is an essential need which stresses the national responsibility of the Government

through a continuous process of health development, intimately linked with the socio economic development of the country.

At least, if the ministry of health is not able to provide all the health care in Lebanon, we expect it to develop qualities for supervision of the other health providers being official or non official but even this disappoints us to the point of dissociation and lack of coordination with the other agencies:

- The municipality of Beirut is completely independent from the Ministry of Health.
- The National Social Security Fund NSSF is completely dissociated from the Ministry.
- No direct supervision of the private sector.

As a summary the function of the Ministry is: a) running the Governmental facilities (hospitals, clinics and dispensaries) and b) helping the private facilities serving the people usually on a contract basis.

B) General Health Service Structure

1* - Health Facilities

Free medical care is provided by the government to the indigent sector of the population but the quality of this medicare has most of the times been questionable.

In addition, medical care is being widely provided by the Private health Sector.

Even when the best medicare and the highly qualified is provided by Private institutions, one should be careful not to generalize the effectiveness of the whole Private Sector in terms of quality because some of them can be profit-making institutions which do more harm than good to the people especially because of the absence of any governmental supervision.

Attempts at evaluation of the different hospitals, health centers and dispensaries should be started very soon to be able to assess our resources and make use of the best we have. Evaluation should be based on such factors as costs, resources, and the quantity and quality of services.

The Lebanese Government emphasizes the role of the hospital, as if health means hospitals and hospital beds. This is typical of the curative medicine orientation because curative medicine rests on good hospital facilities as its basis whereas preventive medicine depends largely on outpatient services for the ambulant patients and on centers for health promotion through education of the people.

The basic elements of our health services are:

* The dispensaries: described by John Bryant as being the smallest unit of health care in most developing countries, it is usually a one room building, poorly maintained

and equipped. According to Bryant the typical picture of a dispensary is: a man with marginal training, limited equipment, few supplies, little or no supervision:

"It does not cost much, and does not provide much."

Since the impact of the dispensaries on Health is slight an attempt to transform them into health centers should be started.

* The Health Centers:

It is usually the most Peripheral unit of the health service. It's action usually varies with the resources of the country. In general a district of 100,000 people can be served by a district hospital and four health centers.

Paramedicals are very important in staffing the health center with an immediate supervision of medical personnel serving the district Hospital.

Therefore the health center is a very effective unit at the peripheral level especially if referrals can be operated to treat the more sophisticated cases and to ensure continuity of health care.

The Health centers approach would be the best and least costly for meeting the immediate health needs of Lebanon and ensure decentralization of health facilities.

* The Hospitals:

Hospitals can be divided as follows:

- The district hospital; it should support directly the efforts of the health center, and rely on auxiliaries as well as professionals.
- The Regional hospital is more developed than a district hospital especially in terms of specialty care. It's size might vary from 250 to 500 beds.
- The central hospital: this should be central to all other health facilities and can provide the most advanced medical care in the country. Usually there should be one such unit, at the level of the Ministry of health and should be staffed by highly qualified professionals.

In Lebanon differentiations among the hospitals rarely exist, this is mainly due to the lack of planning.

The following table shows the distribution of governmental hospitals and beds according to Mohafazats:

Distribution of Governmental Hospitals
and beds in Lebanon according to Mohafazats (1978)

<u>Mohafazats</u>	<u>Estimated Population</u>	<u>Number of Governmental Hospitals 1978</u>	<u>Number of Governmental Hospitals 1971</u>	<u>Total No. of Beds 1978</u>	<u>Effective Number of Beds 1978</u>	<u>Number of Effective Beds Per 100,000</u>
Beirut	885,000	2	1	250	30	3/100,000
Mount Lebanon	781,250	6	6	427	206	26/100,000
North Lebanon	602,500	4	4	257	47	8/100,000
South Lebanon	566,250	5	5	330	300	53/100,000
Bekaa	415,000	5	5	386	370	89/100,000
TOTAL	3,250,000	22	21	1650	973	30/100,000

Source of the Number of Hospital and Hospital Beds: Ministry of
Health

Despite this distribution one cannot assume that all the hospital beds are the same in terms of quality and utilization.

Knowing the differences in the quality of medical care each hospital is offering, we question, the proper utilization of the hospital beds which register very low occupancy rates in the governmental hospitals especially after the war mainly because of loss of manpower.

Any way, according to the Ministry's actual report to the Council of development and reconstruction, the occupancy

rate is estimated to be 75% in the General hospitals in Beirut and nearly 30% in the rural hospitals.

A study published by the Office of Social Development, September 1978 shows the following distribution for the private hospitals.

Distribution of the private hospitals and beds in Lebanon according to Mohafazats (1978)

Mohafazats	Population	Number of Private Hospitals 1978	Number of Private Hospitals 1971	Total Number of Beds 1978	Number of Beds/100,000
Beirut	885,000	47	49	3185	360/100,000
Mount Lebanon	781,250	36	32	5292	678/100,000
North Lebanon	602,500	25	25	850	141/100,000
South Lebanon	566,250	14	14	537	95/100,000
Bekaa	415,000	1	1	105	25,100,000
TOTAL	3,250,000	123	122	9969	307/100,000

Evolution in the effective number of beds in both private and public hospitals from 1971 to 1978

	1971	1978	Evolution
Number of beds/Private hospitals	9149	9969	+ 8.96%
Number of Effective beds/Public hospitals	1546	973	-37.06%
Total number of beds	10695	10942	+ 2.3%
Number of beds per 1000 persons	4,11/1000	3,36/1000	

* The dispensaries are the other main health component of the health service. Despite its limitations the dispensary is the outlet of many voluntary social and religious movements, thinking that this attempt would cover the population but one would ask here important questions:

- What kind of care does the dispensary provide to the Public?
- Does this create a feeling of false reassurance at the level of the decision-makers?
- How many of these dispensaries are providing supervised medical care?
- How many of these dispensaries can insure proper referrals and continuity of care?

Any way the distribution of public and private dispensaries according to the Mohafazats and the Providers in 1971 is as follows:

Distribution of Public and Private
Dispensaries according to the Mohafazats and the Providers
in 1971

Mohafazats	Ministry of Health	Social Affairs	Muni- cipality	Red Cross	Social Movement	Total	%					
Beirut	1	2	15	3	26	47	16.5					
Mount Lebanon	9	4	6	11	79	109	38.4					
North Lebanon	13	6	2	5	18	44	15.5					
South Lebanon	14	11	-	9	18	52	18.3					
Bekaa	8	-	-	4	20	32	11.3					
TOTAL	% AGE 45	16%	23	8%	23	8%	32	11.3%	161	56.7%	193	1000

There is no coordination between the private and the governmental hospitals and dispensaries even among the Public Health facilities themselves. This is the cause of duplication of facilities like what is happening in Batroun, there are two dispensaries, one for the Ministry of Health and the other for the National Social Security Fund NSSF in the same building owned by the Ministry of Health.

Even if the distribution of health facilities does not seem very frustrating, still some villages lack the means for health care and here arises the problem of amenability because large proportions of the population lack the possibility of

contact with the health services but this problem might be justified at times by the Health insurance coverages.

2* - Health Manpower

Progress in the health field depends on having well trained personnel, sufficient in number and equitable in geographical distribution to provide the needed services for the population.

The Ministry of Health should know the resources of health manpower existing in the country, both in the government and in the private service. This will be a kind of supply analysis to be able to measure the current supply of all types of health workers.

Also it should assess the need and the demand for medical care and other health services and it should also decide on the types of health personnel and the training they need to provide efficient medical care.

Estimated Health Personnel in Lebanon

	No.	Pop/Health Personnel
Doctors	3000	1/1080
Dentists	932	1/3480
Pharmacists	894	1/3635
Nurses	2000	1/1625
Nursing Aids	998	1/3256
Midwives	500	1/6500
Physiotherapists	96	1/33854
Laboratory Technicians	200	1/16250
X-Ray Technicians	20	1/162500
Sanitarians	200	1/16250

Source: Ministry of Health, October 1977.

To be able to judge our gross figure in Lebanon let us compare it to other countries.

Health Personnel: Latest Available Year

Country or Area	Year	Population Per					Mid-
		Physicians	Physician	Dentists	Pharmacists	Nurses	
Bahrain	1972	127	1732	13	8	645	314
Saudi Arabia	1973	2000	4995	45	117	2057	-
Syria	1972	1914	3485	537	1017	2345	1055
France	1971	71039	721	-	-	-	-
Italy	1971	99341	544	-	37200	127399	18828
Poland	1972	53040	623	14614	13367	112722	12911
Spain	1972	49256	700	3537	16925	-	4124
Sweeden	1972	11920	681	6990	-	51680	640
United Kingdom England & Wales	1971	62000	787	13400	13900	165400	18500
Australia	1971	16107	792	3477	8046	89520	-
United States	1971	333299	621	104000	130750	1175000	-
Israel	1972	8453	364	1748	1892	-	603
Lebanon	1973	2300	1330	583	612	2528	-

Source: World Health Organization.

We can conclude from this that Lebanon lacks health personnel in terms of quantity especially the Paramedicals although it is better shaped than most of the other developing countries.

But here some pertinent remarks are essential:

- The meaning of a doctor or physician varies from one country to the other in terms of quality and function and this makes us careful while assessing these resources outside the real context of the country itself.

Therefore one should be aware that the number of health manpower is not very much significant although it is important because we cannot but give the deserved credits to the quality of medical care rendered, this also refers to the type of education and training they have undergone.

- The more acute problem appears when we talk about the distribution of health Personnel because this is an important indicator of how resources are being used.

These being taken care of, let us study the distribution of our Lebanese health manpower according to Mohafazats, the latest available is the 1971 distribution:

Distribution of Doctors according to Mohafazats
in 1971

Mohafazats	Beirut	Mount Lebanon	North Lebanon	South Lebanon	Bekaa	Total
Number of Doctors	1300	325	200	110	65	2000
%age Distribution	65	16.2	10	5.5	3.3	100.0
%age Population	27.3	24	18.5	17.4	12.8	100.0
Population/Doctor	1/550	1/1925	1/2410	1/4120	1/5110	1/1300

Source: Ministry of Health.

Distribution of Nurses According to
Mohafazat in 1971

Mohafazat	Beirut	Mount Lebanon	North Lebanon	South Lebanon	Bekaa	Total
Number of Nurses	956	295	169	56	38	1514
%age Distribution	63.14	19.5	11.16	3.7	2.5	100.0%
%age Population	27.3	24.0	18.5	17.4	12.8	100.0%
Population/Nurse	1/741	1/2120	1/2853	1/8090	1/8740	1/1717

Source: Ministry of Health.

Distribution of Pharmasists According to
Mohafazat in 1971

Mohafazat	Beirut	Mount Lebanon	North Lebanon	South Lebanon	Bekaa	Total
Number of Pharmacists	96	105	34	20	19	274
%age Distribution	35.03	38.32	12.40	7.15	7.1	100.0%
%age Population	27.3	24.0	18.5	17.4	12.8	100.0%
Population/ Pharmacist	1/7375	1/5953	1/14176	1/22650	1/17475	1/9490

Source: Ministry of Health.

This distribution of health manpower shows a striking imbalance, favoring the urban over the rural areas.

A concentration of doctors and nurses in Beirut, the ratio of population to doctors and nurses is ten times as high in Bekaa as in Beirut. This is not the case for the Pharmacists because there are specific laws and policies related to the spacing of Pharmacies.

Therefore this problem of concentration of manpower in the city of Beirut can be taken care of by valid and well studied policies and laws to allow the potential medical care to reach all the people in the country.

3* - Health Insurance Scheme

The most prominent third party payors are:

A) The National Security Fund (NSSF):

The Lebanese Social Security is independent from the Ministry of Health, ensuring effective functioning even during the war.

The National Social Security Fund up till now seems to overcome easily its problems and function smoothly. The second stage of the Social Security Plan has been implemented.

In order to be covered by the Social Security Law and entitled to the benefits of sickness and Maternity Insurance

in other words to be insured one should fulfill the following requirements:

- I. To be Lebanese.
- II. To be under contract in Lebanon, written or verbal.
- III. To work under such contract on the Lebanese Territory.

however the foreign wage-earners may be entitled to the benefits of the NSSF if they fulfill the following two conditions:

1. Reciprocal treatment to Lebanese by the country of the wage-earner.
2. Possession of work-permit.

Beneficiaries will include all the persons living with the insured under the same ceiling and at his expense. They comprise the parents, wife, husband, and children under sixteen years of age or over sixteen if they are following their studies.

If the insured needs hospitalization from the fund except in emergency cases, this approval will be valid for thirty days from the date of insurance.

In terms of hospital fees, the fund and the patient will pay his share in the form of daily fee or 24-hour stay in the hospital.

30% of the fee will be paid by the insured directly

to the hospital and 70% will be paid by the fund to the hospital. The amount of daily fee is usually agreed upon by the fund and the institution itself.

The NSSF has made it optional to the patient to choose the medical care he needs:

- by doctors practicing free therapy.
- by doctors under contract with institutions.
- by socio-medical institutions, such as hospitals and clinics.
- by polyclinics.

Despite being organized and functional one would be bothered by some questions pertinent to the NSSF:

- * What about the indigent free-worker: All those working in Agriculture, building houses, taxi drivers, maids etc.
- * Do these constitute a big proportion of the Population?
- * What about the NSSF working alone and should'nt be coordinated with other health Sectors especially in terms of planning?
- * What about the money of the fund? Should it be stagnant in the banks till the NSSF reaches a state of balance?
- * Would the further plans for development of the fund be implemented? e.g. Old Age Insurance?

Any way one cannot forget that the National Social Security Fund has provided a good relief for the population especially in terms of quantity of care but if its role continues to be limited at providing the fund it will be incomplete because the quality care would be neglected. The NSSF should then coordinate with the high level Health providers in the country to be able to ensure more and more of better quality care, going hand in hand with the complete coverage of the Population.

ii) The Ministry of Health:

Coverage by the ministry is mainly for hospitalization of indigent patients who are limited in number. The rates of the ministry are the same as those of the NSSF except that the patient is not required to pay 30% of his bill. The whole patient bill is reimbursed by the hospital.

iii) United Nations Relief and Works Agency:

This is an agency responsible for the welfare of the Palestinian refugees. On a contract basis this agency reimburses the hospital concerned for the total patient fee.

iiii) The Private Insurance Groups:

There are some other third party payers mostly the private insurance groups who also reimburse the hospitalization of their patients on a Contract basis with the Selected hospital.

C) Levels of Preventable Diseases

Health cannot be measured because its presence can be a matter of a subjective judgment. But disease is measurable to an extent that it reflects important forces in the community. Therefore we have to use disease rather than health as an indicator which will enable us to compare among countries and even in the same country at different points in time. That is why to study the Pattern of diseases within a society means to study also the degree of its development.

1* - Trend of Reported Communicable Diseases

In Lebanon unfortunately, the rates of diseases cannot be studied because of under-reporting, it will give us a biased picture on the state of the Lebanese health.

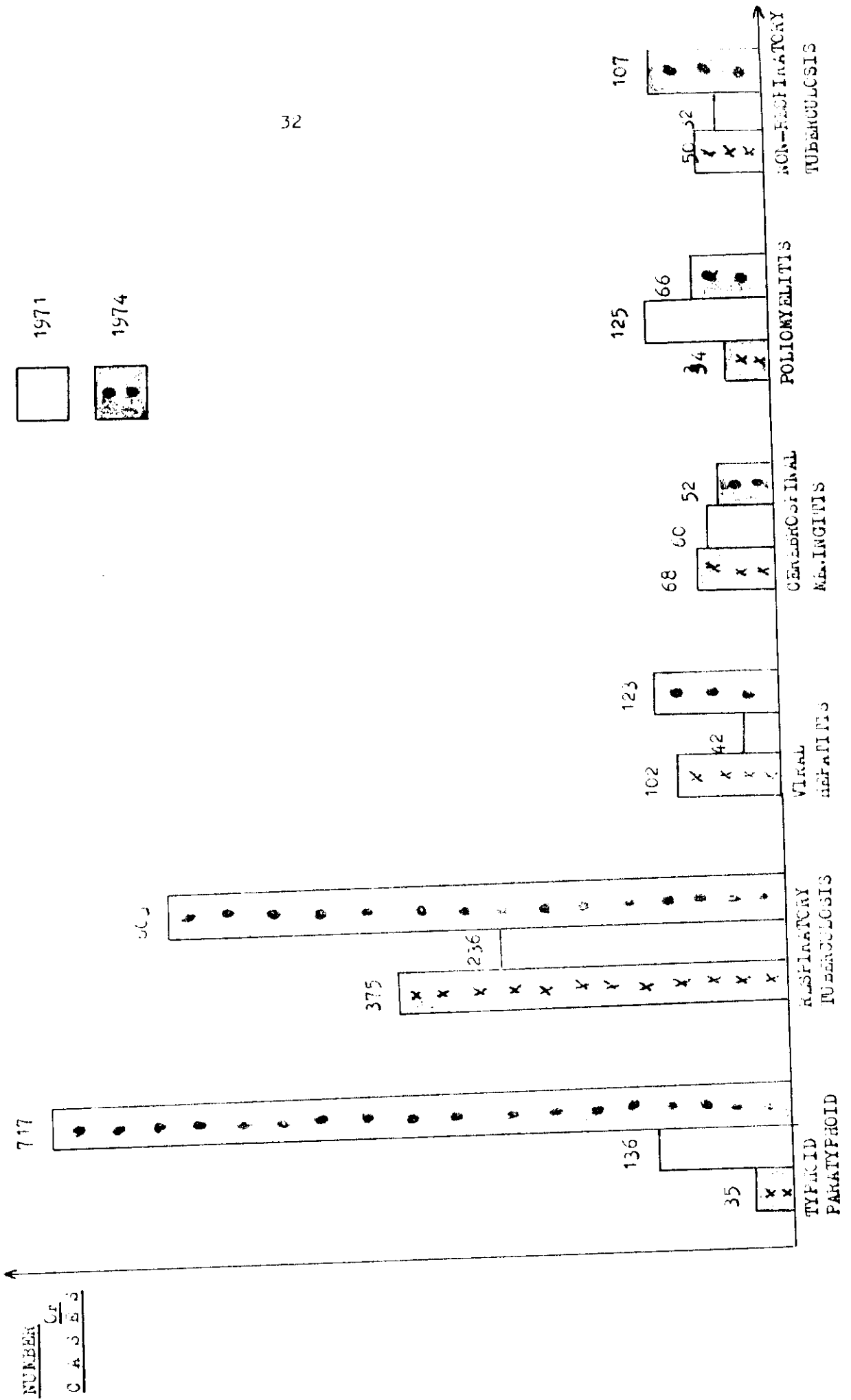
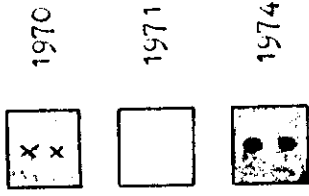
Therefore the trend of communicable diseases will be of value for us, because assuming the under-reporting in the present as well as in the past, it will enable us to study the evolution of these diseases.

Percentage of Reported Communicable
Diseases in Lebanon 1974

Diseases	%
Typhoid and paratyphoid	36.5
Respiratory tuberculosis	30.7
Schistosomiasis	8.65
Viral hepatitis	6.26
Non respiratory tuberculosis	5.44
Polionyclitis	3.36
Cerebrospinal meningitis	2.64
Alimentary intoxication	2.49
Dysentary B+A	1.22
Malaria	1.22
Others (diphtheria, rabies, tetanus, leprasy, maltese fever, scarlet fever, anthrax, measles)	<u>1.52</u>
TOTAL	100.0

Source: Ministry of Health.

DURING 1971, 1972, 1974



NUMBER
OF
CASES

Even with underregistration, one can easily see the unnecessary high level of some diseases which can be curtailed like typhoid and paratyphoid fever, tuberculosis, viral hepatitis, poliomyelitis, meningitis.

And even if it is not properly shown in the table because the data is incomplete, we have a high endemicity level of Tetanus, measles, diphtheria, and whooping cough which are preventable.

It is essential for the Ministry of Health to devote a sizeable portion of the budget to control and eradication programs.

The epidemiological picture for most diseases, if changed has increased, whereas in the developed countries some of these diseases are completely eradicated.

Schistosomiasis for example is becoming more and more pronounced in the country because it is increasing in the South where water resources, mainly for irrigation, are being developed.

2* - Problems of Prevention

Since these diseases are very important Public health problems, causing high morbidity and mortality and since these are of Preventable nature, immediate actions of Prevention should be taken.

Here, some problems arise:

- I. The environmental health measures which would reduce enteric infections, respiratory infections, food and water born diseases do not exist.
- II. These diseases are underestimated because of lack of reporting.
- III. Lack of epidemiological surveillance.
- IV. The diagnostic facilities, to detect the diseases at their early stages are limited.
- V. Immunization campaigns which would reduce Polio, diphtheria, tetanus etc... are not always carried

The following table shows the number of vaccinations according to the dispensaries carried during the year 1977.

Vaccination According to Dispensaries and
by Mohazats 1977

Mohazats	Total No. of Dispensaries	Number No. of of Triple Vaccine	No. of Small Pox Vaccine	No. of Tetanus Vaccine	No. of Whooping Cough Vaccination
North Lebanon	41	18	6	5	7
Mount Lebanon	34	35	8	1	1
Beirut & Suburbs	20	28	7	4	2
South Lebanon	29	3	1	-	-
Bekaa	10	3	-	-	-

Source: UNICEF 1977

3* - Prevention VS Control

Every one agrees that prevention of diseases is much more beneficial and efficient than its treatment. Prevention has also an additional advantage that it is much cheaper and much more economical in terms of Manpower and money use. Also one has to keep in mind that the outcome after treatment might not be satisfactory and might end up with handicapped people and this will increase the burden on the society.

As far as the environment is concerned national programs for the promotion of environmental health should be developed and these should not only be restricted to the disposal of garbage and refuse but should include also the sanitary control and surveillance of the production, processing, packaging, distribution and serving of milk, milk products, meats, fish, shellfish and other foods; the control and surveillance of certain drugs, cosmetics and chemicals; the elimination of insect and rodent vectors of disease; the surveillance of the atmosphere to prevent pollution. Considering the dust, smoke and especially bacterial contamination, the surveillance of domestic water supply and the prevention of their pollution by man, animals and industries, the surveillance of the potable water in terms of the degrees of chlorination and fluoridation, the development of safe and satisfactory disposal of human and solid wastes, the supervision of recreational areas,

the studies of accidents and accident prevention, the promotion of occupational health, the surveillance of the amount of radiation and development of policies regarding its transportation and disposal etc....

* The epidemiological surveillance system should also be developed to be able to eradicate and reduce the incidence of many diseases. Notifications of occurrence of diseases are essential especially those which are not subject to international Health regulations.

* Health laboratory technology should be developed.

The central Public Health Laboratory although well functioning is concentrating its activities on clinical pathology therefore, it is more of curative than of public health nature.

* Immunization should be carried routinely for certain diseases and should cover all the population.

However, the expanded immunization programs need to be connected with the epidemiological surveillance because of the evaluation of these programs very essential at all levels of implementation. Notifications of cases occurring before, during and after the implementation of the Immunization program assume the value of Parameters for evaluation.

Therefore the notification mechanism should be established in a systematic and rational way.

D) Medical and Paramedical education and Training:

1. Medical education:

a) Education and facilities

In Lebanon, we have two private schools of Medicine:

1. School of Medicine - American University of Beirut.
2. Faculte de Medecine - Universite St Joseph.

The first school's system is American oriented and the second is French.

Until recently these two schools functioned completely independently one of the other without coordination or common planning or shareness of the already existing facilities of the country.

The duration of studies at A.U.B. is seven years divided in three stages:

a) Two years of premedical studies, governed by competition among the students because the large number of students at the beginning of the premedical years will end up by 50-60 selected students on the basis of their grades.

A number of these students is being selected also after the completion of the bachelor of science in biology or chemistry courses.

b) Four years of medical studies combined with practical training mostly done in the American University Hospital.

c) One year of internship during which the medical student is allowed to take some responsibilities under the direct supervision of his superiors.

The duration of studies in the French faculty is also seven years. The fifty accepted students are selected after a difficult exam or: "concours" before starting their first year of studies.

The French faculty years of education are directed into three stages nearly similar to the medical studies stages at A.U.S.

The training of the French medical student is mostly done in the hospitals of the capital and the suburbs:

Hotel Dieu Hospital
 Rizk Hospital
 St. Georges Hospital
 Lebanese Hospital
 St. Joseph Hospital
 Baabda Governmental Hospital
 Quarantine Governmental Hospital

There is no doubt that these two schools of Medicine maintain high standards of medical education being accredited by developed western countries but these standards need not always be relevant to the local needs of our country.

The medical teaching in both of these schools for example lacks the proper emphasis on preventive and social medicine greatly needed in Lebanon.

Each school relates academically to the original state and university:

- * A.U.B. relates to the New York University of Medicine.
- * The St. Joseph Faculty relates to the Lyon University of Medicine.

The problem of irrelevance becomes even more pronounced because of the failure of the Ministry of Health to assess the specific needs of the country and to set up standards of accreditation for the two schools of Medicine.

Another important problem of the medical education in Lebanon is that it is highly expensive even 4-5 times more expensive at A.U.B. than at the St. Joseph Faculty of Medicine.

This is a basic obstacle for the good element to study medicine in Lebanon, when his family is not able to pay for him and due to his heavy curriculum he is rarely able to study and work in the same time.

Therefore, many of these students seek medicine outside Lebanon.

b) Lebanese Trained Abroad

In the paper on Health problems in Lebanon submitted

to the Council of Development and Reconstruction by the Saint Joseph Faculty of Medicine, the figures of the registered doctors at the Ministry of Public Health between the years 1971-1975 are described as follows:

The total number of registered doctors during that period of time is 729 doctors of which only 281 doctors have been trained in Lebanon or 38.5% (192 at the Faculte de Medecine universite St. Joseph and 89 at the American University of Beirut.

The other 61.5% of the registered doctors are graduated as follows:

- * 32% from Western European countries (24% from France)
- * 15% from Middle Eastern countries (11.5% from Egypt)
- * 15% from countries of Eastern Europe (10.3% in U.R.S.S.)
- * 1% from various countries such as Australia - India - Latin America.

In 1977, among the 123 registered doctors at the ministry, 39 graduated from Lebanon. In other words 31.7% only graduated from Lebanon.

- * 33.3% from Western European countries
- * 25% from France
- * 27.6% graduated from Eastern Europe

Many of the students are now seeking their medical education in the so called "Second-Rank" schools because

acceptance at the "First-Rank" or high level schools in the United States, France, and England is becoming extremely difficult.

In order for a doctor to practice officially in the country he needs the Lebanese Colloquium which cannot be very reliable because it cannot indicate the quality of education and training of seven years of study.

C) Brain Drain

Unfortunately many of the Lebanese students studying abroad will not come back and also many of the very good doctors have left the country or are planning to leave.

This situation is usually due to the following factors:

1. The unstable political situation of Lebanon.
2. The high salaries outside the country especially in the States and in the Arab countries.
3. The impossibility locally to compete with these countries.
4. The availability of continuing education and research in the developed countries.

It is worthwhile to mention here the maldistribution problem which creates an urban versus rural state of imbalance and this problem was discussed earlier in this paper.

The problem of maldistribution of medical and para-medical personnel is more acute than the whole number of

available manpower.

The greatest number of doctors is found in Beirut, nearly 1doctor/516 inhabitants which is a high proportion relatively to the south for example where we have 1doctor/3568 inhabitants indicating a proportion of nearly 10 times more people/doctor in some of the rural areas.

This situation creates many health problems at different levels:

- * Social and Financial State which has to do with the availability and amenability problem.
- * Medical Problem: Emergency cases die sometimes before reaching a doctor or a hospital. In the case of pregnant women, the life of two persons can be in danger.
- * Public Health Problem: The lack of medical and paramedical personnel in a specific area usually reflects poor social and health conditions and this will lead to a higher incidence of preventable and communicable diseases.
- * Geopolitical Problem: All the above description will increase the exodus of health Manpower from the rural areas to the suburbs and this will create the dangerous "Misery belt" around Beirut which will aggravate the social conflicts within the country.

2* Paramedical Education

The whole country relies on one school of Public Health, one school of Pharmacy, one school of Dentistry, two schools of Nursing which are of university levels, one school of Physical Therapy, one school of radiography, two schools of Laboratory Technicians.

The enrollment of students in these schools does not answer the country demand and actual need for the paramedical personnel.

The role of the auxiliary medical person especially in a country like Lebanon, should not only be emphasized but also over emphasized and this is to be able to ensure adequate coverage at all levels. The bulk of the work ought to be done by these people, in other words these people should be put in the front of the picture and should carry the primary work, ensure proper referrals to the more specialized persons. This is the basis of implementation of primary health care.

It is worthwhile to notice here that Lebanon is not able to keep its actual paramedicals because some of the countries especially the Arab countries are giving our people 3 to 4 times what they earn in Lebanon. This has led to a great Nursing drain which has reached its peak during the civil war in Lebanon, this means also that: the culminating point is still maintained!...

III. Major Constraints Limiting Health Development

1. Shifts in priorities because of lack of planning. If the needs of a country are not assessed, no priorities can be set and since the planning cannot be met all at once therefore we can expect sometimes to start with the least important in other words: to shift our priority needs.

2. High Cost of Services: This is due to the high cost of living and this problem is acute in our country because of the scarce resources.

3. The Maldistribution Problem: This has been discussed earlier in this paper but here the health insurances coverages can justify this problem of equity, if Health Insurances are more controlled and betterly planned by our government.

4. The Inadequacy of Coverage in Relation to the Needs: This has to do with the supply-demand of the country which becomes more and more imbalanced because the first one is decreasing and the second is increasing exponentially and is more aggravated by the unstable political situation of the country.

5. Problem of Amenability: Large proportion of the population lacks the possibility of contact with the health services.

6. Lack of Utilization of Governmental Services: Many doubts are expressed about the intrinsic benefits and the value of preventive, curative and restorative interventions done at the governmental level.

Any way one should be careful about this generalization because despite being few there are some facilities which are well performed by the government as an example of this is the kidney dialysis in the Batroun Hospital.

7. Lack of Coordination: Between the private and the public sector on one hand and within each sector on the other hand leading to a state of "No coordination" among the health services and facilities which leads to duplication of health services.

8. Lack of Control and Supervision: The Ministry of Health which should in principle control and supervise the health sector is dormant.

If the Ministry of Health is not able to provide for its consumers their minimum needs, at least it should develop qualities of supervision and control of the providers to ensure proper quality of health services and to cut off the profit-making individuals and groups who can exploit the needy instead of supporting him. This of course is leading to a chaotic state in the country.

9. Population Increase: The Lebanese population like the world population is increasing. This increase is more acute in a developing country where Mortality in general has decreased due to the advanced medical knowledge and the birth rates have increased due to the lack of practice of family planning and

the taboo on abortion.

Family planning newly started in Lebanon but needs to be more supported by the government and illegal abortions are carried among some practitioners and some birth attendants.

The increase of the population has also its consequences on the medical resources for example the ratio of health manpower and pop.

10. Major Statistical Information Gaps: Lebanon is one of the three countries of the world which do not have a census.

* How can one make any planning for his consumers if he does not know the actual number of his target population?

* How can one plan for disease control if he does not know the actual incidence and prevalence of some diseases?

* How can one prepare a long range developmental plan if he cannot obtain the necessary data?

Information about the perceived health needs of populations is an essential requirement for the final stages of decision-making.

Although these stages are basically political in nature, the decisions should be guided by evidence and logic meaning, the basic statistical information.

The irony of our age is to know that in the states, the application of electronic data processing in this field has started especially in determining base-line data which is the basis for accurate and rapid health programs and to realize that in Lebanon this department does not exist yet.

IV. Recommendations

If we adopt the definition of the World Health Organization on health which states the following:

"Health is a state of complete physical mental and social well being and not merely the absence of disease or infirmity"

And because of its position of primary responsibility for community health matters, the organization and function of the official health body deserves special consideration.

Theoretically the Ministry of Health should be involved in a wide variety of services and activities.

Therefore we need to:

1* Reorganize the Ministry of Health on the Central and Provincial levels with the new active advisory body.

2* Make the local health departments functional

The basic function of the local health departments should include at least the followings:

1. Vital Statistics
2. Environmental Health
3. Maternal & child health including family planning
4. Communicable disease control
5. Chronic disease control
6. Mental health including addictive disease programs especially after the civil war.
7. Promotion of adult health

8. Laboratory services

9. Health education

3* Develop control and supervision abilities at the level of the ministry.

4* Improve the coverage and the content of health services

5* Improve the process of health planning. Careful process of planning should be stated based upon the needs of the population and integrated at each level with the social and political values.

6* Start the statistical information system to be able to have necessary data for planning and evaluation of health services.

7* Terminate the services of dubious value.

8* Coordination and participation among all the health providers should be started because these are supposed to share the same concern and responsibility for certain special aspects of the well being of the community.

9* Decentralization should start with proper planning, to be able to ensure proper coverage.

10* The primary health centers should be developed and proper hospital planning to ensure proper referrals and continuity of care.

11* Supply-Demand and cost analysis should be started and developed.

12* Since medical care is difficult to be reached by all the population, setting priorities in any planning is very essential especially in a developing country like Lebanon because of the scarce resources.

For example Community Health Programs have to put a special emphasis on the so called "population at risk" to be able to protect the expectant mothers and the young children.

Since the mothers and children constitute nearly 60%* of the Lebanese population an emphasis on maternal and child health centers is required.

13* There should be a direct control of the Ministry of Health on the curriculum of the medical and paramedical schools in Lebanon with specific criteria for accreditation based on the basic needs of the country.

14* The Ministry should support these schools in providing adequate funds for teaching the students, develop new programs for training, continuing education and recyclage for the auxiliary personnel and to develop research in the medical and scientific fields related to health.

*Source: Dr. Harfouche, pamphlet on the distribution of health services in Lebanon, 1977.

15* If proper planning is carried the Ministry should be able to assess the manpower needs of the country and develop its programs accordingly.

16* The Government should also take the proper measures to retain health manpower and specialists in Lebanon.

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