

## *FINAL REPORT*

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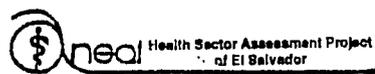
*HUMAN RESOURCES  
IN HEALTH*

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*El Salvador*

*Health Sector Assessment*

*May, 1994*



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*May, 1994*

# INDICE

ACRONYMS	i
INTRODUCTION	iii
EXECUTIVE SUMMARY	vii

---

## Chapter *I*      *The planning of the Health Sector of human resources*      *1*

- 1      The Ministry of Health/1
    - 1.1      The Health Code/1
    - 1.2      The National Health Plan, 1991-94/2
    - 1.3      Organizational structure of MOH and human resources/3
    - 1.4      Analysis of the role of MOH in the sectorial planning  
of human resources/4
    - 1.5      Recommendations to MOH in planning of human resources/6
    - 1.6      Recommendations on sectorial policies of human resources/6
    - 1.7      Summary of key points and recommendations in the planning  
of the resources of the Sector/9
  - 2      The Salvadoran Social Security Institute (ISSS)/9
- 

## Chapter *II*      *Analysis of some aspects on the formation of human resources of the Health Sector*      *11*

- 1      The formation of human resources and its relationship with  
the needs of the country/11
- c

- 1.1 Main institutions training and using the resources/11
  - 1.2 Evolution of resources in the last fifteen years/11
  - 1.3 Formation of critical human resources for the Sector/12
  - 1.4 The formation of nurses/13
    - 1.4.1 Recommendations on the formation of nurses/15
  - 1.5 The formation of medical technicians/16
    - 1.5.1 Different careers on medical technology school/17
    - 1.5.2 Proposals on technology formation/20
  - 1.6 University higher education/21
    - 1.6.1 Registration distribution and number of graduates in the Private and Public Sector/22
    - 1.6.2 Proposals on university education/24
- 

## Chapter III *The job market*

25

- 1 Availability and distribution of key human resources of the Health Sector/25
  - 1.1 Distribution of doctors and nurses by geographic areas/25
  - 1.2 Distribution of human resources by institutions/33
    - 1.2.1 Salvadoran Social Security Institute (ISSS)/33
    - 1.2.2 Teacher's welfare/35
    - 1.2.3 National Administration of Telecommunications (ANTEL)/36
    - 1.2.4 Hydroelectric Commission of Lempa River (CEL)/37
    - 1.2.5 National Administration of Aqueducts and Sewerage (ANDA)/37
    - 1.2.6 Private Sector and Medical Insurance/38
  - 1.3 Discussion and proposals/38

# Chapter IV *Administratation of public resources in the Public Sector* 41

- 1 Main categories in human resources/41
    - 1.1 Doctors/41
    - 1.2 Nurses/41
    - 1.3 Promoters/41
    - 1.4 Empirical midwives/42
    - 1.5 Technicians/43
  - 2 The system of positions/44
    - 2.1 Position categories/44
      - 2.1.1 Officers by Law of Salary/44
      - 2.1.2 Officers hired and hands/45
      - 2.1.3 Officers by patronage/45
    - 2.2 Hiring part-time doctors/46
    - 2.3 Standards for dealing process/48
      - 2.3.1 Existing standards and processes of current revisions/48
      - 2.3.2 Principles to be considered in the personnel Management revision/49
  - 3 Productivity/50
    - 3.1 The model of attention and the pattern for providing these services/50
    - 3.2 Some productivity indexes/52
    - 3.3 Productivity in hospital health Care/56
    - 3.4 Discussion and proposals/56
- 

# Chapter V *Registrar and control of health professions* 59

- 1 The Superior Council of Public Health and the Vigilance Boards/59
  - 1.1 Discussion and proposals/61

**ANNEXES**

**63**

- 1    Stuctural Organization of Regional Centers, MOH/65**
    - 1-A   Organizational Structure/66**
  - 2    Distribution of doctors acocordinag areas and specialties/67**
    - 2-A   Distribution of doctors acocordinag areas and specialties/68**
    - 2-b   Distribution of doctors acocordinag areas and specialties/69**
  - 3    Process of revising the preliminary reports/70**
- 

**BIBLIOGRAPHY**

**79**

## ACRONYMS

ANDA	National Administration of Aqueducts and Sewerage
ANSAL	Health Sector Analysis of El Salvador
ANTEL	National Administration of Telecommunications
CEL	Hydroelectric commission of Lempa River
IDB	Interamerican Development Bank
ISSS	Salvadoran Social Security Institute
MIPLAN	Ministry of Planning
MOH	Ministry of Health
PAHO	Panamerican Health Organization
UES	University of El Salvador
USAID	United States Agency for International Development
WB	World Bank

## INTRODUCTION

The Health Sector Analysis of El Salvador (ANSAL) is the work of a group of consultants who analyzed the health situation in the country and the performance of its health services. This effort was sponsored by four international organizations: PAHO/OMS, the World Bank, IDB, and USAID.

The objective of this project was to pinpoint the most important problems of the health sector in El Salvador; additionally, to offer the newly elected government options for shaping policies in health. These objectives have made it necessary to allow the findings, thoughts and comments from different institutions and experts in the health sector of the country be integrated into the analysis.

El Salvador is in a process of transition toward a new social and economical order, after having overcome a long period of civil war, during which the whole society suffered, a high cost in terms of human suffering and economic and social losses. The peace process that the salvadoran people have started to live requires, first of all the reconstruction of all the sectors, especially health and education.

El Salvador is a geographically small, but densely populated country (240 inhabitants/km<sup>2</sup>), facing demographic problems. These are associated with the pre-transitional epidemiologic profile. Contagious diseases prevail: those preventable by immunization and those related to insufficient prenatal, delivery and postpartum care, basic sanitary conditions and access to potable water.

Health indexes are influenced by social and economic factors related mainly to the poverty of the population. It is estimated that more than 50% of the population is poor and (25% under acutely so). This is translated into high rates of illiteracy, unemployment and underemployment, and a housing deficit (estimated at more than half a million units). These problems are particularly acute in the rural areas where more than 50% of the population lives: difficulties of accessibility, inequity and insufficient coverage of health services will demand structural and performance changes.

Violence and delinquency, a result of the recently ended civil war, make social harmony, peace, democracy, consensus, and community participation of communities priorities, rights of the population at large.

The challenges of the health sector include: (1) improve the quality of health; (2) improve efficiency of the care health centers, and (3) expand coverage to all rural areas and increasing the accessibility health care in all social sectors. This requires an analysis of the policies and strategies in human resources which is considered by all social levels as one of the most urgent problems in the health sector.

The analysis of human resources is complex and the information compiled in this report does not cover all aspects of the area, but highlights those points considered important for planning structural changes.

Many of the problems observed in the institutions of the health sector are difficult to place in a rigorous scientific framework, but the general consensus is they exist, making them necessary to consider. Their inclusion in this analysis may give the impression of a superficial approach to some of the topics. However, we consider them key elements in the shaping of the changes proposed.

This report is meant to be an instrument for the shaping of reforms necessary to improve health care personnel and therefore to improve the quality of health care for the people.

### *Structure and Sequence of the Analysis*

Four chapters cover key areas: planning, the training of health care providers; the labor market, administration of health personnel in the public sector, and the accreditation and monitoring system of health professionals.

The key questions answered in each of the chapters are based on the following premises:

- 1) A consensus exists among all people involved that there is a need to propose structural changes in the health system to achieve real changes in the sector.
- 2) The changes in human resource policies should focus on the most important problems in the health sector, such as the extension of the coverage, and improvement in the quality of assistance and accessibility to the services.

In Chapter I, the following questions are considered: Who is responsible for planning human resources? What is the MOH's role? What kind of health care personnel are needed to cover its needs? Consideration of the last question is a critical point--the predominantly medical model in the country, and the high cost and insufficient coverage. Alternatives were also considered such as prioritizing technical and auxiliary level personnel (such as nurses, technicians, health promoters, and empirical midwives), which would fit the epidemiological profile of the country and the possibility of economic and financial sustainability.

Within the same context as Chapter I, Chapter II priority is given to the formation of technical and auxiliary careers, especially nursing careers, considered key to coverage expansion at a lower cost for the country in terms of time and investment. The quality of the health professionals is not discussed although we consider it necessary.

One of the most important points to discuss is which kind of health professional should be trained as the primary health giver and the problems they will likely face and be able to solve.

Chapter III, discusses the labor market and human resources in the health sector to estimate future needs. It has been difficult gathering such information. We have consulted several secondary sources of information. The findings of a complementary study on the private sector a on labor supply, carried out by GIDRUS<sup>1</sup>, which includes voluntary participants from MOH/UES/PAHO<sup>2</sup> are not included.

Chapter IV on *the administration of human resources in the public sector* resulted from several studies and statistic data that show low productivity and poor quality care. The information gathered has been used to propose possible solutions which begin during the hiring process: salary levels, incentives, organization of establishments, model of care, and implementation or not of specific systems; all of which have a direct bearing on decentralization or any other new management model. These proposals are made in global terms to allow for discussion and analysis--necessary if real solutions to complex problems in the administration of the public sector are to be found.

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<sup>1</sup> GIDRUS, Intersectorial Group for the Development of Human Resources in the Health Area.

<sup>2</sup> MSPAS: Ministry of Public Health and Social Assistance.  
UES: University of El Salvador.  
OPS: Pan american Health Organization.

Chapter V on *registration and supervision of health professionals*, has been included because we consider this one of the least efficient areas of the system because it does not have any effective mechanism to guarantee the professional quality of health care personnel. All possibilities are analyzed and new proposals for possible changes on the present system are given.

### *METHODOLOGY*

Data from several secondary sources and interviews with health professionals of all parts of the health sector was analyzed. No special instrument for gathering of data from primary sources was used.

Documents analyzed include: official documents from government institutions and international agencies; specialized reports and surveys, and data from the information systems of several health sector institutions.

The institutions visited included: MOH, MIPLAN, ISSS, other social security organizations, human resources; training institutions, the council of health and the vigilance committees, corporate organizations, health establishments, NGOs, international agencies, and health care workers.

A draft report was prepared in October and November 1993, and widely distributed among institutions and health care workers throughout the country, for comments and corrections. Some written comments received have somehow been incorporated in the writing of the final version of this report; others have been incorporated in an annex (Comments Received).

The second stage (during February and March 1994), of the process of consultation was continued with people directly responsible, or who have a direct bearing on the health sector because of their leading positions, and health care workers, both local and regionally. The users of the services, although directly affected and whose cultural perceptions and needs are generally excluded or rarely required, were not consulted.

The process of revision of the final report was carried out, with analysis gathered from written comments (100 institutions and people from the health sector were consulted). Meetings with the ANSAL team, MOH planners, and with the MOH director of human resources were also helpful.

The second strategy involved meetings with health workers at the local and regional level, and with the community leaders in ten town meetings in different regions of the country.

The third strategy was a two-day meeting with the social and health leaders, as well as the public and private sectors. Representatives from planning institutions and those providing health services (MIPLAN, MOH, ISSS, NGOs)<sup>3</sup> were invited; training institutions (University of El Salvador), professional associations, main political parties, and a member of the Health Commission of the National Assembly.

This process has been both useful and interesting for the ANSAL team. Not only have we been able to clarify concepts and improve the contents, conclusions and recommendations of report, but it was aided in the building of a consensus among several key people. This we consider the most valuable for the future health care providers.

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<sup>3</sup> MIPLAN (Ministry of Planning) ISSS (Social Security Institute of El Salvador) NGOs (Non government organizations).

## EXECUTIVE SUMMARY

After a long civil war, which left social and economic scars, El Salvador has begun a peace process which entails national reconstruction and reconciliation.

The health sector faces the challenge of improving the quality of life for all Salvadorans particularly the poor, improving health care, expanding coverage, and increasing accessibility for all social groups in the country. An analysis of the health situation indicates that of human resources is one of the most critical aspects of the sector.

### *Planning human resources*

The MOH (Ministry of Health) has traditionally taken charge of the management of its own human resources and the formation of health personnel at the technical and auxiliary level at schools administered by it. The role of the MOH to form health personnel is established by the law.

The National Health Plan (1992-94) establishes policies, for the personnel of the institution, instead of establishing sector wide proposals which would allow the for national rooms.

The MOH does not have a department or unit for the development of policies and programs at sector level and for institutional coordination. Its traditional role has been to administer nursing schools and sanitary training to form a variety of resources at technical and auxiliary level. We consider that this role belongs to training which the MOH should transfer to the appropriate institutions.

The MOH should become a regulating organ of the health sector and coordinate with all institutions in the health sector, establishing a national human resources policy. Its role should be to plan to determine future needs, optimize the distribution and utilization of human resources and define quantity and quality criteria to be able to cover the needs of the country. This implies the modification of the legal framework presently in force.

The country is small but it is densely populated, with an epidemiologic profile that reflects diseases related to poverty and lack of basic sanitation and potable water. The population is young with high rates of fertility, particularly among adolescent women.

With this reality it is easy to understand that health policy must focus on primary health care in order to have the most social impact. Preventive health services should be cultural and geographically easily accessible to the consumer.

This calls for a redefinition of human resource policies nationwide, formation and training of personnel should be prioritized at technical and auxiliary levels: nurses, technicians, health promoters, empirical midwives, environmental health technicians, teachers, and social workers. The forming of new health personnel should also be considered, such as a rural obstetric auxiliaries whose specialized training would be to assist at births and other maternal-child interventions, a national high priority.

Another important human resource to increase coverage are health promoters. They should have increased training (to allow them to perform more effective coverage), better supervision, follow-up of referrals, cross reference systems, and permanent and continuous education.

Since medical assistance is culturally acceptable, training public health physicians for rural regions of the country is another alternative, complementing the process with a system of incentives such as better wages.

#### *Human resource training*

Traditionally there have been three institutions responsible for training health care providers in the country: the MOH, the Ministry of Education, and the University of El Salvador. Unfortunately coordination among these does not exist, nor the type of resources needed for the health sector.

The UES has a medical technology school which has existed for many years but with few graduates, inferior training, and low penetration in the work force calls for an institutional review of its policies and the effectiveness of its programs.

Several important factors have influenced the training institutions: the budget crisis of the last decade, the closing of facilities and the political confrontation between the university and the executive branch of government, the closing of the MOH nursing school, and the increasing importance of the private sector as an answer to the crisis in the only national university.

New strategies to stimulate technical and auxiliary careers must be found, since they constitute resources which would, at less time and cost, improve and extend coverage. These strategies require better coordination among training institutions and users in order to create jobs and increase salaries.

Public health physician training should be offered to young doctors with a required residency, for 2 or 3 years, in a rural community, with an option for specialization afterward. These strategies usually results in a certain percentage of the doctors remaining in the rural areas.

#### *The job market*

The number, composition and distribution of human resources in the total sector is not available. A national census would be the basis for planning and organizing the services required by the country. Information gathered, shows a low number of doctors and nurses per 10,000 inhabitant in almost all the regions of the country, which supports our recommendation of training more nurses and find strategies to encourage doctors to move to rural areas.

The MOH and ISSS are the institutions which generate most of the jobs, other organizations of the sector have lower coverage and they use a limited share of the labor force. The profitable private sector is the least known and estimates are all we have on their role on the rendering of services. The NGOs performs a very important role in primary health assistance and in communitary assistance.

#### *Administration of human resources in the Public Sector*

The most relevant aspect within the public sector personnel administration process is the low productivity of the workers; all indicators such as number of consultations are low; and the perception of the users is of poor quality of service.

The system is of the doctors working only 2 hours a day in the Ministry of Health generates an excessive number of poorly paid positions, which negatively influences the productivity of the professionals and it does not allow for good relationships within the institution.

Both the MOH and the Ministry of Planning through their state modernization policy, are creating administrative instruments based on careers, important for the central and regional level officials. Health centers should choose more flexible, modest and less bureaucratic mechanisms, to allow for a more efficiency.

*Control of the professional practice*

The registration, accreditation and control of professional practice is now under the Public Health Council and the vigilance boards of the professions. Despite legal regulations, they have little power. Inefficiency is a result of: an old-fashioned legal framework, lack of human and financial resources, the weak technical regulating capacity, and little credibility.

The laws must be modernized, and the organization of the control agencies and the training and technical areas restructured, and made a requisite in order to accomplish their function. Likewise, consumer representatives should be incorporated in the control agencies in order to protect their fellow consumers.

In conclusion, mechanisms that allows for self-sufficiency should be established, perhaps by collecting fees.

The discussion in the country on the need to transfer these responsibilities to the professional boards is also important since these represent the opinion of those involved. The permanence of the existing organizations (councils and vigilance boards) or the creation of professional boards is a decision to be negotiated among the different actors nationwide. The experience of other countries show that, despite the agencies in charge of the control, what matters is a regulation framework to support them, the requisite of the registration and the credibility of the institutions managing it.

## **I THE PLANNING OF HUMAN RESOURCES OF THE HEALTH SECTOR**

El Salvador, like most Latin American countries, is facing the challenge of improving its population's quality of health by improving the capacity to offer health services in its health institutions, expanding the coverage and increasing the accessibility for all social groups in the country.

This process requires as a basic condition, the analysis of the policies of development of human resources from the health sector, as well as discussion about the formal or informal traditional roles the institutions from the sector have been playing in the country.

The peace process that the people of El Salvador have started offers an excellent opportunity to start changes in the institutions of the health sector, in the legal framework that regulates and controls them; and in the policies and strategies that serve as basis for the development of human resources, in order to adequate it to the new challenges the governmental authorities of the government and the population have to face for the reconstruction of the country, within the framework of a wide social participation that the entire society has started.

### **1 The Ministry of Health**

The Ministry of Health (MOH) has always been in charge of the utilization and administration of human resources for the implementation of policies that has historically developed: of regulation and control; and providing direct services to the population.

MOH has guided the training of human resources, organizing its own schools. The variety of human resources: graduated and auxiliary nurses, laboratory technicians in different areas, auxiliaries, odontologists, auxiliaries, sanitary inspectors, dieticians, health promoters etc. The MOH policy has been to form resources to satisfy its needs, and the planning is based of the institutional needs<sup>4</sup>.

#### **1.1 The health code**

The role of the Ministry of Health to form and train human resources within the institution, and to satisfy the needs of its institutions and dependencies, is established by the health code, legislation in force since 1988, in its article 272 establishes that:

To form and train the personnel of its dependencies, the Ministry is in charge of:

- a) Schools of training health providers
- b) Courses for auxiliary nurses
- c) Institutions and courses that it considers necessary.

It will encourage health professionals and their auxiliaries and will cooperate with respective educational institutions from other ministries and from other national or international organizations within its legal, regulatory and financial possibilities.

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<sup>4</sup> MSPAS. *National Health Plan 1985/89*. Pg. 135.

The health code, in spite of establishing in its article 40 that the Ministry of Health is the organization in charge of determining, planning and carrying out national policy concerning health; in what is related to the area of human resources it only establishes standards for training of the personnel of the institution. This legal framework limits the role of the Ministry of Health to its institutional needs.

## 1.2 The National Health Plan, 1991-94

In chapter III, the National Health Plan, 1991 - 94 of the MOH, it establishes, in point six, the policy of human resources in the following terms:

To encourage the adaptation of the human resource to the sector. To design systems that ensure the continuity and improvement of the personnel, implementing economic and professional incentives, aiming to ease the rational utilization of the resource available.

Components:

- a) Support the modernization and simplification of the work process.
- b) Stimulate the technical-administrative career within the Ministry.

The statement defines a very restricted policy oriented exclusively to administrative personnel within an institutional framework. The MOH should prepare proposals for policies at sectorial level to enable the development of human resources in all its components. This point of view demands clearer conceptualization on which are the needs of health personnel in the country, and to cover the demand for health assistance in the population.

Chapter IV defines the *strategies for the National Health Plan*, in which there are several points referring to human resources.

Thus, point 1 on *coverage expansion to the whole population*, we establish as action guidelines to encourage the participation of the community.

On point 2 on the *improved capacity in levels of assistance*, we establish improve the quality and efficiency of the human resources in health.

Point 3 on *decentralization*, we establish to gradually decentralize human physical and finance resources.

Point 4 on *institutional development* we establish four lines of action, all to improve the efficiency of the institution, including dealing with administrative personnel: design and adapt operative systems and organization structures, to improve the management capacity of the sector and to encourage technical and administrative modernization in the different levels of assistance.

Point 6 states the interinstitutional and intersectorial coordination of all components of the sector, where the MOH is the presiding entity who has to make the national health system work and ensure its interrelationship with other sectors.

Finally, point 7 delineates the coordination with external cooperation, where one of the action lines is to identify needs and methodologies of the different agencies for the best use of the human and financial resources.

These strategies shows an increased MOH role in the health sector.

To fulfill its goals, the National Health Plan creates operative programs, where the human resources component develops administrative support through two programs: training and development of human resources program and the personnel program.

Training and development of human resources program, as a component of administrative support, is limited by the administrative personnel of the MOH. This program should depend on the planning office and not on the administration, so that it deals with the national policies in the health human resources area.

The description of the policies, strategies and operative plans of the National Health Plan do not define clearly what the institution has to do with the human resources field, and confuses the roles of administrative personnel with planning, standardization, control, regulation, and coordination of the human resources policy for the whole health sector.

### **1.3 Organizational structure of MOH and human resources**

The difficulties to settle a National Program, clearly defined, are the result of the absence, in the SPAS, of a Unit to plan, leads, coordinates, grade and oversee the implementation of a policy for the development of human resources at sector level. The lack of this Technical Unit in the Institution makes certain sections of the Institution to work in an asystematic, spread, non-integrated way superposing efforts and resources that definitively affect negatively in the process of work in the Institution.

Analyzing the organization Table of the MSPAS (See Annexes IA and IB), there are several sections where policies and programs for human resources are generated.

The human resources Department works on the training and development policies, being responsible of the nurses and auxiliary nurses training at the schools that the same Institution directs and administrates; two management training programs for professional and technicians; programs of continued training in services and the administration of a scholarship intra-country program, both little developed up to date. Other responsibility is the direction of the Sanitary Training School, which operates in the SPAS since it was created by decree-law in 1958.

The Department of human resources depends on the General Health Direction, a direct dependence of the Ministerial Dispatch. Even so, it does not participate in the planning of policies and its level of decision is very limited.

In the area of training, the Community Health Department, created in 1989 as an independent unit of the Division of People Attention and at the same time the Standardizing Operative Technical Services Direction, concerns about the training, following, evaluation and control of Health Promoters. The mother-infant Department, depending on the Department to People Attention, concerns about the training and oversight of empirical midwives.

The Education for Health Unit, depending directly from the normative Operative Technical Services Direction, coordinates and directs, together with the Sanitary Training School, a modular course for the education and participation of the communities in the SILOS<sup>5</sup>, called SILOGUIA.

All these health personnel training and development programs do not communicate among themselves neither are they the result of a job coordinated distribution among them to institute level.

The health programs of the MOH, like mother-infant nutrition, immunizations (PAI), etc., develop modules, journals, meetings, etc. of training for a better development of the programs. These generally relate to concrete topics, learning of rules or activities for the health personnel to do. Each department plans these activities so that superpositions, fragmentation of knowledge and difficulties in coordination occur in operative levels. The international cooperation produces these fragmentation with the provision of financial resources which each program administrates specifically and with little institutional coordination.

On the other hand, The Personnel Division, depending on the Administrative Direction, concerns about the Policies of Personnel Administration in what refers to selection and recruiting systems, appointments, salaries, career plan, etc. It has produced recently a Personnel Manual where, in Section 1, General Policies of Personnel Administration, states the hierarchy levels responsible for the planning and fulfillment of such policies. These three levels are: The Ministerial Dispatch, The General Health Direction and the Directions. The Personnel Division is responsible for the operative, administrative and executive part in the central level and the Personnel Units at local and regional levels.

However, and as an example, the World Bank Project that hires human resources to widen out the coverage of attention in ex-conflictive zones, is operated and administrated out of the dependencies of the Personnel Division and it does not have detailed information of them.

The previously mentioned aspects show how the lack of clear definitions in the policies and the bad institutional coordination origin superpositions that contribute to the little institutional efficiency and increases the resources unnecessarily.

#### **1.4 Analysis of the role of MOH in the sectorial planning of human resources**

The MOH now administrates the Health Personnel Training Schools, which work inside the Institution, like the Graduated Nurses and Auxiliary Nurses Training Schools and the Sanitary Training school that trains different kinds of health human resources.

It is considered that this role belongs to the human resources training system and that the MOH should transfer its resources to the training institutions which, in the country, are the universities, schools, institutes, etc. Besides, in the last years, other instances like the NGOs, which have shown capacity to train health promoters and empirical midwives in rural areas.

When the MOH destines resources to administrate human resources training institutions, it creates unnecessary duplications.

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<sup>5</sup> SILOS: Local Health Systems.

At present, it is evident the divorce that exists between the training and user institutions of health personnel. As example, The UES has been training human resources in technical level, called technologists, through the years, which represent a high cost to the country and the people. However, the MOH, the institution with most capacity of jobs and most extension of coverage in the country practically does not use these resources and trains other resources that considers useful for the health attention in its establishments. This creates serious distortions between the sectorial offer and demand. The role of MOH is not the training of human resources, but to plan and coordinate with the training institutions to avoid these incoherences.

The distortion of roles creates a great number of situations that produce superpositions and an unwise use of the resources. In this sense, we can point at two situations that are there at present in the Sector. The first one is that it has generated the lack of nurse personnel in the last years in the country; this caused the phenomenon of the spreading of various nurse training schools in the Private Sector with hesitating quality of training, approved by the Education Ministry. On the other hand, the need of the MOH to use these resources motivates the new training of such nurses in the institution, instead of being in agreement with the Education Ministry about the necessary corrective regulations to correct the problem definitively.

The second distortion in the Sector is about the same problem. The ISSS, to face this problem of lack of nurse personnel and the low quality in training in some schools in the Private Sector, is planning to use its own courses of nurse training in the institution.

The role of the MOH, ISSS and the other institutions that provide services is not the training of human resources but their adequate use.

### **1.5 Recommendations to MOH in planning of human resources**

Considering the previous facts, the MOH should modify its actions considering the following:

- a) The MOH has to become the ruling organ at health sector and establish at national level, in a coordinated way with the institutions that compound it, the Policies of Development of human resources.
- b) These Policies should establish the mechanisms that permit the health personnel training systems to achieve the necessary adaptation with the health service providing system. This articulation expects that the attention to the population is according to its needs and in the limits of the social, political and epidemiological areas of the country.
- c) The role of the MOH should not be the administration of human resources training institutions but the planning and coordination with the training institutions about the necessary policies of training in base to the necessities of the country. Under these definitions, the MOH has to transfer its teaching establishments and its resources to the training sector.
- d) For the development of policies at national level, the MOH has to strengthen a Technical Unit that has the political and technical support of the high levels of decision of the institution.
- e) The role of the MOH should be the planning to determine the future necessities of health personnel all over the country. To optimize the distribution and use, define the criteria of quality and quantity and the occupational profile that permits to respond to the necessities of the establishments of health attention, to the execution of the programs and projects that are considered to be necessary to implement for the population's health problems.

- f) To modify the role of the MOH, the legal side of the Health Code has to be checked, which at present limits the MOH to a role of administration of human resources at institutional level and not sectorial.
- g) The MOH has to strengthen the coordination among the different institutions involved in the planning, training and use of health human resources. The important thing in these instances is that they have a politic support to take decisions, or they might become bureaucratic structures, non operating and of little real utility.

There exists in the country an instance since two years ago, called Intersectorial Group for the Development of human resources in the Health Area (GIDRUS), which pretends to begin a labor in that sense. It is made up of **voluntary members** of the MOH, ISSS, UES, and the PAHO. The GIDRUS is currently in a step of consolidation, it needs more technical severity, more organization of its activities and a more firm compromise of the institutions that make it up. If they do not receive a permanent technical and political support, they will probably not achieve their final objectives.

#### **1.6 Recommendations on sectorial policies of human resources**

If the current situation of El Salvador is considered, it is a small but densely populated country, with sanitation epidemiological problems of pre-transition diseases, related to poverty and the lack of basic knowledge and potable water. Demographically, its populations is young, with high rates of growth and it affects mainly to young women and teenagers (less than 20 years).

Knowing this sanitary characteristic, it is easy to understand what policies of health have to rule first the primary attention of health (APS) so that it can have more social impact. These services of prevention, promotion and direct attention of basic pathologies should be geographically and culturally close to the user community.

If we understand that the primary health care has to be one of the priorities in the sanitary policy in the next years to control the demographic and epidemiological profile, is unquestionable that the policies of human resources at national level have to be restructured to implement this policy.

At the present there is a model medical-hospital-healer that prevails in the culture of the institutions of the sector, in the health workers and in the same population that uses the services. We consider that this model is not appropriate, nor defensible, for the country, in first place for the kind of problems that affect the population (that mainly requires APS); in second place because the country does not have the necessary resources to keep this model extending its coverage and making available their services to the all the population and third, because the implementation of it has a high cost of time and technical and financial resources that improves the capacity of the country.

We consider that the larger challenges of the health sector in the country are:

- The extension of the coverage in the populations of high risks of health, as the mother and the child, the populations that live in poverty conditions and in rural areas;
- The improving of access and equity in the health care;
- The more efficient and reasonable use of the available resources that allows the sector to be finance solved.

The possibilities of reaching the implementation of strategies to solve these problems requires the prioritization of the following aspects:

- a) Strengthen the and training of health personnel of technical and auxiliary levels, as nurses, nursing auxiliaries, some kind of technicians the country is training, health promoters, the trained empirical wives, technicians in the environmental health area, the educators and social workers.
- b) Consider as a strategic axis of the human resources Policy, the of health personnel of technical level or auxiliary for assisting the childbirth by trained personnel. The proposal is based in the next premise: if a better health care of the deliveries is reached, which has very low figures in the country, indirectly will be an incidence in other aspects that have to do with the maternal and newborn morbidity.

This health personnel should be an *Auxiliary or Rural Obstetrics Technician*. His training should be focused in the mother-infant care, and the training time should extend as maximum in two years. He has to learn the prenatal health care, the normal childbirth, the time directly after childbirth, the normal newborn, sexually transmitted diseases, family planning, knowledge on nutrition, immunization and health education.

This health resource would work mainly in the Health Units and Posts, and should assist the mothers in their own homes meanwhile this cultural pattern of the country is being modified. It has to have a good supervision, reference and cross reference system with the more complex health care levels.

Should be selected resources from the same empirical wives and health promoters for the of this health personnel that are working now in the rural area or new candidates that would like to begin a process. About this proposal many comments have been received both from the MOH authorities, as from NGOs members and from the participants in the different meetings made in the document checking process.

All the comments coincide in the need of strengthen the and training of the resources at a technical and auxiliary level for the delivery health care and the time after delivery, mainly in the rural areas.

Several proposals have been discussed, and we consider them valid. The first one, improve the obstetric component in the of nurses and nursing auxiliaries (technical and auxiliary levels). Second, create the obstetrics specialty in the nursing career and third, check the formation of the mother-infant technician, presently produced in the Technology Medical School of the UES.

- c) Another human health resource that we consider important to support in the country, are the *Health Promoters*. There is a very positive work experience in the rural areas, that has been developed, during the war time, and for this last years, has had, a greater support and impulse.

The interesting of this work experience of the promoters is that it has shown its utility for the extension of the coverage of health in the country independently from the ideological orientation of the institution that trained them. This, undoubtedly, will allow the discussion about future lineament, with a large possibility to come to agreement and consensus.

The MOH should check the profile of the health promoters that work in the country and widen the intervention level of the trainees. For example, the MOH should teach them to prescribe some medicines of low complexity under treatment protocol (antipyretic use, common analgesic, some antibiotic for

infectious and acute respiratory diseases, or indications for oral contraceptives). Also the use of technologies of low complexity as the instrument controlling the blood pressure.

The Health Promoters should be trained to solve the most common troubles in the communities, mainly for the need that the country has of extending its coverage to the rural areas and geographic, economic or cultural access problems.

The work of the promoters as the one of all the workers at a technical and auxiliary level, demands to the Health System a good supervision and following level, reference and cross reference mechanisms and continuous training.

- d) Consider the training of family doctors to resist the high specialization model that begins to increase in the work market of the medical sector. This has to be together with policies of salary incentives, of promotion, of permanent training, to make it attractive for the new generations of professionals.

The family doctor with a good formation in the 4 basic clinics: (Internal medicine, surgery, gynecology-obstetrics and pediatrics) should be the reference and support point of the community units of first attention in the Health Posts and Centers.

### 1.7 Summary of key points and recommendations in the planning of the resources of the Sector

Key Point	Recommendations
1) Unbalance among the necessary human resources according to the epidemiologic profile and the traditional human resources that are being trained in the country.	1.1) The State has to give incentives (creating positions, subsidizing formation and other) to increase the of human resources according to the epidemiologic profile: promoters, obstetrics technician, diagnostic and therapeutic technicians and family doctors.
2) Absence in the State of a petition of formulation of human resources policies and institutional coordination of the implementing with the human resources institutions.	2.1) Develop a technical unit in MOH which makes incentive policies and other necessary ones to adequate the and qualifying of human resources to the epidemiologic profile of the population, coordinated with other government petitions. 2.2) Create a coordination formal mechanism between the institutions users of the necessary human resources for the epidemiologic profile and the institutions in charge of those parallel resources as a part of the National Council of Health.
3) MOH per of the function of some human resources, function that is not a priority, that distracts it from the accomplishing of other essential functions that have to be performed by other society's institutions; and that results in a low budget priority.	3.1) Transfer the administration of the Nursing Schools and the Sanitary Training Center to an autonomous entity of MOH.
4) Promoters, trained empirical wives and technicians of MOH are not producing preventing people, basic curative and family planning activities, that could be made with delegation, authorization and with a minimum of training and additional supervision, and thus they would improve the health situation of the user population.	4.1) Enlargement of the role, training and power of decision of the first line health personnel (nurses, technicians, promoters and empirical wives).
5) Inadequate sum and mechanism of compensation and incentives, that help to: Low productivity, wrong distribution, inadequate schedules for the population needs, inefficient number and quality of the human resources.	5.1) Elaborate Social stimulating Policies and strategies and other incentives that improve the settled problems related to distribution, efficiency, quality and control and warmth.

## 2 The Salvadoran Social Security Institute

The ISSS, as well as the other public entities with their own services for their employees (ANTEL, CEL, ANDA, TEACHERS' WELFARE, etc.)<sup>6</sup>, have the objective to give an attention system to finance for the whole the family upon the results of the mishaps of life as the accidents, illnesses, old age, disability, death, layout, etc.

The traditional role of these institutions in the health field, is the curative attention from the second level, where the use of attentions of third and fourth level many times is predominant.

<sup>6</sup> ANTEL: National Administration of Telecommunications.  
CEL: Hydroelectric Commission of Lempa River.  
ANDA: National Administration of Aqueducts and Sewerage.

The high cost that represent for the institution the coverage of the third and fourth level of health care and the present scientific knowledge which affirms that the attentions of first and second level are more opportune, casier to distribute and with larger impact, have to obligate these institutions to define a new attention model where the preventive, promotional and health education actions have a very important role.

In ISSS, an institutional investigation about the morbi-demographic profile of external consultation, showed that within the first 10 causes of consultation are the respiratory and intestinal infections, which could be controlled with preventive standards. This also shows the need to define the health care levels that may be given to the user population, answering to the epidemiologic profiles of the country.

Clear mechanisms have to be settled, under a framework that protects them, to coordinate with the MOH in the planning of the first health care, the prevention and promotion, the health care of the health priorities of the country as the mother-infant health care, the infectious diseases, etc.

At the present the health care in these services is almost exclusively based in the doctors and odontologist, predominating the health care given by specialists (37% of the external consultation in ISSS on 1992).

This specialized medical model of attention in the Institution, that is supported by the demand from the users, generates the need of large inversions in high technology, in infrastructures of high investment cost and expenses, that in time makes the Institution to expend much of its funds.

The definition of a new health care model requires a substantial modification of the human resources Policies in ISSS and similar institutions.

In the human resources area this means, the introduction of new kind of workers as technicians, epidemiologist and social workers. The authorities in the institution, the professionals and users have to elaborate mechanisms that gradually introduce these changes that mean a mentality change and also a change of the present concept about the health care.

The change in the health care model requires checking and probably limit the complexity of the offered services to the users. Also the standardizing of the unlimited number of services. At the present the use of the external consultation does not have restrictions and there are no limits about the consultations number that the insured can make in the year.

The privatization of the external consultation has generated an excess of referred patients to the specialties consultations. This has to be analyzed within the ethic level of work of the professional workers.

The other important aspect that the Social Security has to analyze in its human resources Policies, is the efficiency and quality of attention that the institution gives.

This requires the checking of some aspects, for example: its bureaucratic mechanisms that generate agglomerations and time lost for the insured; the efficiency, quality and performance of the administrative and health personnel. The users complain for the lack of organization, the limited kindness from doctors and nurses, and the limited quality of health care.

## **II ANALYSIS OF SOME ASPECTS ON THE FORMATION OF HUMAN RESOURCES OF THE HEALTH SECTOR**

### **1 The formation of human resources and its relationship with the needs of the country**

#### **1.1 Main institutions training and using the resources**

Human resources for Health in El Salvador have been traditionally formed by the Ministry of Health and the University of El Salvador without having there been a coordination between them nor clear orientations on the kind of resources the country needed to face health problems.

Aside from these two institutions, there is the Ministry of Education which is responsible of the habilitation and accreditation of schools and the different careers at all levels throughout the country. This includes the Public and Private Sectors, high school and higher education; this latter includes technical and university degrees.

The lack of coordination and understanding among these three institutions remains a difficult problem to overcome. The MOH, for instance, resists using many of the resources at the technical level formed by the university such as the technicians, social workers and nurses trained by private schools. As for the Ministry of Health, it continues a variety of human resources at the assistant and technical levels to supply its needs.

The formation of human resources on Health at private schools has been initiated in an important way since 1981 both at a university level and higher non-college level. The privatization of college education has been very important in the country. While there is only one public university, 41 private have been created. Other 4 are on their way to accreditation. Some of these lack quality very much.

#### **1.2 Evolution of resources in the last fifteen years**

The warfare the country went through for many years, linked with the reduction of the public health and education budgets, has brought important facts to highlight, such as:

- The economic constraint of the National University (particularly in last decade), this being the only private university in the country. This has exerted direct influence on the deterioration of its teaching and research activities, and the difficulty in sustaining its institutional patrimony.
- The closing of the University of El Salvador has caused difficulties to the Ministry of Health, since the providing of services at the Health Posts and Units is generally given by the medical social service students and the lack of a continuous of professionals has left many of these services unattended; this affected mainly the rural, and those harder to reach areas of the country.
- The closing of the Schools of Nursing of the Ministry of Health in 1985, because it was considered there was a market saturation, while factors such as migration because of the war and the recession, the increase of services in the sector, and the aging of the labor group, which requires a renewal of personnel, were overlooked.
- The increase in the private sector in human resources on health, in many cases, without an effective control of their curricula and without complying the minimum requirements for their operation. These

aspects are being widely discussed nationwide on account of the study of the Law of Higher Education Project.

### **1.3 Formation of critical human resources for the Sector**

The country has basically used some human resources we may consider critical, to assist the population at health centers, because the providing of services lies on them. They are: doctors and dentists; assistant and registered nurses, workers at the assistant and technical level trained at the Ministry of Health; and lately, health promoters and midwives also trained in the Ministry.

The analysis on the formation of human resources, shows the difficulty there is in fitting the kind of workers trained in the country for their use at the health centers. For instance, in the absence or lack of medical personnel at the centers of the Ministry of Health, mother-infant care is given by assistant nurses and sometimes by registered nurses. However, the university goes on producing mother-infant care technicians which, although they are receiving better training in the specific area, are not used by the Ministry of Health.

The increase in room for the traditional careers such as medicine and dentistry, mainly because of the opening of private universities and the creation of new technical careers, has not come from the identification of the health problems in the country nor from the needs perceived by the users of the human resources of the Sector.

Table 1

**DISTRIBUTION OF INSTITUTIONS TRAINING HUMAN RESOURCES ON HEALTH  
EL SALVADOR, 1992**

Institution	Status	Careers	Annual average	Location
University of El Salvador	National	Medical Doctorate	225	Capital Center Regional Other cities in the country
		Odontology	50	
		Chemistry	40	
		Pharmacy	30	
		Clinical Lab	30	
		Mother-Infant Health	15	
		Physiotherapy	20	
		Health Education	5	
		Radiotechnology	5	
		Ecotechnology	2	
		Nutritionist	15	
		Nursing	15	
Alberto Masferrer UNIVERSITY	Private	Medical Doctor	40	Capital
		Odontology	25	
Evangélica UNIVERSITY	Private	Medical Doctor	100	Capital
		Odontology	30	
		Nutritionist	15	
Nueva San Salvador UNIVERSITY	Private	Medical Doctor	35	Capital
Santa Ana UNIVERSITY	Private	Medical Doctor	25	Western Reg.
MOH	National	Nurse auxiliary	100	Western Reg. Capital Capital Several Regions
		Sanitary Inspector	35	
		estad. Tec.	30	
		Promoters	150	
Inst. Tec. F. Nightingale	Private	Nurse auxiliary	50	Capital
Sanidad Militar	National	Nurse auxiliary	50	Capital y Eastern Reg.
ISSS	National	Nurse auxiliary	40	Capital

Source: PASCAP/PAHO, *Caracterización de la Situación en Recursos Humanos en Salud* (Characterization of human resources for health Status), pag. 22, 1993.

#### 1.4 The formation of nurses

The Ministry of Education has traditionally been the institution the nursing personnel for all institutions providing services to the health sector. The formation of nurses started in the country in 1918, creating the National School in 1920. Later, the schools in Santa Ana (1950) and San Miguel (1982) were opened, all of them under the MOH.

Assistant Nurses training nurses were started in San Salvador, Santa Ana, San Miguel, and San Vicente in 1957. In Sonsonate, in 1979.

The service network expansion considered in the Treaty GOES/IDB 604, in 1978, was one of the reasons for the increase in the enrollment limits for assistant and registered nurses by the Ministry of Health, for its production to be large enough to cover part of the deficit dragged on and to provide for the health centers as they opened.

Nursing personnel has also been traditionally trained by the Sanidad Militar and the Salvadoran Social Security Institute (ISSS), mainly to cover their own demand, since the Ministry of Health uses most of personnel formed in its schools. Added to this, in these last years, is the personnel formed by private schools.

The early opening of the Schools for Nurses in the country is the reason why there are practically no nurses without training or those receiving on-the-job training, a very common phenomenon in other latinamerican countries.

Currently there are three levels of training in this area:

- *Licentiate in Nursing*: a university degree, formed in the Public Sector at the University of El Salvador (UES), with 5 years of academic training; in the private Sector, at the Universidad Pedagogica de El Salvador (UPES). There are two universities more in process of authorization.

The formation of this level of nurses was started after the closing National Schools of the Ministry of Health, but the annual production of graduates has been very low. Also, since 1989, the Complementary Plan for nurses graduated from the schools of the Ministry of Health who want to have a Licentiate degree, was approved by the UES.

- *Graduate Nurse (Registered Nurse)*: of a technical level, takes three years of academic training and one year of Social Service, at the MOH centers. These are mainly trained at the National Schools of Nurses of the Ministry of Health, and the past few years at private institution (such as the Higher School of Nursing Florence Nightingale).
- *Assistant Nurses (Auxiliary nurses)*: with one year of academic training and one year of Social Service, trained also according to the courses organized by the MOH.

The training of nurses has always been very well accepted by all institutions of the Sector. The syllabuses were always revised and updated, the teachers have been trained, and continuous adjustments have been made to the curricula under quality criteria.

The aspect that has been neglected in nurses is that of emphasizing a more community approach rather than one attached to the medical and hospital work, for their work to be more useful for primary attention in the rural areas. The fact that the obstetrics component is not included in the specialization areas, or as an important part in the curricula, is a very good reason to expand the coverage of the rural areas since the country has such a low percentage of deliveries assisted by trained personnel.

In 1985, the Ministry of Health canceled the enrollment of new students, because of the closing of the Higher Schools and three of the five courses for Assistant Nurses (in San Salvador, Sonsonate, and San Vicente). This was done because it was considered that the supply of nurses exceeded the national demand.

Such estimates overlooked some important elements, that is: the warfare and the recession which encouraged migration to other countries; the increase of centers and coverage in the Sector took a larger number of human resources, and the aging and retirement of personnel.

The implementation of Decree 11/92 for early retirement and the congelation de plazas as a part of the modernization of the State worsened the lack of personnel. In 1992, 330 nurses retired, out of which 102 were Registered Nurses and 228 were assistant nurses.

Table 2

## RETIREMENTS OF NURSING PERSONNEL BY REGIONS, March-May, 1992

Region	Nurse	Auxiliary Nurse	Total
Western	24	64	88
Central	7	16	23
Metropolitan	50	86	136
Paracentral	11	26	37
Eastern	10	36	46
Total	102	228	330

Source: MOH, Personnel Department, *the role of the nurse facing our reality*, Jornada Cultural, May 1992.

This fact has generated the implementation of two strategies by the Ministry of Health in order to cover the 300 vacancies for 1993:

- To bid 150 nurses formed by the private sector and to give them on-the-job training for a year.
- To select 150 Assistant Nurses from the institution, under 35, with 10 years of experience and good record, in order to train them to become Registered Nurses under an 18 month home study program, and exonerated from the Social Year.

These emergency steps are useful to palliate the problem in the institution, but they do not solve the problem affecting the health sector.

#### 1.4.1 Recommendations on the formation of nurses

- a) The Ministry of Health must set as a priority within its policies on human resources the formation of Nursing Personnel at technical and assistant levels and look for strategies to enable the improvement of its distribution to the rural areas.
- b) It must coordinate with the Ministry of Education the profile and the quality of Nursing Resources being formed at private schools instead of training them again, to avoid unnecessary expenses.

- c) It must improve the community element and give attention to obstetrics in its curricula to, as stated in the previous chapter, a new type of personnel on health a rural assistant for obstetrics, being its formation on health care to deliveries focusing on mother-infant problems.
- d) Lastly, the role of the administrator of training Schools for human resources should be revised and existing schools may become Learning Centers for human resources in Health, both at technical and auxiliary levels where all human resources considered necessary in the country may be trained.

This presents the need to integrate the Schools of Nursing to the Sanitary Training School, which would allow the creation of a great center or institution for the training of human resources in health. This institution should become an independent and decentralized from the MOH organization. It should have its own budget, a stable group of teachers and a multidisciplinary team of professionals.

This latter proposal will probably be objected, considering that the MOH has administered its own schools for 73 years; anyhow we consider its consideration and analysis important.

### **1.5 The formation of medical technicians**

The University of El Salvador (UES) was founded in 1841, and the Faculty of Medicine was organized in 1849.

Depending from the Faculty of Medicine, the Medical Technology School started its activities in 1958 with a two-year program for Technicians in Clinical Laboratory.

The University of El Salvador has historically had many confrontations with the government which in some occasions resulted in the closing of the campus and a serious drowning of its financing in the last ten years. This has basically resulted in a high level of student desertion and an increase in the enrollment in private universities.

A product of this crisis was also the closing of the Medical Technology School which was restructured on 1973. Open again for political reasons rather than a result of planning the coverage of a need on the health sector.

The reopening of the School was produced because, at that time the UES started an open door policy which produced an enrollment in very large numbers to the Faculty of Medicine. There were serious confrontation between the University and the Faculty of Medicine and this culminated in the closing of the latter. This was followed by the opening of the Technology School as a strategy to distribute the enormous number of students enrolled in the Faculty of Medicine.

The creation of this level of formation pretended to be an alternative which will ease the incorporation of qualified technicians to the health centers, to form multidisciplinary teams, with lesser cost of formation than the traditional university careers.

The Ministry of health and the Social Security, even though they are the ones which generate a great number of positions, utilize very little of these resources, in fact many undergraduates with technological careers have difficulty in finding a job.

### 1.5.1 Different careers on medical technology school

At the moment, the Faculty of Medicine offers a Doctorate in Medicine and the School of Medical Technology offers nine careers. Licentiate on: Nursing, Diet and Nutrition, Medical Lab, Health Education, Ecotechnology and Anesthesiology. They all require 5 years of academic formation. At Medical Technology level it offers: Physiotherapy, Infant-mother Health, and in Radiotechnology which require a 3 year academic formation.

The students of School of Medical Technology may graduate at two different levels: Licentiate and Diplomate. The present studies at a Diplomate level is being reviewed to be offered at Licentiate level. We consider that this would unnecessary prolong the careers and discourage many students who, for economic reasons, must be in the job market at a relatively short period.

The curricula change started in 1985 and it took as an axle the teaching process of clinic and communitary work aiming to expose the students to the reality of the communities of the country at an early stage. However, an evaluation has not been made on the impact of this strategy to modify the skills of the students in order for them to choose rural areas in the country as a work place after graduation.

A great difference may be observed between the enrollment and the graduation figures on the technical careers, in most cases the graduations are few and the product has been poorly utilized. As an example, in nursing area, a key human resource in the sector, only 51 Licentiates had graduated by July, 1993, with an average of 12.54 nurses per year in the period 1990-1993.

If we analyze the period between 1983 and 1993, the annual average of graduates produced by the School is very low.

Table 3

#### ANNUAL AVERAGE OF GRADUATES BY CAREER A IN THE SCHOOL OF MEDICAL TECHNOLOGY, UES, 1983-1993

Career	Graduates/year
Lic. Clinical Lab	27.07
Lic. Ecotechnology	1.63
Lic. Diet and Nutrition	3.45
Lic. Health Education	1.09
Tec. Anesthesiology	19.45
Tec. Radiotechnology	3.81
Tec. Physiotherapy	14.90
Tec. Mother-Infant Care	4.63

Note: the data of 1993, refers up to the month of July.

Source: UES, *Academic Record of the Faculty of Medicine*, 1993.

Table 4

NUMBER OF GRADUATES IN THE SCHOOL OF MEDICAL TECHNOLOGY BY CAREERS,  
FACULTY OF MEDICINE, UES PERIOD 1983-1993\*

Career	Year										
	1983	1984	%w85	1986	1987	1988	1989	1990	1991	1992	1993
Doctor in Medicine	299	238	59	272	189	189	93	79	132	190	140
Lic. Clinical Lab	33	23	14	33	62	19	31	25	29	19	10
Ecotechnology	9	1			2				3	3	
Lic. Diet and Nutrition			3	3	3			4	16	5	4
Lic. Health Education	2				2			1	2	5	
Lic. Nursing								3	13	18	17
Tec. Anesthesiology	7	3	10	12	18	20	15	35	27	42	25
Tec. Radiotechnology			6			4	4	6	8	10	4
Tec. Physiotherapy	10	17	11	1	18	22	27	22	20	10	6
Tec. Mother-Infant Care	3	4	2	4		1	2	13	16	4	2
Total	363	286	105	325	294	225	172	188	266	307	308

\* Includes graduation on July 1993

Source: UES, *Academica Record of the Faculty of Medicine*, 1993.

On the other hand, it is important to point out that the number of new students enrolled for 1993 period has increased greatly.

Table 5

## ENROLLMENT BY CAREER IN THE MEDICAL TECHNOLOGY SCHOOL, 1993

Career	Enrolled
Nursing	181
Physiotherapy	121
Clinical Lab	80
Anesthesiology	139
Tec. Mother-infant care	122
Diet and Nutrition	51
Health Education	51
Radiotechnology	52
Ecotechnology	62
Total	859

Note: Data up to July 1993.

Source: UES, *Academic Record of the Faculty of Medicine*, 1993.

Table 6

**STUDENTS ENROLLED IN THE DIFFERENT CAREERS IN THE FACULTY OF MEDICINE  
UES, I SEMESTER 1993\***

Careers	Sophomore and junior	Freshmen	Total
Doctor in Medicine	3,762	629	4,391
Nursing	423	181	604
Nursing Complementary Plan	429	50**	479
Physiotherapy	372	121	493
Clinical Lab	452	80	352
Anesthesiology	416	139	555
Mother-Infant Care	105	122	227
Diet and Nutrition	68	51	149
Health Education	52	51	103
Radiotechnology	94	52	146
Ecotechnology	44	62	106
Totals	5,917	1,488	7,435

\* Includes enrollments up to July, 1993.

\*\* Data from the Vigilance Board of the Nursing Profession.

Source: UES, *Academic Record of the Faculty of Medicine*, 1993.

### 1.5.2 Proposals on technology formation

There are several reasons which makes the performance of the School of Medical Technology difficult: absence of its own budget; the need to share teachers with the Faculty of Medicine; the need to train the professors, political problems experienced in the last decade and the limitation of human, material and financial resources.

However, we consider that the analysis of the figures of graduates from the School of Medical Technology is a very important topic to be discussed among the University, the Ministry of Health and other institutions which may be potential consumers of such resources. This should take us to global review of the performance of the institution, and particularly, a deep reassessment of the present careers and their real use.

In reference to this it is necessary to consider the following suggestions:

- a) The Mother-infant Care Technician and the Education for Health careers have a profile that could be incorporated in the Nursing career. This would be more useful for the health centers.

- b) The 5 year span for careers such as Licentiate in Ecotechnology, Education for Health and Nourishment should be reviewed because they take too long, particularly for a country with limited financial resources and where lower cost but larger impact should be preferred.
- c) A priority for the country is the assurance of environment and the sanitary conditions of the communities. In view of this we suggest the revision of the formation of the Ecotechnologist. This should be reduced to 2 or 3 years and their work should cover mainly the work with the communities, for the use of suitable and low cost technology, and the improvement of the environment and sanitary level (teaching water treatment, disposal of liquid and solid waste and others). Besides he or she should work to improve the education of the communities and should give some technical support, specially in rural areas, on the use and maintenance of natural resources. This would be more suitable for the needs of the country. This, on the other hand, calls for a review of the professional profile of the current Ecotechnicians and Sanitation Supervisors from the MOH and to determine which would be the most useful health personnel for the country in this specific area and to modify both careers or to complement them.
- d) Careers such as Anesthesiologist, Physiotherapy, and Radiology should be given more support and motivation, because these complement the health team at a lower cost and may cover entirely the rural health centers.

#### 1.6 University higher education

The traditional university careers in the country are Medicine, Odontology, followed by Chemistry and Pharmacy, Clinical Laboratory, Psychology, Social Work, Nursing, Nutrition and Physiotherapy.

The medical career is currently being taught at the El Salvador University and 4 private universities: Alberto Masferrer Salvadoran University; Evangelical University of El Salvador; New San Salvador University and the Autonomous University of Santa Ana.

The medical career curriculum, involves 8 years of preparation, the last years are for Internate and Social Service.

The usage of these two types of students by the MOH to perform services in their centers is very important and traditionally has been an answer to the lack of resources in this institution.

The interns will offer services in the hospitals and will receive payment through the Salary Law. The same is true for the medic in social service. For 1993, the MOH has 418 openings for Interns and 240 openings for Students in Social Service.

The UES Medicine Faculty, started in 1978 a curricular change enabling students to have early contacts and to have a closer relationship with the community.

However in the formation of doctors it is difficult to break certain tendencies towards a profile where: the curative is above preventive; the progressive growth of specialties relating to doctors in general, in the last years; the concentration of doctors in the capital and urban areas and the use of technology as a way to gain working space and better payment in the job market.

There is no specialty or post-graduate school or mechanisms to assure or standardize the formation of specialists available in the Public or Private sector. Medical residency does not fully guarantee the formation of specialists, because these are pyramid structures. This means that they start the first year with a certain number of doctors and the following years, due to the budget, the openings become fewer and those who can finish two or three years of formation are a smaller group of doctors.

This is a very interesting aspect to be analyzed, between the University and the MOH which is now using these resources for providing services in their centers. The way in which these two situations can be combined should be studied: on one hand the formation and training of young doctors in the internship program, social service and medical residence, and on the other hand their usage by the health centers to increase of coverage.

A proposal to be analyzed would be offering young doctors a short stay of 3 years in the rural area, with permanent residence in the community. After this period is over, offering a scholarship for specialty studies in the capital. This could be accompanied by an incentive system according to the community's characteristics (for example, distance between the urban centers and the capital, access problems in the community, poverty conditions, basic sanitary conditions). These programs could be carried out in coordination with various faculties, including not only the health sector, but also other areas such as architecture, engineering, agronomy, education, veterinary, depending on what is necessary for the elected communities.

#### **1.6.1 Registration distribution and number of graduates in the Private and Public Sector**

In 1991, the total of registrations for the medical career in the Private Universities was of 2,049 and in Odontology 1,684 (Table 5).

In the UES Medicine Faculty, a total of 4,391 students are registered for 1993, of which 629 are freshmen (Table 4). The number of people registered has had some drastic variations in some years, due to the armed conflict and some temporary closing of the National University (Table 3) The decrease of registrations in 1989 due to the war affected the public as well as the private sector, nevertheless a current progressive increase of registrations in the private sector can be seen (Table 6).

If we compare the number of registration with the number of graduates in the different faculties, we can see a great difference between the total of students enrolled in the faculties and the annual number of graduates. Many start the career but few finish it, this phenomenon is important both in the private and in the public sector.

Regarding the needs of the country, it would be necessary to analyze the phenomenon of the higher enrollment in traditional careers of superior level in comparison to the low number of enrollment in the careers of technical and auxiliary levels. Strategies to revert the current proportion should be looked for.

This indisputably undergo the coordination in the universities, the MOH and Ministry of Education and the institutions which use human resources to set up encouragements, promotions towards careers of technical and auxiliary levels and above all assure young graduates the possibility of entering the job market.

Table 7

STUDENTS REGISTERED IN PRIVATE UNIVERSITIES BY FACULTY  
AND CAREERS RELATED TO THE HEALTH SECTOR, 1992

Faculty and Careers	Total	% Pop. Total Students
Odontology Faculty	1,684	3.0
Dr. Dental Surgery	1,684	
Medicine Faculty	2,214	4.0
Dr. in Medicine and Surgery	2,049	
Dr. in Diet and Nutrition	116	
Physiotherapy Technician	49	
Pharmacy and Chemistry Faculty	96	0.7
Dr. Pharmacy and Chemistry	396	
Human and Science Faculties	17,058	30.7
Lic. Psychology	1,875	
Dr. Social Work	599	
Dr. Nursing	30	
Social Work Technician	11	

\* Percentage over the total population of people registered in the private sector's universities for 1991. Total population 55,541 people registered.

Source: Superior Education in figures Yearbook 1991/92, Education Department, Unpublished figures.

Table 8

## STUDENTS IN UNIVERSITY EDUCATION IN THE PRIVATE SECTOR BY FACULTY, 1987-91

Faculty	Year				
	1987	1988	1989	1990	1991
Medicine	6,936	8,694	1,696	2,220	2,214
Odontology	1,684	2,174	1,333	1,427	1,684
Chemistry and Pharmacy	1,250	1,095	279	351	396
Total	9,870	11,963	3,581	3,998	4,294

Source: Education Department, *Superior Education in Figures*, Yearbook 1991/92. Unpublished Figures.

## 1.6.2 Proposals on university education

- a) Considering the country's needs of human resources in health, it is important to maintain the unity of the students at the Internate level and Social Service for the health centers, especially in the rural areas.

This makes it necessary to establish agreements between the formation centers (faculties of different careers) and the Health Department, in order to offer students a program enabling them to gain experience and supervised training and at the same time enabling the centers to have human resources to increase coverage of attention.

- b) Analyze the factibility of implementing a Rural Residency Program, in which the doctor will reside in the rural area for three years as a minimum, and becomes a general doctor or a family doctor, with a basic formation in the 4 general clinics (medical clinics, paediatrics, gynecia-obstetrics and surgery). At the end of the period after an ability test he can choose to specialize in one of the greater hospitals on the country.
- c) Create in the country a Post-Grade school that regulates, coordinates and supervises the formation of specialties in the country's different university careers. Currently there is no organization in charge of implementing programs on the formation of specialists, or a regulation that authorizes and enables the professionals. The El Salvador University Medicine Faculty has elaborated a program, but there is nothing legally implemented yet.
- d) Look for strategies that will invert the current tendencies of high registration for superior university careers in relation to low registrations in the careers of technical and auxiliary levels. This implies establishing policies in coordinate form between the Education and Health Department in order to promote technical and auxiliary careers, establish incentives to attract students towards these careers and create openings to use these resources in the health attention centers.

### **III THE HEALTH JOB MARKET**

#### **1 Availability and distribution of key human resources of the Health Sector**

One of the important aspects in the analysis of the job market in health is to know the amount, composition and distribution of the human resources not only at the institutional level of those making up the whole sector but also the distribution per regions or geographic areas, mainly when criteria of priority and focus are applied to the analysis.

For El Salvador, these criteria include basically the aspects of rural area, of the location of zones of extreme poverty and poor conditions in the quality of life of the people, the ex-conflictive zones or simply those where some epidemiologic rates make a focus of the attention and actions in health necessary.

The distribution by institutions related to the health sector is required, as El Salvador is a small country, but with several institutions and organizations of heterogeneous composition. This allows many human resources to work simultaneously in several institutions, to face the economical problems derived from policies of low wages, in many of the institutions the sector.

We have searched several secondary sources in the country to learn about the distribution of the human resources per region or geographic areas, but this information is not available in the country. The MOH should be the institution responsible to have this kind of information, but it only has information of the same institution and not that of the whole sector.

Other sources that we have searched are the Vigilance Boards of Health Professionals, which are the organizations that by Law have the command of registering and authorizing the practice of professionals throughout the country. The kind of information they have is the chronological record of the professionals since these organizations were created up to this date. The professionals are not registered 100%, the amount of deceased professionals is not updated neither is there an estimation of those who emigrated or by any other reason are no longer practicing.

The MOH, along with the UES and the PAHO, are finishing a research on the determination of the labor force in the public health sector. For the information that refers to the amount and distribution of the health workers, secondary sources were used, that is, the records of the institutions under the research. These do not have updated and complete information. Moreover, it does not include the whole sector, but only the MOH and UES.

Because of the importance of numbering the amount of workers that the country has, its distribution and composition at geographic level and inside the different institutions of the sector, we consider it necessary to perform a National Census of human resources of the health sector, to become a basis for its planning.

##### **1.1 Distribution of doctors and nurses by geographic areas**

If we consider that the MOH is the institution with the highest number of jobs and the most distribution of infrastructure in all the country, we may assume that the information of the distribution of human resources could lead us close to the national distribution, mainly in the rural areas. But this, too, has serious difficulties, because of the lack of an information system in the area of human resources that can offer reliable data on the reality.

The majority of the reports from the MOH refer to the positions of the Law of Salaries. The Law of Salaries is the law applied to the employees of the Civil Service. It registers the number of positions for each kind of professional and its level of salary, but it cannot be considered that the number of positions equals the number of workers. Also, there are several categories of jobs inside the institution as contracts, payrolls, patronage, etc. that because of the lack of an information system, produce distortions in the data.

Even so, we consider it interesting to analyze the distribution of the positions for doctors and nurses in the MOH, as we consider that this leads us closer to the reality of the country.

Table 9

## DISTRIBUTION OF POSITIONS BY REGION MOH, 1993

Professions	Health Regions										
	Total	Western		Central		Metropol.		Paracent.		Eastern	
		No.	%	No.	%	No.	%	No.	%	No.	%
Doctor	2,086	354	16.97	225	10.79	980	46.98	161	7.72	366	17.55
Odontologist	202	36	17.82	19	9.40	80	39.60	26	12.87	36	17.82
Nurses	4,566	852	18.65	411	9.00	1,783	39.04	486	10.64	907	19.86
Sanitary Inspectors	263	49	18.63	27	10.26	65	24.71	42	15.96	73	27.75
Administration Personnel	2,184	252	11.53	104	4.76	472	21.61	240	10.98	313	14.33
Labor and Service Personnel	2,975	466	15.66	201	6.75	1,199	40.30	248	9.54	580	19.49

Note: The percentage given is in relation to the total of the three health regions.

Source: Law of Salaries 1993. Technical Dept. Personnel Division, MOH.

Table 10

**DISTRIBUTION OF POSITIONS FOR DOCTORS AND NURSES IN THE HEALTH REGIONS  
MOH, 1993**

	Western	Central	Metrop.	Paracentral	Eastern
Territory : 21,040 km2	4,488.54 21%	3,669.46 18%	886.15 4%	4,267.33 20%	7,729.31 37%
Population: 5,047,925 hab.	1,066,824 21%	702,698 14%	1,477,766 30%	685,201 13%	1,154,436 22%
Rural area:	61%	60%	30%	65%	
Centers Total: 362	85 23.5	60 16.5%	42 12%	66 18.2%	109 29.8%
Doctors: Total: 2,086	354 16.97%	225 10.79%	980 46.98%	161 7.72%	366 17.55%
Nurses Total: 1,537	287 18.24%	169 10.74%	611 38.84%	158 10.04%	284 10.05%
Aux. Nurses: Total: 2,993	565 18.87%	242 8.08%	1,172 39.15%	328 10.95%	623 22.95%
Doctor: 4.32/10,000 hab.	3.31	3.20	6.63	2.34	3.17
Nurse 3.11/10,000 hab.	2.69	2.40	4.13	2.30	2.46
Aux. Nurse 5.92/10,000 hab.	2.52	3.44	7.93	4.78	5.39

\* Positions according to Law of Salaries.

Source: Memoria 1992/93 MOH, Ley de Salarios.

According to the records of the Medical Profession Vigilance Board, as of October, 1993, there were 590 doctors registered, from which it is estimated some 2,800 to 3,000 doctors would be practicing. The record of the School of Medicine has 2,758 professionals, whom are considered to be practicing now.

If we consider the distribution of the positions for doctors in the MOH, we can see that the Metropolitan Region concentrates 12% of the health centers, and 46.98% of the doctors, and has an rate of 6.63 doctors per 10,000 inhabitants. However, all the other regions keep an average of from 2.34 doctor/10,000 inhabitants (Paracentral Region) to 3.31 doctors/10,000 inhabitants (West Region).

In all of the regions, the relationship between the number of nurses and the number of doctors is unfavorable, showing the serious problems the nurses sector has now because of the lack of professionals at national level. Practically in all regions, the number of doctors is higher than the number of registered nurses. According to the PAHO/OMS the ideal relationship of nurses per 10,000 inhabitants is 4.5. This proportion is not achieved in any region but San Salvador with 4.13 nurses/10,000 inhabitants; the other regions do not reach a percentage higher than 2.69 nurses/10,000 inhabitants.

We have gathered information from a medical laboratory that works in the country, that has kindly cooperated to give data from its information system. The objective is to be able to estimate the number of doctors working in the country and their geographic distribution and by specialties. Even though we estimate that there might be even 5% of duplications (that is, the same doctor, registered twice), we consider that the information might reflect the national reality.

In this source of information, 2,085 doctors are registered, from which 60.95% is in San Salvador and 39.05 is distributed all along the country. The figures are staggering when the average of doctors per 10,000 inhabitants is estimated. Except for San Salvador with 8.6 and San Miguel with 5.2 doctors/10,000 inhabitants, the other regions keep an average equal or lower to 2.7 doctors/10,000 inhabitants. According to the recommendations of the PAHO, the rate of doctors/10,000 inhabitants should be close to 8 doctors/10,000 inhabitants.

Comparing the information of the MOH and the medical laboratory both show approximate distributions, which means that these figures might be close to the real data.

On observing the distribution of specialties, we see a high number of general doctors (56%); however, the percentage of pediatricians is only 15% and of genic-obstetricians is 12%. This is relevant data for the country with a high mother-infant morbi-mortality.

Another important aspect is the low number of surgeons. There might be a distortion in the interpretation of the distribution of specialists, but that the data is only from one laboratory.

Table 11

## DISTRIBUTION OF DOCTORS BY REGIONS, 1993

Regions/Depts.	Number of Doctors		
	Total Reg.	Total/Depto.	Rate/10,000 inhab.*
Western Region	293		2.7
Dept. Ahuachapán		45	1.7
Dept. Santa Ana		130	2.9
Dept. Sonsonate		118	3.3
Central Region	132		1.9
Dept. Chalatenango		19	1.1
Dept. La Libertad		113	2.2
Metropolitan Region	1,271		8.6
Dept. San Salvador		1,271	8.6
Paracentral Region	89		1.3
Dept. Cuscatlán		22	1.3
Dept. La Paz		37	1.5
Dept. Cabañas		17	1.2
Dept. San Vicente		13	1.0
Eastern Region	300		2.7
Dept. Usulután		63	2.0
Dept. San Miguel		199	5.2
Dept. Morazán		5	0.3
Dept. La Unión		33	1.3
Total**	2,085	2,085	

\* Based on the population of the 1992 census, General Census and Statistics Office.

\*\* Includes 16 Odontologist. See Annex 1.

Source: Records from a medical laboratory working commercially in the country. El Salvador, 1993.

Table 12

## DISTRIBUTION OF DOCTORS ACCORDING TO SPECIALTIES, 1993

Specialties	No. of Doctors	Percentage
General Doctor	1,158	56.00
Pediatrician	313	15.00
Gynecologist-Obstetrician	254	12.00
Internal Medicine	181	9.00
Orthopedist	36	2.00
Surgeon	22	1.00
Dermatology	20	0.90
Otorrino-laringologist	17	0.80
Pneumologist	14	0.60
Other Specialties*	70	2.70
Total	2,085	100.00

\* Includes 16 Odontologist.

Source: Records from a medical laboratory working commercially in the country, El Salvador, 1993.

The following Tables show the distribution per regions and departments, according to specialties. All of the regions have general doctors, also with the basic specialties of pediatrics and genic-obstetrics. We consider that the few records of surgeons is the result of the criteria used by the laboratory for classification rather than a real situation.

The Department of Morazán registers only 5 doctors, out of which 4 are general and 1 is a pediatrician. This is equal to a rate of 0.3 doctors/10,000 inhabitants. The Departments of La Union and Chalatenango register only general doctors. The Paracentral Region is the one that has the least doctors (89 professionals), too the MOH has assigned them less number of positions (161 positions, that are equal to 7.7% of the total). It is also the region with more number of centers without permanent doctors. According to an unpublished study, 71.43% of its centers does have permanent doctors<sup>7</sup>.

<sup>7</sup> GIDRUS, Determination of the Labor Force in the Public Sector in El Salvador, unpublished data. 1992.

Table 13

## DISTRIBUTION OF DOCTORS ACCORDING TO REGIONS AND SPECIALTIES

Regions	Specialty	No. of Doctors
Western	General Doctor	220
	Pediatrician	29
	Gynecologist- Obstetrician	14
	Internal Medicine	23
	Otorrino-Laringologist	1
	Others	6
Central	General Doctor	87
	Pediatrician	32
	Gynecologist- Obstetrician	7
	Internal Medicine	5
	Orthopedics	1
Metropolitan	General Doctor	579
	Pediatrician	208
	Gynecologist- Obstetrician	209
	Internal Medicine	133
	Orthopedics	28
	Others	114
Paracentral	General Doctor	60
	Pediatrician	19
	Gynecologist- Obstetrician	5
	Internal Medicine	3
	Others	2
Eastern	General Doctor	212
	Pediatrician	25
	Gynecologist- Obstetrician	19
	Internal Medicine	17
	Orthopedics	7
	Surgeon	7
	Others	13
Total		2,085

Source: Record from a laboratory of medications working commercially in the country, El Salvador, 1993.

## 1.2 Distribution of human resources by Institutions

The health sector in El Salvador is made up of a large diversity of institutions, not only in the public but also in the private sectors. The two greatest health institutions at national levels are in the Public Sector: the MOH and the ISSS. The other institutions in the public sector are the Sanidad Militar, and other entities of the Central Government having their own services for their employees. The most important are: Teacher's Welfare, ANTEL, ANDA and CEL.

In the Private Sector, there are commercial and non-profit organizations and institutions. The Non-Government Organizations (NGOs) are part of the second group and have played a very important role in the country during the last years, mainly in the area of primary attention and community health.

### 1.2.1 Salvadoran Social Security Institute

The ISSS is the second most important institution in the public sector; together with the MOH, they constitute the institutions that generate the highest number of employees for the health sector in the country.

It has a coverage of 11.5% of the total population, with 583,613 beneficiaries. For the health care, it has 44 centers and 1,424 beds.

The total number of officers in 1992 was 9,194 out of which 1,476 (16.05%) were doctors and dentists, 2,768 (30.10%) were technicians and paramedics; and 4,950 (53.83%) were administrative and service personnel (Table 12).

These figures are important to consider, when the complaints of the users have to be faced in relation to the high number of administrative officers, little efficiency, with slow bureaucratic systems that generate long waiting hours and are generally accompanied by mistreatment and rudeness.

The health care in the institution is given basically by medical-odontological professionals.

Table 14

## HOSPITAL SERVICE AND ADMINISTRATION PERSONNEL IN THE ISSS, 1992

Year	Total	Administration Offices			Hospital Medical Service			
		Total	Adm.	Serv	Total	Med./ Odon.	Tec. Parm.	Serv. Adm.
1956	523	149	127	22	374	104	148	122
1960	650	149	128	21	501	120	198	183
1965	1,004	201	155	46	803	212	308	283
1970	1,959	329	257	72	1,630	323	632	675
1975	3,041	628	514	114	2,413	510	972	931
1980	4,063	844	703	141	3,219	538	1,282	1,399
1985	4,780	1,009	804	205	3,771	734	1,414	1,623
1990	5,781	1,272	1,081	191	4,509	992	1,691	1,826
1992	9,194	1,815	1,226	589	7,379	1,476	2,768	3,135

Source: Statistic Bulletin, ISSS.

For 1993, the ISSS had 1386 doctors, 571 nurses and 1,228 assistant nurses. Out of the total, 66.81% of the doctors, 67.60% of the nurses and 67.42% of the assistant nurses worked in the Metropolitan Region.

The high concentration of centers and health personnel concentrated in the Metropolitan Region and other urban ones respond mainly to the distribution of the beneficiaries that are in lower proportion in the rural area.

Between the two most important institutions of the public sector, the ISSS offers better salary levels to the professionals, and the support resources for the diagnosis and treatment, medicine, equipment, also constitute a better motivation for the professionals. There is no data on the number of doctors now working simultaneously in several institutions, but it is estimated that the level of multiple jobs is mainly at the ISSS, MOH and the private sector.

Table 15

**DISTRIBUTION OF HUMAN RESOURCES BY REGIONS AND CATEGORIES AND HEALTH CENTERS IN THE ISSS, 1993**

Region	Categories				
	Doc.	Nurses	Aux. Nurses	Phar. Tech.	Lab. Tech
Metropolitan	926	386	828	149	185
Central	107	36	77	32	6
Western	223	51	191	37	25
Eastern	130	98	132	29	20
Total	1,386	571	1,228	247	236

Source: ISSS, *Información recolectada de los Centros de Atención y Coordinación*, (Information collected from the Health care and Coordination Centers 1993).

### 1.2.2 Teacher'welfare

The Teacher's Welfare started as a Department giving some medical support to teachers in 1968, as an answer to the union pressure. It does not have its own centers, it contracts the services and professionals directly from the private sector. It covers about 140,000 beneficiaries, which is equal to 2.8% of the population.

It depends on its support from the Ministry of Education, this makes the system have little resources, and the payment of services to be slow and delayed. This generates little motivation for the professionals who work for the institution. The number of professionals registered is not high. The contracts are done with every professional and is established by a fee Table for consultations and the other medical acts. The level of payment is low compared with other institutions of the sector.

Now, it has 214 doctors registered at the ISSS, 12 odontologist, 5 psychologists, 12 anesthetics technicians, and 2 respiratory therapists.

Table 16

**DISTRIBUTION OF DOCTORS ACCORDING TO  
SPECIALTIES AT THE TEACHER'S WELFARE, 1993**

Doctors	Number	% Of the total
General	94	44
Gynecologist	26	12
Pediatricians	15	7
Surgeon	16	7
Internist	4	2
Specialist	59	28
Total	214	100

Source: Data furnished by de Planning Department of Teacher's Welfare, 1993.

### 1.2.2 National Administration of Telecommunications

ANTEL has 8 centers, a capacity of 83 beds and 406 officers, for a coverage of 45,000 beneficiaries, which is 0.9% of the total population.

The system of hiring of doctors is per hour, as the MOH and the ISSS, where doctors of general consultation are hired mainly in regimens of 2 hours and the specialists in 4 hours, when it should be otherwise. Besides, the number of hours hired for general consultation is three times less than for the specialties.

Table 17

## DISTRIBUTION OF DOCTORS BY HOURS OF CONTRACT IN ANTEL, 1993

Doctors	Number	Hours Contracted	Total of hours
General	5	4	20
Consultation	16	2	32
Specialties	50	4	200
	1	2	2
Residents	14	FT*	112
Department Clinics	8	4	32
Total of Doctors	94		398
Odontologist	5	4	20
Nurses	35	FT	280
Auxiliary Nurses	71	FT	568

\* FT: Full Time.

Source: Information Department, ANTEL, 1993.

#### 1.2.4 Hydroelectric Commission of Lempa River

CEL has a coverage of about 15,400 beneficiaries, corresponding to 0.3% of the total population.

The ISSS has 15 clinics for general attention and pediatrics. For other benefits, it contracts the private sector where there is an open list of about 500 doctors. Odontological attention is available also.

For its centers it has 46 local doctors, 1 Licentiate nurse, 4 graduated nurses and 23 nurse auxiliaries as well as a psychologist.

It is one of the few institutions of the sector per medical auditing, it even has records of having fined professionals.

#### 1.2.5 National Administration of Aqueducts and Sewerage

ANDA has a coverage of about 10,500 beneficiaries, who are incorporated to the ISSS. Moreover, it has some services for its employees in 6 clinics of ambulatory attention of general medicine and pediatrics. More than a system of medical insurance, it is an organization simultaneous to the ISSS, so that the attention is more accessible to the employees.

### 1.2.6 Private Sector and medical insurance

The private sector in health in El Salvador can be included in the commercial and non profit sector. In the first one, we can include all clinics, offices of medical care, including medical insurance. In second place, we have the NGOs, which have had an important development in the country and which have increased much more in later years.

About the Private Sector, there is so little information for its analysis. The ANSAL-94 project has a research for the future to analyze it. According to the REACH/USAID, 1989, of the ambulatory attentions, 45% is done in the private sector, however in the hospital attention it renders only 9%.

The NGOs constitute an important element in the health attention system in the country. According to the studies made by the PNUD, they would reach about 200 in the country. Out of that total, 90 (45%) would be working in Health and 50 (55.5%) in Community Health. Several NGOs are already working under a common coordination, for example, PROSAMI (Project of Maternal Health and Child Survival) that holds 36 organizations; CISI (Intersectorial Committee of Child Survival) that holds 30 organizations; CIPHES (Interinstitutional Coordinator of Human Promotion of El Salvador) and others. The presence of the NGOs in the country, from the right and the left has provided an interesting experience, especially in that related to the primary attention in health and community health, with the strategy of producing health promoters to cover areas in mother-infant problems, infectious diseases and sanitary problems of water and health.

The great dilemma these organizations face now is to define the mechanisms of coordination among them and with the public sector and the necessity of finding the mechanisms for self-financing, because the majority is financed by international organizations which do not guarantee the continuity of the project.

### 1.3 Discussion and proposals

The most serious problems in the work market are the poor distribution of the critical human resources of the sector, that is, doctors and nurses in the rural areas of the country. We emphasize again the need for a National poll of human resources in Health, showing the real distribution of the labor force of the sector and that this allows to measure the problem.

The strategies of solution must analyze a great amount of factors that determine the complexity of this phenomena, for instance: the low salaries and the lack of other incentives; the lack of resources in the centers of attention that discourages the health personnel to keep on working and it generally contributes to the poor quality of the benefits in the public sector.

We do not know the situation of subemployment and/or multiemployment in the country. But the hiring policies of the institutions for few hours with low salaries is probably generating situations that make professionals rotate in several services to improve their income.

In the case of the nurse personnel, for the lack of resources, it is known that many are working two shifts. This affects the possibilities of a good performance and the quality of attention they can give the users of health services.

The regulation of the job market goes through changes in the policies of human resources, which can be done in agreement with of all the most important institutions of the training area and utilization of human resources, and accompanied by political decisions of the institutions. These policies have been stated above:

- 
- a) To give priority to the and training resources in technical and auxiliary levels that at a lower cost in time and resources can improve the coverage and modify the cultural pattern of the health attention in the country under the prevailing medical model.
  - b) To improve the salary level of the health personnel and the system of incentives; to have more flexible staff systems to allow termination or motivation of personnel according to their conditions of development.
  - c) To measure the benefits the health sector receives from groups of informal workers, as healers, herb doctors, empirical midwives and others, so that their incorporation under policies of training and supervision may contribute to some priority programs such as that of mother-infant care.
  - d) To study all alternatives that may allow decentralization of actions in primary attention as, for example, the municipalization of the attention, the use of the NGOs, organizations of cooperative type, SILOS, and others depending on the possibility of each community.

There is already experience of several systems working in some communities in the area of primary attention in the country. That pattern of diversity in the attention of health is a model that has to be kept to help for a real decentralization of health care and which would generate a healthy situations of competitiveness. The possibility to administer human resources in these models of attention is always more efficient.

- e) It is difficult to state recommendations giving way to wide modifications in the conditions of the job market, as the modifying factors have many causes; however, the general recommendations discussed in the chapters of planning, formation and administration of the human resources in this report are partial thoughts that can contribute to improve the work conditions of the health sector in the country.

## **IV ADMINISTRATION OF HUMAN RESOURCES IN THE PUBLIC SECTOR**

The MOH is the institution with the highest labor population in the health sector and covers all the country regions; this determines an intricate administration and demands for mechanisms to speed up, arrange and solve the main problems of operation to render services to the population within the best limits of efficiency, efficacy and quality.

The second institution in the Public Sector is the ISSS, with an estimate coverage of 11.5% from the total of the country and now with 9,194 employees, approximately 7,000 of them, correspond to health sector.

The personnel administration of MOH has to organize for 1993, 21,253 employee's positions, distributed in 362 centers with different functions and complexity levels.

These figures give a general dimension of the problem the public institutions face in the administration, dealing, use, control and development of its human resources.

### **1 Main categories in human resources**

To give direct attention of health to the population, the MOH uses 6 basic human resources: doctors, nurses, nurse auxiliaries, technicians, health promoters and empirical midwives.

#### **1.1 Doctors**

Doctors together with odontologist are the ones traditionally providing the direct attention in the centers. The expansion of services and the need of increasing the coverage made necessary to use other human resources. Some of them have been formed in the formal educational system as nurses and technicians; others are people from the community trained by the institution, such as the health promoters and empirical wives.

#### **1.2 Nurses**

The nursery personnel is the second human resource in importance to serve the community. The closing of schools in 1985, the migration to other countries, and the increase of other institutions of the sector that are absorbing personnel, has generated an important difference among the supply and demand of this health personnel. In 1992 they performed 17.3% of the total of the ambulatory attentions registered in the Ministry of Health. This figure has been gradually decreasing since 1989 when it was 19.7%<sup>8</sup>.

#### **1.3 Promoters**

The people presently called Health Promoters in MOH, come from the integration of different groups of main agents of community attention that worked in the institution since 1976. In 1989, MOH has 225 Health Rural Helpers, 264 Health Community Helpers and 60 Community Helpers HOPE, each of them with objectives, working lines and different information systems. The integration of all these groups presently constitutes the Health Promoters, based on a new training and supervision program.

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<sup>8</sup> MSPAS, "Memory 1992/93", 1993, Page 40.- MSPAS, "Public Health in Figures", 1991.

Out of 579 promoters in 1989, the number increased to 1182 in 1993 promoters, which represented an annual increase of 17.27% for 1991; of 46.09% for 1992; of 19.15% for 1993 and the estimate for 1994 would be 47.37%<sup>9 10</sup>.

#### 1.4 Empirical Midwives

The high percentage of doctors at hospitals and the absence of midwives schools at a technical level in the country besides the cultural traditions of the population and the difficult access of attention in the centers, has made necessary the training of empirical midwives. They perform the control of pregnant women, assist in delivery, and postpartum the attention to the newly born, and children under five and attention in family planning.

In 1992, they performed 4.5% of the total of the attentions registered by the MOH. The increase in the number of attention from 1986 to 1992 was 53% (Table 23).

According to the Poll FESAL 93 the coverage of delivery by place of attention shows that the MOH and the ISSS have a coverage of 38.1% and 9.7%; the private sector only 3.2% and 49% is perform outside the health centers. The midwives perform in their homes 1.7% and at the patients home 34.7%.

Table 18

#### ATTENTIONS OF EMPIRICAL MIDWIVES MOH, 1987-1992

Years	Total of Attentions	% of Annual Increase
1987	148,230	
1988	177,207	19.54
1989	214,843	21.23
1990	252,750	17.64
1991	284,762	12.66
1992*	226,506	-20.45

\* Data obtained in the Memory 1992/93, MOH.  
Source: MOH, *Public Health in Figures*, 1993.

<sup>9</sup> MSPAS, Department of Community Health, *Executive Summary of Objectives and Reaching of Community Health*, 1993.- MSPAS, "Memory 1992/93", 1993.

<sup>10</sup> MSPAS "Memoria 1992/93", 1993.

### 1.5 Technicians

There is also an important group of health personnel working as technicians and auxiliaries, most of them trained in the institution, who are very important to support the health team. However, it can be considered, that besides the nursery personnel, health promoters and the sanitation inspectors, the rest of the workers are the less known and analyzed group at an institutional level.

The only health personnel that helps unpaid with the institution is the volunteer of the Malaria Program, which is qualified as an efficient and responsible resource, this has allowed the program to have a great impact at a national level.

A study, still unpublished, made by the MOH, the UES and PAHO, on the determination of the working force in the public sector in El Salvador, shows the distribution of the occupational categories within the MOH for 1992. In the data showed here, only the personnel under the Sanitary Areas is included.

The study separates four basic categories of health personnel:

- a) University graduates, including: Doctors, Odontologists, Chemist-Pharmacists, Sanitary Engineers, Licentiates in Clinical Laboratory, Licentiates in Nutrition, Licentiates in Nursing, Licentiates in Psychology, Licentiates in Health Education and others.
- b) Technicians A, including the personnel at a university technician level: Diplomate in Nursing, Technicians in: Physiotherapy, Clinical Laboratory, Mother-infant, Radiology, Anesthesia and others.
- c) Technicians B, including non-university graduates personnel: Nurse, X-Rays Technician, Anesthesia, Clinical Laboratory, Physiotherapy, Health Education, Social Worker and others.
- d) Auxiliaries: Nursing auxiliaries, dietician auxiliary, microscopist, malaria surveyor, sanitation inspector, statistics and medical documents technician, health promoter and other.

The personnel classified as B technician and auxiliary, constitute 69% of health personnel. However, except from promoters and nurses, it is the least considered in the policies on human resources for the coverage extension and the improvement in the access to the services. The A technician, trained in universities, that has a high cost for his, practically is not considered until now by the Ministry as a valid resource to be incorporated, using only 2.0% of the employees' positions.

Table 19

**DISTRIBUTION OF THE HEALTH PERSONNEL IN THE REGIONS  
BY OCCUPATIONAL CATEGORY, MOH  
To June of 1992\*\***

Occupational Categories*	Health Ministry	
	Total	Percentage
University	2,111	28.1
Technician A	155	2.0
Technician B	1,464	19.5
Auxiliary	3,773	50.4
Total	7,503	100.0

\* Includes the personnel that gives direct and indirect attention and corresponds to Law of Salaries. It does not include other hiring categories, nor administrative personnel.

\*\* Unpublished data, the interpretation is responsibility of the author.

Source: *Determining of the work Force in the Public Sector of El Salvador* (MOH, UES, PAHO), 1992. Data obtained from the Personnel Unity at a Sanitary Regions level from MOH (questionnaire no. 1 and 2).

## 2 The system of positions

### 2.1 Position categories

The MOH employees can be mainly classified in 3 different categories according to their financing source, to the characteristics of the labor bonds of their hiring and the benefits they receive.

#### 2.1.1 Officers by Law of Salary

Most of the employees belong to the Civil Service and are ruled by the Law of Salary; they have always constituted the largest proportion of employees' positions, however this has been reducing the last years, so in 1989 it constituted 85% of the employees' positions, in 1991 the 83% and for 1991 the 79%<sup>11</sup>.

Probably this lowering in 1993 has a relation with the implementation of the Decree No.11/92, where the voluntary retirement, without age limits, of officers that have at least 12 service years. The analysis of the impact of this standard is unknown yet, but all the interviewed persons thought that it has been negative for the institution, because approximately 2,000 officers, were protected by this and a high percentage, estimated among 40 to 50%, were medical and paramedical personnel and offices with a lot of experience and training.

<sup>11</sup> Salary Law 1989/91/93.

Because of this several officers were hired again by the institution, giving as result an unnecessary expense to the Government.

The main benefit that the Law of Salary offers is the working stability of the officer (Civil Service Law), other benefits are Christmas bonus, medical and life insurance and the pension system, through the INPEP.

The largest problem the Civil Service Law gives is the high centralization and bureaucratization for managing the personnel, and the lack of modern instruments to enable more flexibility in the operation.

### 2.1.2 Officers hired and hands

The second group of employees is ruled by the hiring system and wages payroll, which for 1993 constitutes the 7% and 10% respectively. In these categories, the bond is established according dispositions, without obligation in any of the parts, giving conditions of little labor stability.

### 2.1.3 Officers by patronage

The fund of Special Activities that collects incomes through patronage in the hospitals is a third source of contracting the health personal and its ruling framework is not clearly defined.

This determines the few labor benefits they have and also the minor assignments they receive in relation to other employees' categories (Table 20).

At present, the MOH also receives from some international organizations, as the Project with the World Bank, financial resources to pay salaries of 144 officers that are working in the ex-conflictive areas and with critical health and poverty conditions. Another example, the PAHO finances the salaries of all the officers working in the laboratory of the AIDS Program. It is established that these resources will soon be absorbed by the National Government and it is important its consideration because they belong to human resources that are working on prioritized programs of the institution.

Table 20

#### TYPE OF HIRING OF HEALTH PERSONNEL ACCORDING TO JOBS MOH, 1993

	Law of Salaries	Contract	Hands	Patronage	Internal. Org.*	Total
Total	16,756	1,520	2,139	732	106	21,253
%	79	7	10	3	0.5	100.0

\* Does not include the World Bank hiring.

Source: MOH. *Memory 1992/93*.

In the institution at the present there is not an information system that concentrates all these different hiring levels, which makes it hard to know the present state of the quantity and distribution of the human resources. A personnel census has been done, but an important part of the data is still in manual records. The wages

payrolls are another source of information, but many officers work in different places from where they were appointed.

All these, make impossible to estimate accurately the number of existing human resources in the institution, as well as their distribution and the evaluation of the productivity of their services.

Most of the information published on the quantity and distribution of the personnel of the MOH, makes reference to the employee positions of the Law of Salaries. It is important that this information be analyzed carefully because it distorts the reality, specially on doctors and nurses.

First because they are employee positions and not a number of hired officers. The employee positions might not be occupied and the number of positions is unknown; second, because of lack of nursing personnel, many of them are hired to work two shifts. A third factor to consider is the case of doctors and odontologist, they are hired by hours/doctor, that vary from 2 hours a day to full time (8 hours a day). There is a high hiring percentage for 2 hours, this increases the number of employee positions to cover the needs of services. Also, some employee positions of 2 hours a day might be used as the complement to the salaries for some doctors.

## **2.2 Hiring part-time doctors**

The analysis of the positions of doctors for hours/hired shows very interesting data. The number of positions for 2 hs/doctor hired in Health Areas has been 310 positions in 1990, and 690 positions in 1993, an increase of 122.58%.

In 1993 the number of doctor positions for 2hs/day constitutes 56% of the total of doctor positions hired by the institution. The positions for 4 hs and full time constitute 8% and 4%, respectively, for a total of 2,086 positions (Tables 21 and 22). On the other hand, the increase of positions for the hospitals has been less. The total increase of positions in the Hospitals between 1990 and 1993 has been 7.6%.

Table 21

## DISTRIBUTION OF EMPLOYEE POSITIONS ACCORDING TO CATEGORIES OF DOCTORS AND HOURS/DOCTORS HIRED IN SANITARY AREAS, MOH, 1993\*

Doct.	West.		Metrop.		Center		Parac.		East.		Total	
	90	93	90	93	90	93	90	93	90	93	90	93
Res.				- 1				9 - 9		6 - 15		15 - 25
FT		7 - 9		6 - 6		6 - 9		7 - 9		10 - 16		36 - 49
6 hs.		- 1		2 - 2		- 3		- 7		- 7		2 - 20
5 hs.				2 - 2								2 - 2
4 hs.		2 -		10 - 10		1 - 1		4 - 4		5 - 1		22 - 16
2 hs.		57 - 104		140 - 374		27 - 95		32 - 10		54 - 107		310 - 690
Int.		101 - 91		171 - 191		30 - 31		60 - 73		56 - 56		418 - 420
Total		167 - 215		331 - 566		64 - 138		112 - 99		131 - 202		805 - 1220

\* Law of Salaries, 1993.

Note: Some partial figures do not correspond to the figures published by MOH, the criteria used might not have been the same. The total number of doctor positions is 2,086

Source: *Law of Salaries 1993*.

Table 22

## DISTRIBUTION OF POSITIONS BY CATEGORIES OF DOCTORS AND DOCTOR/HOUR HIRED AT THE MOH AND HOSPITALS, 1993\*

Doctors	1990		1993	
	Number	Hours hired	Number	Hours hired
FT**	14	112	37	296
6 hours	9	54	23	138
5 hours	1	5	1	5
4 hours	146	584	159	636
2 hours	524	1,048	499	998
Residents	306	2,448	357	2,856
Total	1,000	4,251	1,076	4,929

\* Law of Salary 1993.

\*\* FT: Full Time.

Note: Some partial figures do not correspond to the figures published by the MOH, perhaps due to different criteria used.

Source: *Law of Salaries 1993*.

Table 22 shows the distribution of positions by categories of doctors and doctor/hour hired according to different types of contract (full time, 2hs, 4hs, etc). If the positions of resident and social service doctors at

central level, are set aside in order to know the total of doctor/hours hired from more experienced doctors at the hospitals, the results are: 48% are doctors hired for 2 hours; 31% are doctors hired for 4 hours; 14% are full time doctors and other part time doctors are 7%.

The labor system of doctor/hours hired, is a common system in the country, used by most health institutions in the health sector. This topic deserves a deep study in order to see if it influences negatively in the quality and productivity of the services.

This system is generally preferred for the hiring of specialists or for very small centers where consultations may be made in a few hours. In any case, the minimum limit suggested is 4 hours a day and for hospital health care 6-8 hours if it is possible.

### **2.3 Standards for dealing process**

#### **2.3.1 Existing standards and processes or current revisions**

The whole process of personnel administration, the legal framework that regulates it and the necessary instruments for its dealings and control are now under study by all the public sector and by the MOH itself, within the process of modernization of the State, that leads and coordinates MIPLAN.

MIPLAN is elaborating a proposal for the creation of the human resources Administration System for the public sector of El Salvador. This is based in four fundamental axis of reform:

- a) The creation of a Civil Service Executive Management with responsibilities of controlling the management of the system and to start the move an Administration Career, with a new classification system and valuation of positions.
- b) The formation of a Civil Service National Counsel, as a consultive assistant on human resources Policies.
- c) The conversion of the Personnel Departments or Units into human resources Management at a Directorate.
- d) The inscription of the Civil Service Court to the Judicial Organ.

Since 1990, MOH has a Personnel Manual where the responsible instances of the personnel management policies for the institution organizes the sub-systems of selection and recruitment, personnel's valuation, appointments, inducement, registration, control and discipline are clearly established for the first time. On the other hand it allows the beginning of a decentralization process to the personnel department in the health's centers and regions for them to be able to implement the system of recruitment and personnel selection at their location.

There are two aspects that make the implementation of that regulation difficult. On one hand, the lack of resources the Personnel Division and the Personnel Departments distributed in the hospitals and regions have and the lack of continuous and updated Information System to provide input of the whole institution, with its different employee's categories. And on the other hand, the lack of personnel's training for this new outgoing process.

The new Management System of the human resources of the MOH, thought it is a step on the right track, may represent a consolidation of the present situation. As much as this does not reach the desired level the Personnel Manual could turn more rigid a structure of personnel less effective and efficient<sup>12</sup>.

The organization and the performance of the center of the MOH have slightly efficient patters of health care and use. Therefore, the instruments for the administration of personnel as manuals, classification of positions and performances, internal regulations, etc. developed on that base, take the risk of Regulate the existent deficiencies and therefore to block the changes in the performance of the centers.

A series of instruments to regulate a system of officer career for the workers of the institution with a seniority system of position and salaries are in a final stage. We have not had a direct access to these documents, but we consider that this proposal can have a major value for the institution's central and regional Administration, although not for those centers that provide direct services to the public<sup>13</sup>.

### 2.3.2 Principles to be considered in the personnel management revision

The health's centers should have a model of organization and performance in response to a pattern of efficient and effective attention for the public using the services. This requires from the personnel of administration to be flexible, less bureaucratic and rigid and mainly that the decisions the administrators that lead the centers made. The officer career of the Government's Central Administrations turn into a Power vest for the administrators at the operatives levels providing services to the users.

The formulations of policies for the personnel administration in the institutions should have as priority some elements that we consider important to consider:

- A restructure of the organization and performance of the health's centers, and not only to standardize the present structure.
- The usage of decentralized models of Administration and dealing, where the center level standardizes and supervises and the local administration providing services to the users take decisions according to their needs. This would require an major change in the organization culture.
- Emphasis should be given mainly to salary policies and other types of payments and motivations, and also to evaluation systems, auditing and supervision, which are the most critical points institutionally.
- The inclusion of aspects of organizational update such as leadership, personnel motivation, management training, handling disagreements, work organizations, task planning and responsibilities for junior and senior management levels, and criteria regarding flexibility on human resources administration.
- Direct participation and coordination when preparing the proposal of general modernization of the state enforced by the Ministry of Planning.

These standards are very important for the administration of the centers which provide health care, and they are made incompatible with the official careers of the public sectors central levels; the existing ones and the ones in the designing process.

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<sup>12</sup> Technical Report "*Sistema de Salud*" (health system), ANSAL, 1994.

<sup>13</sup> The proposal was gathered a posteriori of the writing of this report due to its large size it was not possible to analyze timely.

### 3 Productivity

All the people interviewed accept and acknowledge that the public sectors health workers have low productivity in health services, mainly in the medical sector.

Most of the productivity indexes are low, number of consultations, people attended, consultations per doctor/hours hired rate, numbers of deliveries, low percentages of bed usage, low coverage of priority programs as infant-mother care and nutritional complement.

Several factors contribute to this problem:

- the model of attention and the patterns for the use of services;
- low salaries and the absence of other systems of incentives and wages, particularly for the medical and nursing personnel;
- poor geographic distribution of resources, in the different types of centers and poor proportional distribution of the different types of human resources. For instance, the doctor/nurse/auxiliary nurse /technician ratio.
- little use of multidisciplinary teams;
- lack of financial and instrumental resources, devices for diagnosis, and medical supplies for timely delivery of services at the centers;
- weak administrative and management training of the personnel at the different regions and centers;
- large percentage of hospital and health center managers with clinical medicine formation but without hospital administration training;
- weakness in the evaluation, auditing and supervision systems.

Following is an analysis of some of these factors.

#### 3.1 The model of attention and the pattern for providing these services

The prevailing model of attention in the services is highly medicalized. While other human resources on health (such as nurses and technicians) have very little participation in a direct providing of the services. The solving of illness scene, particularly IRA, and the providing of some services on family planning are reserved exclusively to the medical team. This model seems to be very well accepted socially. For the MOH, the activities performed by nurses, technicians, etc. are attentions but not consultations. Thus, in 1992, out of the total of attentions registered, 73.7% were performed by doctors, 17.3% by nurses, auxiliaries and technicians; 4.5 % by promoters and 4.5% by empirical midwives. This difference in percentages remains unchanged for several years.

Table 23

PERCENTAGE OF AMBULATORY HEALTH CARE BY TYPE OF PERSONNEL  
MOH, 1987-1992

Type of Personnel	Percentage per year					
	1987	1988	1989	1990	1991	1992*
Doctor/Odontologist	72.0	73.1	75.3	75.5	76.3	73.7
Nurse/Mother-infant Technician	19.7	19.7	19.7	19.2	17.9	17.3
Health Promoters**	5.1	3.4	n/d	n/d	n/d	4.5
Trained Midwives	3.2	3.8	5.0	5.3	5.8	4.5

\* For 1992, data from the Memoir 1992/93, MOH.

\*\* Named health promoter since 1989, include health care for brief morbidity and health care on preventive programs.  
Source: MOH, *Public Health in Figures*, 1991.

According to Dr Molina's study (1991), the program of infant care, the total of enrollment registered nationally, were assisted 68.9% by doctors, 4.4% by Technicians 26.7% by nurses. Out of the children between 1-2 years old 76.3% were assisted by doctors, 2.7% by technicians and 21% by nurses. Comparing the health care in the hospitals and health centers it may be observed that the nurses and technicians carry out more health care and controls in the health centers, perhaps due to the concentration of doctors in the hospitals.

One of the main issues faced by the institutions in the health sector, is the improvement of coverage, which will be very difficult if the factors mentioned are not analyzed.

The ISSS as well as other institutions with health services for their employees (ANTEL, Teacher's Welfare, CEL, etc) has mainly a curative model of health care. This is centralized in hospitals and costly high technology and treatment units. The direct health care is given mainly by doctors and dentists.

The MOH centers usually render ambulatory health care in the morning. This generates health personnel concentration and users at that time, generating long waiting time, dissatisfaction for the quality of the services and low accessibility. The restricted schedule of external health care has generated in the last years the phenomenon of increase of ambulatory health care through emergency. Between 1985 and 1991, the increasing average in the Hospitals was 2.0% a year and in the Health centers is 4.5%. Not only was there a substantial increase in the absolute amounts, but also in the proportion respecting all ambulatory consultations. According to Gómez (1992), the urgent consultation in the Health Centers costs 67% more than external consultation and in the Hospitals it costs 85% more, which implies an increase in the costs on one hand and a necessary reduction of resources in other type of activities, compromising on the other hand timely health care in real emergencies<sup>14</sup>.

<sup>14</sup> Fiedler, Gómez and Bertrand. *Antecedentes y Situación del Sector Salud en El Salvador, Documento informativo para la Evaluación propuesta del sector Salud* (Background and situation in the health sector in El Salvador, report for the evaluation of the health sector proposed) Annex 1, pg. 40-41, 1993.

The schedule of ambulatory health care in the hospitals and health centered needs of the medical sector which, on account of their having to work in 2 or more public establishments aside from their private practice.

Most of the consultation in the public sector are in the morning and the private sector serve in the afternoon in individual offices. This may also be the reason for the latest increase in the number of medical positions in the with only 2 hours a day, in relation to other positions with more hours a day hired.

The hiring system of Doctors, dentists and other professionals for 2 and 4 hours a day is also a frequent standard in the ISSS and in other institutions with medical insurance such as ANTE, ANDA, Military Health, etc.

### 3.2 Some productivity indexes

At MOH the total of medical consultations registered in 1992 was 2,905,848, an average of 0.68/habitant. This figure has remained low for several years. This means that the majority of the population has an average possibility of being attended by a doctor every two years, and in some areas of lower coverage only once every five years. So in:

- 1987 it reached 0.62 consultation/inhabitant year
- 1988 it reached 0.61 consultation/inhabitant year
- 1989 it reached 0.57 consultation/inhabitant year (period of increase of the armed conflict)
- 1990 it reached 0.62 consultation/inhabitant year
- 1991 it reached 0.66 consultation/inhabitant year

If we consider that the centers with inward facilities, the external medical consultations are more important at the Hospitals than at the Health Centers. According to a study by Dr. Molina (1991), the external consultation at hospitals was an average of 5,856.3 daily, out of which 69.1% were in hospitals and 30.9% at Health Centers. Out of the 14 hospitals working, 5 made 40.6% of the total consultations of the hospitals of the institution (San Miguel, Rosales, Bloom, Santa Ana and Santa Tecla). Out of the 15 Health Centers, 8 exceeded the daily average of 120.7 (Metapán, Chalchuapa, Nueva Concepción, San Bartolo, Cojutepeque, Sensuntepeque, Ilobasco and Santiago de Maria).

The distribution of doctors show a concentration in the hospitals compared to health centers. On the other hand, there has been great increase in recent years, health care in Health Centers. Units and Posts rendered by non medical personnel (nurses, auxiliary nurses, technicians and promoters)

Unpublished data from the Labor Force (MOH/UES/PAHO), show a great percentage of MOH's establishments lacking full time medical personnel. In 100% of the centers in the metropolitan region have a full time doctor whereas the Paracentral has it only in 28.57% of its centers and the Eastern Region in 41.17% of establishments.

Table 24

MOH CENTERS WITH AND WITHOUT DOCTOR BY SANITARY REGIONS, JUNE, 1992\*

Regions	With Doctor	%	Without Doctor**	%	Total	%
Western	44	57.14	33	42.86	77	100.00
Central	29	59.18	20	40.82	49	100.00
Metropol.	30	100.0			30	100.00
Paracentral	14	28.57	35	71.43	49	100.00
Eastern	49	41.17	70	58.83	119	100.00
Totals	166	51.23	158	48.77	324	100.00

\* Unpublished data, its interpretation is solely responsibility of the author

\*\* There is no full time doctor. One or two visits a week from the rural mobil unit doctor.

Source: *Determinación de la Fuerza de Trabajo en el Sector Público de El Salvador* [determining the labor force in the public sector of ES] (MOH, UES, PAHO). Data gathered in the Personnel Unit in the Sanitary Regions or the MOH. 1992.

According to data gathered from Dr. Molina's study (1991), the Table shows that the highest rate of doctors in the hospitals is higher in relation to the doctors in the four basic clinics (general, surgery, pediatrics and gynecology and Obstetrics). For instance, there were 4.6 specialists for each pediatrician and 2.7 specialist for each gynecologist. Out of the 15 Health centers 3 had no general Doctors, 5 establishments did not have surgeons, 4 establishments did not have gynecology and Obstetrics, and 6 establishments did not have pediatricians.

Table 25

## DISTRIBUTION OF DOCTORS AND DENTISTS IN THE MEDICAL SERVICES OF MOH, 1991

Doctors	Total	Hospitals		Health's centers	
		No.	%	No.	%
Generals	204	159	77.9	45	22.1
Surgeons	51	42	82.1	9	17.9
Gynecologists	113	98	86.7	15	13.3
Pediatrics	66	57	86.4	9	13.6
Specialists	305	299	98.0	6	2.0
Orthopedics	33	33	100.0		
Dentists	58	35	60.3	23	39.7
Residents	331	321	97.0	10	3.0
Social Services	112	18	16.1	94	83.9

Source: Molina, *Evaluación de metas asistenciales y análisis de actividades de consulta externa, servicios de apoyo y hospitalización*, 1991. (Evaluation of health care goals and analysis of external consultation's activities, hospitalization and support services), 1991.

According to the same study, the medical consultation was under the standard of 6 consultations/hour in most of the services. The hospital of Ahuachapán was close to the standard with 5.7 consultations per doctor/hour and the hospitals with the lowest averages were Rosales with 0.5 medical consultations per hired doctor/hour and Santa Ana with 1.2 consultations. Regarding the residents and doctors in social services calculated according to the hired hours, it was found that as an average, each resident gives 0.5 consultations per hired hour in the hospitals and 1.3 in the health centers. For the doctors in Social services the average was 0.9 medical consultations per medical hired hour in the hospitals and 1.6 in the health centers.

It would be useful to research on the relationship between these levels of productivity in the ambulatory health care and the new labor relationship of doctors with contracts of 2 and 4 hours a day who are a large proportion in the institution. We can suppose that the productivity is less in the contracts of 2 and 4 hours than the ones of full time.

In the ISSS, the structure of external consultation in 1992 was 47% for general medicine, 37% for specialties and 16% for emergencies, with a high proportion of specialized consultations above average oscillating between 12 and 16%. At institutional level is important to investigate this phenomenon for the privatized attention program of services in the specialties that may be related to these figures.

The institutional standard for general medical consultation is 5.5 patients per doctor/hour and 4 consultations for the specialists. The averages per doctor/hour hired in 1992 and 1993 (Jan-Jun), can be seen in Table 26, where we can see an increase of consultations per hired hours between these two years. If we compare both

institutions, MOH and ISSS we can see that ISSS has better averages in the ambulatory consultation, and many of the people interviewed stated that this can be attributed to the differences in salary between both institutions and to a strategy of improved supervision and control in the ISSS in later years (medical auditors, control of performance, etc.). There is little information on the quality of benefits in both institutions, but the preference of the users for the ambulatory consultation in private services recorded in the studies of demand indicate that the level of patient's satisfaction is not high in the public services.

Table 26

CONSULTATIONS/DOCTOR/HOURS CONTRACTED ACCORDING TO REGIONS, ISSS, 1992-1993\*  
EXTERNAL MEDICAL CONSULTATION, GENERAL MEDICINE

Regions	Doctor/Hours Worked		Consult.-Doctor/Hour	
	1992	1993	1992	1993
Metropolitan	279,870	145,416	4.1	5.0
Central	56,766	30,376	5.3	5.3
Eastern	54,979	27,335	4.2	5.1
Western	71,195	39,363	4.9	5.6
Total	463,776	241,890	4.4	5.3

\* Data to Jun 1993.

Source: ISSS, *Estadísticas de Salud* (Health' Statistics), 1992/93.

Table 27

CONSULT HOURS/DOCTORS HIRED ACCORDING REGIONS, ISSS, 1992-1993\*  
EXTERNAL MEDICAL CONSULT, SPECIALTIES

Regions	Hours Doctor Worked		Consult/hour Doctor	
	1992	1993	1992	1993
Metropolitan	155,278	81,475	4.1	3.7
Central	8,657	3,428	5.5	5.3
Eastern	21,939	10,038	3.5	3.8
Western	29,469	17,020	4.7	4.3
Total	215,343	111,961	4.2	3.8

\* Data to june of 1993.

Source: ISSS, *Health Statistics 1992/93*.

### 3.3 Productivity in hospital health care

Related to hospital health care in 1991 the MOH had 4,355 beds for acute patients; the occupancy percentage in the country was 58.1%; with important regional variations; 80.2% in the Metropolitan Area and 47.8% in the Paracentral Area and 49.2% in the Eastern Area. According to Melina's study (1991), from the total of beds in the 4 basic areas, 82% were in the hospitals and 18% in Health Centers.

Out of the discharges made 80.3 were in hospitals and 19.7 in Health Centers. The percentage of discharges that belonged to the 4 basic areas was between 90 and 100%.

The Pneumonic Hospital, Bloom Hospital, Maternity Hospital and Rosales Hospital had occupation percentages that were equal or higher than 80%. The Santa Tecla, Psychiatric and San Miguel Hospitals between the 70 and 80%. The rest of the hospitals were between 50 and 60%, Usulután has 37%.

From Health Centers, only Nueva Concepción and San Bartolo had between 55 and 65%; the rest had percentages between 23 and 50%.

One of the most important aspects in the hospitalization area is the coverage of the institutional delivery, that at the country level, is alarmingly low.

The low coverage of the programs generally, as the mother-infant care, immunizations, nutritional complement and other, are indirect elements that also measure the productivity of the human resources in the establishment. In the next lines are showed some illustrative data taken from the study of Molina 1991 already quoted.

The coverage of the people assisted for the first time, was 33.2% of the target population, that means 85% of the total population of the country.

From the total of the maternal inscriptions and prenatal subsequent controls, there was a total of 40,434 protected mothers, that corresponded to a coverage of 15.6% of the pregnant women estimated in the country for that year.

From the people assisted for first time in odontology the coverage was 3.7% of the total population of the country and 3.5% for the groups of 15 years old and up. In the sub-program for children the coverage was 4.6% for that age group. In the maternal program the coverage corresponds to 15.6% of the pregnant women group.

### 3.4 Discussions and proposals

The analysis of strategies to improve the productivity in the health establishments requires standards to be applied to the organization and its performance, and to standards directly related to the administration of the health personnel.

- a) The model of attention centered in the health care rendered by doctors and should be modified gradually and then incorporate other human resources, mainly in the priority programs: mother-infant health, diagnostic and treatment of some common pathologies. This implies prioritized the of the nursing personnel, the training of the empirical midwives, the of promoters of health and of the auxiliaries of the rural obstetrics to extend the coverage and increase the production in the first health care level at health units in the rural areas.

- 
- b) Any plan that pretends to improve the distribution of the human resources to less developed zones and with a few access, has to contemplate incentive systems and wages improvements. For example, in the case of the young doctors we planned the possibility of residences in family or rural medicine which would allow the application for specialty training scholarship after some years of residence in rural areas.
  - c) Use pattern of collective incentives in the Hospitals and Health Centers, for example systems of medical auditory every 6 months in the different departments of a hospital and give a salary increase incentive to the group which did the best work in the institution. These experiences demand the inclusion of all the personnel of the group, to develop concepts of total quality.
  - d) To implement research on the performance of the centers, for example, to find out the level of satisfaction of the users, peak schedules, waiting time, warmth of health care, etc.
  - e) To enlarge the schedule of undertaking of general and full time doctors to contract schedules of 6 or 8 hours. This improves the performance of personnel and improves the institutional identification.

All this strategies require great flexibility in the administration of human resources, in order to be able to complement them with official carriers from the national central administration.

## **V REGISTER AND CONTROL OF HEALTH PROFESSIONS**

The process of registration, authorization and control of the professional practice in El Salvador is now competence of the Council of Public Health and the Vigilance Boards of the Professions. This is established by the National Constitution in its Art. 68 and the Health Code in its Title 1.

In spite of the legal dispositions in force, it can be said that the country does not have a system to carry out the function of authorizing and controlling the professional exercise.

The weak power of control of the actual legal actions makes the process to be more like a bureaucratic process to make the registration of professionals possible.

The analysis of the authorization and controlling process, should complement the role and attributions of all the institutions involved. Thus the universities should revise the formation and authorization of specialists, that now, is not regulated in the country; and also the Council and the Boards should revise the whole process of authorization and control that competes them by law, but which they carry out very weakly. Besides, the societies and professional scientific associations in the country are claiming a space of participation to discuss the changes that should take place on this subject. They ask the authorities the publishing of a law that establishes the Collegiate Registration as an organization in charge of the control of the professional practice.

Therefore, the participation of all these social actors should be very important in the discussions that take place in the future to study the changes that should be introduced to improve the actual conditions.

### **1 The Superior Council of Public Health and the Vigilance Boards**

The Superior Council of Public Health is a corporation of Public Right, with legal capacity to contract rights and acquire obligations and to join in actions, and both the Council and the Vigilance Boards are autonomous in their functions and resolutions<sup>15</sup>.

The council has 14 members, a president appointed by the executive organ a secretary appointed by the executive organ and 3 representatives elected within its members for each of the following professions: Doctors, Dentists, Chemist-Pharmacist and a Veterinarian. The vigilance boards have 5 members, that are academies of the respective professions, and that in the first session appoint a President and a Secretary. Each of them has a substitute member.

The election of Council Members as the Vigilance Boards, are carried out in General Professional Assemblies of each corporation, especially convoked by the Superior Council of Public Health. The members are elected by vote and remain 2 years in their positions and can not be reelected, with the exception of the substitutes.

At the present there are 7 Vigilance Boards: Doctors, Chemists, Dentists, Veterinarians, Psychologists, Nurses and Lic. in Clinic Laboratory. Some Boards are very old, as the Chemists's which has been operating for 100 years already and other recent ones like the one of Nursery, created in 1992.

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<sup>15</sup> Health Code, Art. 7.

The Vigilance Board of Nursery, Clinic Laboratory and Psychology do not have any representatives in the Council of Public Health, because the Constitution states the composition of the same and does not allow the addition of other representatives who are not members of the medical, odontologist, chemical-pharmacist and veterinarian medical journals.

What the Boards do is to keep a chronological record of the registered and authorized professionals since they were created up to date. The records are manual, and do not have a system to update them and are incomplete because they do not have 100% of professionals registered.

The Boards are autonomous organizations, but they depend financially from the Council of Public Health. Each Board has its own rules for the process of authorization. They are simple and do not have technical rigorosity, which indicates that the labor the Boards do is only a registering and authorization process.

The relationship between the Council of Public Health and the MOH is only financial. The budget of Council is included in the MOH budget. At present, a coordination between the two institutions is planned, but that has been difficult up to now.

There are various aspects that do not permit the effectiveness of these organizations. The most important are:

*A deficient and not updated legal framework*

The current legal aspect is not updated and do not convey real attributions for the professional control. If a professional is fined or his practice is banned by the Board, this one makes use of other judicial instances or simply does not obey the fines of the Board. No cases of professionals who have been banned or fined due to mal practice in the professional practice.

*A Law of Practice of Professions* is necessary to establish clearly all the aspects that have to be regulated; the mechanisms of registering and authorization of professionals and specialists; the control and fine for bad professional practice, and the organizations that will carry out that control and its attributions and functions.

*Insufficient financing*

This aspect is determining, which results in the lack of human resources, of infrastructure and of support to its performance. The Council of Health has the same amount of employees since it was created, most of them administrative personal. By 17 administrative functionary, there are 2 chemical professionals and a proper one. Each Vigilance Board has 1 or 2 inspectors for all the country, most of the personal needs training, incentive systems and better salary retribution

*Weak technical and normative capacity*

These aspects are important, knowing that the attributions of the Council also include various aspects, besides the control of professional practice. For example the control and authorization of health establishments (pharmacies, medicine factories, clinical-biological laboratories, hospitals, sanatoriums, clinics, pharmaceutical industries, and any other establishments that provides health service to the population). Besides this, it authorizes the consumption, fabrication, importation and advertizing of all the commercialized pharmaceutical specialties in the country.

*Little credibility on the dealings and the control capacity in the Council and the Boards.*

All the information system is deficient, there are no procedure and functioning laws. The bureaucratic procedures are slow and many times, despite the recommendations of the Vigilance Boards, no fine decisions are taken by the Council, which causes discredit for both institutions.

### 1.1 Discussion and proposals

- a) The modernization of the organization and the performance of the two organizations responsible for the registration and control of professional practice in the country are highly necessary. These changes require primarily a deep revision of the legal framework and the up to date of the same.
- b) The discussion, current in the country, about the need of the Schooling as the most adequate to exercise control of the professional practice, has to be analyzed, because this represents the predisposition of the professionals to be registered and controlled.

For all this, it is necessary to consider two aspects: first, for the real changes to take place in the professional practice control system, the current legal aspect has to be modified, even creating new laws, like the Professions Practice Law. Therefore, the permanence of the Council and the Vigilance Boards, as well as the creation of Schools, need the revision of the constitutional aspect and the Health Code. On the second hand, it is important to understand that, for any of the two possible instances of control<sup>16</sup> function efficiently, they require:

- political support to restructure of its organization
- trained human resources in the technical-normative;
- to update the current rules that need it.

Likewise, it is necessary that both institutions have an obligatory system for all the professionals, so that they can really fulfill a control and regulative action.

Finally, financial support is required for the implementation of the reforms and the creation of financing sources that allow to support the functioning of the system in a permanent way.

Considering these two aspects, the decision related to any of the two control and regulation instances has to be valid. The negotiations and accords that can be established between the different actors that are now discussing the problem of the salvadoran society will result from the election.

The experience in other countries shows that independently from the type of institution responsible for the process of control (State Organizations, Corporations, Journals), the important aspect is the regulative legal aspect that supports them, the requisite of the registration and the credibility of them. These are determining factors for the control and regulation process to function.

- c) Another important element, that can be seen in the most modern institutions, is the incorporation of representatives of the users of the health service, so that the professionals protecting the corporation can be avoided.

This makes the users interests to be protected and at the same time removes the monopoly of the decision to the private sector, that sometimes loses objectivity when judging the pairs.

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<sup>16</sup> Both instances are: the maintenance of the existing institutions (Council and Vigilance Boards) or creation of Professional Schools and transference of the control to these organisms.

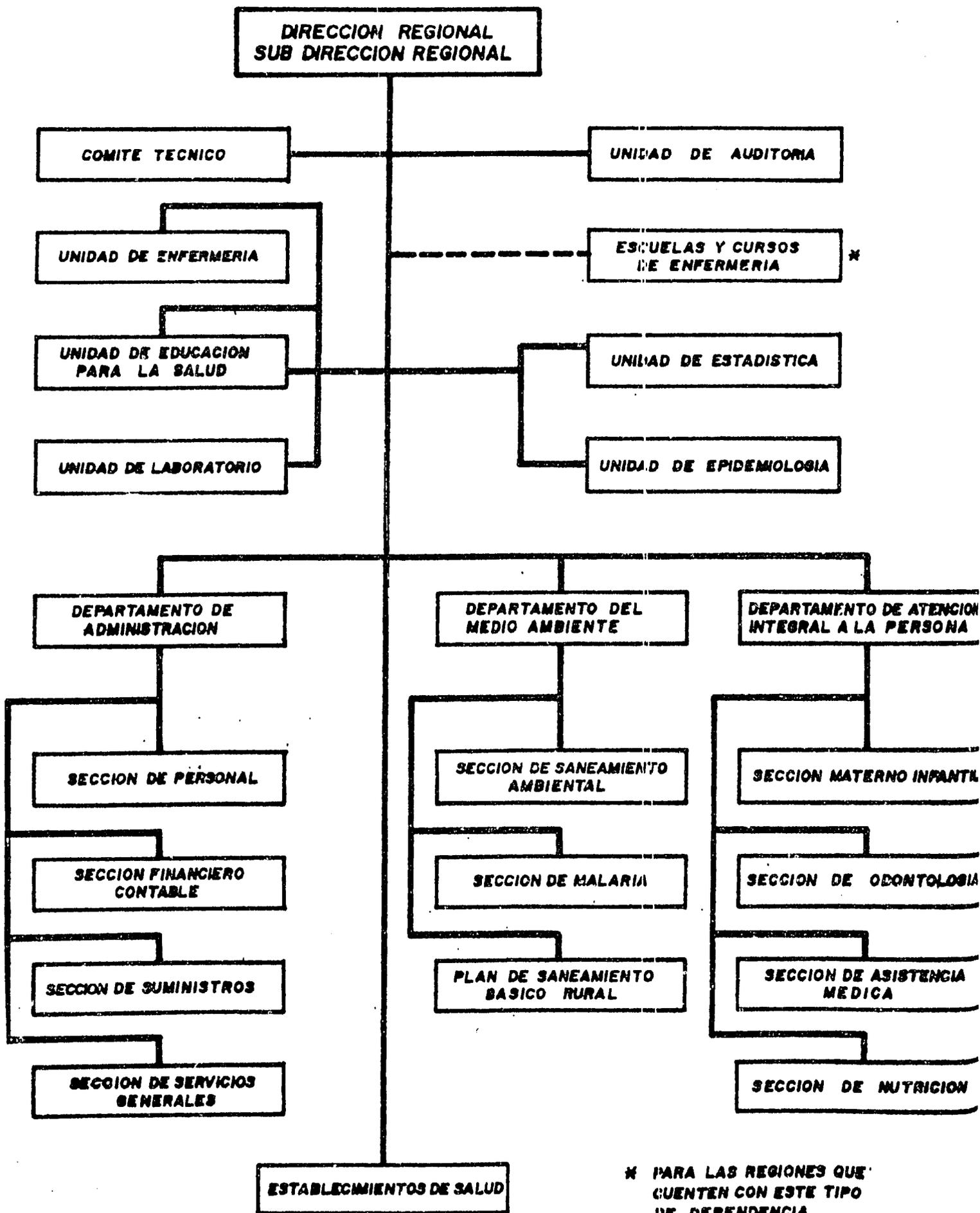
- d) The financing has to be autonomous and independent from the MOH's budget. It is recommendable to establish a system of tariffs for the records and authorizations to make the sustainability of the institution possible.

# ANNEXES

# ESTRUCTURA ORGANIZACIONAL DE LAS DIRECCIONES REGIONALES

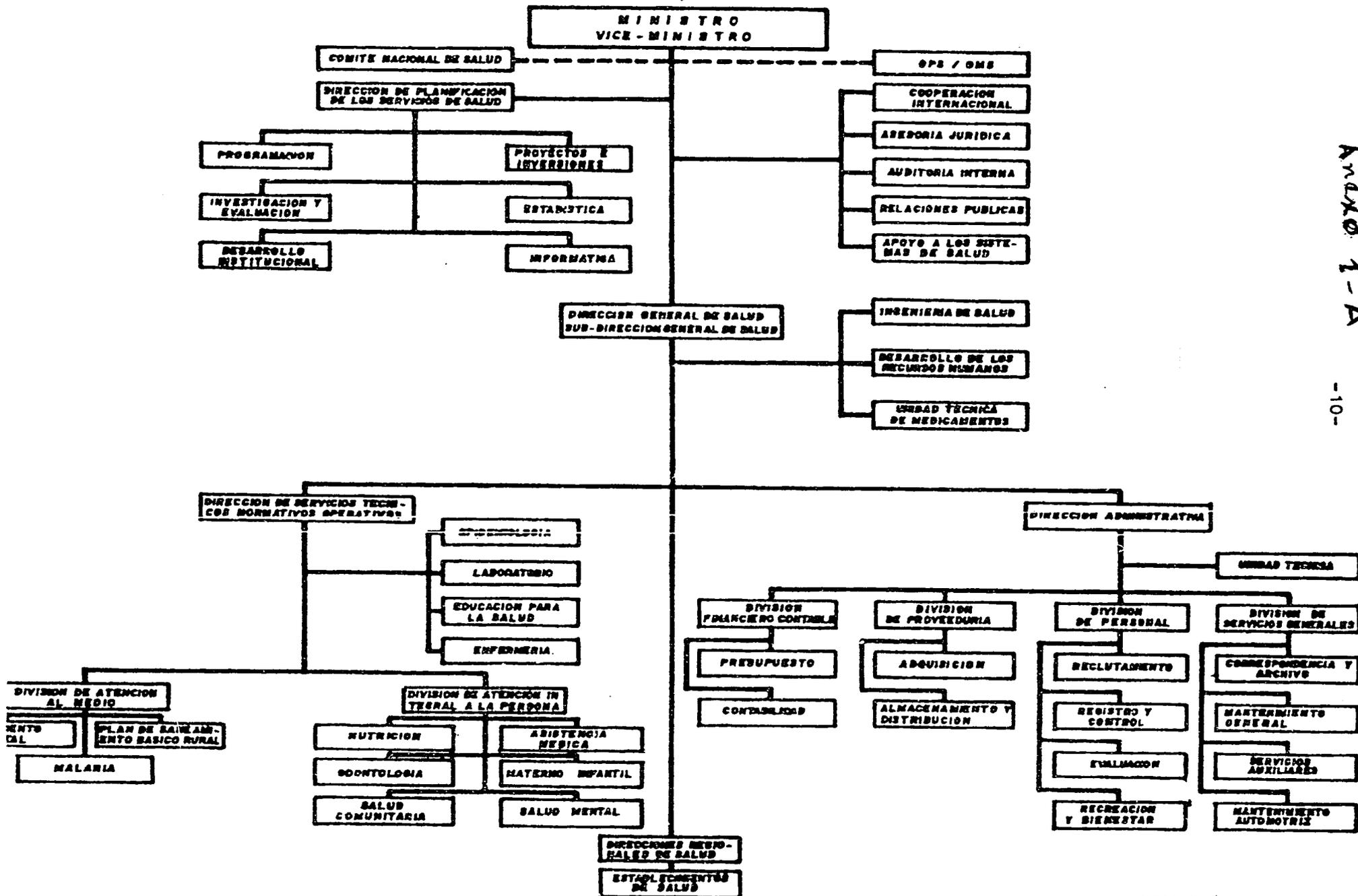
Anexo 1

65



\* PARA LAS REGIONES QUE CUENTEN CON ESTE TIPO DE DEPENDENCIA

# ESTRUCTURA ORGANIZACIONAL DEL MINISTERIO DE SALUD PUBLICA Y ASISTENCIA SOCIAL



ANEXO 1-A

JUN - 99/

66

## Annex 2

DISTRIBUTION OF DOCTORS ACCORDING AREAS AND SPECIALTIES  
EL SALVADOR, 1993

Areas/Department	Specialty	No. of Doctors
Western Area		
Dept. Ahuachapán	General Doctor	43
	Pediatrician	1
	Gynecologist-Obst.	1
	Sub-total Dept.	45
Dept. Santa Ana	General Doctor	81
	Internal Medicine	18
	Pediatrician	15
	Gynecologist-Obst.	10
	Other	6
	Sub-total Dept.	130
Dept. Sonsonate	General Doctor	96
	Pediatrician	13
	Gynecologist-Obst.	3
	Internal Medicine	5
	Otorhinolaryngologist	1
	Sub-total Dept.	118
Central Area		
Dept. Chalatenango	General Doctor	19
	Sub-total Dept.	19
Dept. La Libertad	General Doctor	68
	Pediatrician	32
	Gynecologist-Obst.	7
	Internal Medicine	5
	Orthopedics	1
	Sub-total Dept.	113

Source: Records from a commercial medical laboratory in El Salvador, 1993.

## Annex 2-A

DISTRIBUTION OF DOCTORS ACCORDING AREAS AND SPECIALTIES  
EL SALVADOR, 1993

Areas/Department	Specialties	No. of Doctors
Metropolitan Area		
Dept. San Salvador	General Doctor	579
	Gynecologist-Obst.	209
	Pediatrician	208
	Internal Medicine	133
	Orthopedist	28
	Other	114
	Sub-total Dept.	1,271
Paracentral Area		
Dept. Cuscatlán	General Doctor	14
	Pediatrician	6
	Internal Medicine	1
	Gynecologist-Obst.	1
	Sub-total Dept.	22
Dept. La Paz	General Doctor	30
	Pediatrician	2
	Gynecologist-Obst.	2
	Internal Medicine	2
	Other	1
	Sub-total Dept.	37
Dept. Cabañas	General Doctor	10
	Pediatrician	7
	Sub-total Dept.	17
Dept. San Vicente	General Doctor	6
	Pediatrician	4
	Gynecologist-Obst.	2
	Other	1
	Sub-total Dept.	13

Source: Records from a commercial medical laboratory in El Salvador, 1993.

## Annex 2-B

DISTRIBUTION OF DOCTORS ACCORDING AREAS AND SPECIALTIES  
EL SALVADOR, 1993

Areas/Departments	Specialty	No. of Doctors
East Area		
Dept. Usulután	General Doctor	59
	Gynecologist-Obst.	2
	Surgeon	1
	Pediatrician	1
	Sub-total Dept.	63
Dept. San Miguel	General Doctor	116
	Pediatrician	23
	Internal Medicine	17
	Gynecologist-Obst.	17
	Orthopedist	7
	Surgeon	6
	Other	13
	Sub-total Dept.	199
Dept. Morazán	General Doctor	4
	Pediatrician	1
	Sub-total Dept.	5
Dept. La Unión	General Doctor	33
	Sub-total Dept.	33

Source: Records from a commercial medicine laboratory, El Salvador, 1993.

### Annex 3

## PROCESS OF REVISING THE PRELIMINARY REPORTS

### INTRODUCTION

The Analysis of the health sector in El Salvador (ANSAL) was conceived as a part of the efforts made to accelerate the economic and social development of the country. The analysis of the organization and functions of the institutions in the sector must come to the identification of obstacles that, if they are overcome, make the improvement of the sector and health conditions, and welfare of the population possible.

Generally, the projects that tend to accelerate the social and economic development are conceived and designed by experts in the thematic area contained by the project. These contribute with their professional knowledge and their experience to identify the problem, selecting the possible solutions and designing the project components. In this project the exchange of opinions is generally restricted to people that are in leadership positions in the Sector and the society. The potential user and the personnel directly involved in the production of goods or the service analyzed are not frequently included in this consultation process. The resulting projects are not benefitted from the cultural perceptions and from the accumulated experience for the ones who are not at the battle front and therefore, can be seen as foreign by the same benefitted community.

### PROCEDURES

The reference terms of ANSAL established a wide consultation process that avoid the limitation pointed out in the introduction. In these it is established that the participative process has similar transcendence to the content of the analysis. To obtain this it was indicated that the preliminary results of the ANSAL work, collected in nine drafts of Technical Reports, were widely distributed to institutions and people of the health sector to be checked and commented. This approach is part of a participative facing of the efforts of development. To accomplish with this mandate a strategy that has the next components was designed:

- 1) *Written comments.* Some 100 institutions and people with experience in the health services operation were invited to formulate written comments on:
  - the truthfulness and integrity of the data showed;
  - the logic of the analysis used;
  - the feasibility of the recommendations formulated.
- 2) *Meetings with health personnel and people involved in the community.* Ten meetings in different places of the county were done, to cover most of the territory, and health personnel with different levels of training were invited (promoters, empirical wives, doctors and pharmacists), people involved in the communities helped (promoters, empirical wives, doctors and pharmacists), people involved in the communities served (Mayors, members of support commissions of MOH establishments or patronage, members of community education associations or schools EDUCO and Local community leaders) and to regional and local officers and authorities of the MOH.
- 3) *Workshops with Sector Leaders.* There were two working days with public organization leaders related to the social sectors and to health (MOH, MIPLAN, AND ISSS) with directors of NGOs, active in health and the Medical School and health area leaders of different political parties. The UES Medicine Faculty Senior was invited to participate but he was not present.

## Results

The participation was intense and beneficial to validate or discard the preliminary results of ANSAL. Written comments were sent to 30 institutions, including the principal organizations of the public sector (MOH and MIPLAN) and the most important NGOs.

Approximately 250 persons participated in the community meetings representing the three organizations previously mentioned. From the three groups, the community leaders were the ones who had less participation.

Twelve of the thirteen invited leaders participated in the working days; the ones who did so, stayed during the whole practice.

The comments were similar in relation to the main problems of the sector and to the most effective ways to face them. Except for the opinions of the technical central positions of MOH (Programs directors and Regional Directors and Departments) whom expressed objections to some of the findings of ANSAL, The specifics comments are in each of the Technical Reports.

## RECEIVED WRITTEN COMMENTS

As mentioned in the Procedures summary, the basis for this report, as well as other ANSAL<sup>17</sup> technical reports, had an wide distribution aiming to obtain answers by February 18, 1994. As a result, written comments were received from people as well from institutions of the public and private sectors. From the different communications by ANSAL, the following have a direct relation with the subject **human resources**:

In the human resources area we have received written comments of the following Institutions.

MOH: Ministry of public health and Social Welfare (February 17, 1994) Luis Carlos Gómez:

Consultant: Clapp & Mayne (December 15, 1993)

FUSADES: Salvadoran Foundation for Social and Economic Development

APROCSAL: Salvadoran Communal Promoters Association (February 18, 1994)

CDC: Consumer Defense Center (February 18, 1994)

FUNDE: National Foundation of Development (February 18, 1994)

PROVIDA: Humanitarian Health care Association (February 18, 1994)

Santa Monica Clinic: (February 18, 1994)

PROSAMI: Mother Care and infant Supervision Project

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<sup>17</sup> These are: Health Situation, Mother-Infant care Situation, Chemical Products, Performance and Organization of the Health System, Health Services Financing, Human Resources in Health, Infrastructure and Inversion of the Health Sector, Perception and Community Demand of Health; Environmental Health.

Vigilance Board of Nursing Profession (February 28, 1994)

Urban School Center V. de Escalón #2 (February 28, 1994)

Worldwide Nutrition Program (February 24, 1994)

IPSA: Armed Forces Social Planning Institute (March 1, 1994)

*Luis Carlos Gómez (December 15, 1994)*

The observations and comments had been beneficial and pertinent and helped to come up with a better technical structure of the contents of the report. Also it has allowed the revision of new sources of information.

In relation to the comment on quality problems in the formation of professionals (doctors, dentists, nurses) we haven't include the subject, because we do not have in the country a study that certifies this problem. Even though this is an anxiety manifested by many of the interviewed we do not have enough information. We considered dangerous point out conclusions just with the analysis of the university curricula. Other comments had been the necessity of national indicators on the availability of different types of human resources for sub-sectors and total and for the production of these resources, to discuss in general words about the gap between requisitions, availability and possibility in the medium and long term.

Relatively, we consider that not enough information exist in all the institutions of the sector to establish these indicators.

This job have not had the objective of obtain primary information, but the revision of existent documentation, we agree in the importance of these estimations to the planning, mainly when is necessary to show structural changes to the loans services model. For that reason, also, we'll keep on the report the realization of a human resources National Census, that allows to obtain the needed information.

In relation to another comment, about the subject of productivity and incentive salaries, we agree that these are important reasons for the low services productivity.

The proposal of introducing new models that will favor the decentralization of the services (transference at community levels, the dealing and control of resources) along with the salary and incentive policies will help to improve this situation.

We have not include documentation related to the implementation of a Public health school of the Central American University (UCA) due to lack of time.

*MOH (February 17)*

The comments support many of the recommendations and conclusions presented in this document. On the other hand, some observations are outstanding such as the feasibility of some proposals as the ones related to the transference of nursing schools, the information sector and the implementation of rural or familiar medical specialties

In relation to these points, I agree with the difficulties in spite of its implementation, but I consider that, even though the difficulties are very important, its need to make important and real changes in the human resources policies at national level, (that includes the epidemiologic and demographic profile of the country) it urgently

requires its consideration and analysis in order to find timely and defensible strategies at a technical as well as political and financial levels.

In relation to the comments about nursing, rural obstetrics auxiliary, technologists, we've incorporated these suggestions to the final issue of the documents.

We would like to point out that, MOH's human resources department has continuously cooperated since the beginning of the project for which the author is grateful.

APROCSAL, CDC, FUNDE, PROVIDA, SANTA MARIA CLINIC (February 18, 1994) In relation to Chapter I, where it is showed that the ISSS should reduce its bureaucracies, increase its efficiency, gain a major availability of resources and change the tendency to invest in high technology in counter position to the prevailing epidemiologic profile, is suggested also, to add to the proposal the necessity to unify all the social security systems (ISSS, ANDA, CEL, WB, ANTEL, and others) into one whole institution.

We fully agree with this pose, also presented in the report on Health Services and ANSAL's final proposal.

In chapter II, stands out the non inclusion of the health promoters in the job market, posing this, as a fundamental problem to be analyzed.

Other posed considerations are, that the promoters of the NOG's have low salary, some times, only between 200 and 400 colones and this forces them to use a good amount of their time in other labors to secure their families subsistence which produces a sub-use of important resources and it contribute to a high rate of desertion in spite of its high efficiency and motivation.

We fully agree with the posed observations, unfortunately we have not finish the compilation of information on the distribution and quality of promoters by institutions and its geographic regions, and therefore we do not consider it pertinent to include it in the report.

This will be an urgent task to perform in order to estimate the necessities of the resources in the next 5 to 10 years, we have decided to choose the posed strategies as human resources policies at national level. The same explanation is considered pertinent to the subject of incentives and salary.

#### *FUSADES*

It points out that in the chapter on Job Market there is no break down among the different institutions, excepting MOH, in that way the indicators of the doctors/inhabitant, nurses/inhabitant, etc., can reflect the situation of all the different institutions of the sector and the sector could be appreciated as a whole. This will allow recommendations, specially for the public sector.

In relation to these comments, the same chapter states that such information is not available in the sector. Each institution knows the numbers of it resources or some times of work positions, but in various cases, it's unknown the number of professionals that though established at a geographic level works simultaneously in two or more institutions (multi-job level) moreover, the records of some institutions are not reliable.

The effort of applying to a local chemical lab, is made with the purpose of palliate this difficulty which we know that this source of information has a lack of the needed scientist rigorousness.

Thereby, the proposal on human resources National Census to have real data that will allow the planning of the sector.

*WORLDWIDE NUTRITION PROGRAM (February 24, 1994)*

Shares the thought that the MOH does not play an important ruling role in the formation of human resources in health and this is one of the reason why up to date the needed human resources have not been formed to solve the main health's problems of the people.

furthermore, it is necessary to emphasize the necessity of MOH's coordination with the promoting institutions.

*IPSFA (May 1st, 1994)*

The comments are intended to emphasize the need for a national coordination among institutions and employers.

Moreover, they emphasize the need for salary policies and incentives to improve the efficiency of health personnel to make their moving to rural areas possible.

Otherwise, we want to make clear that, the data referring to human resources of the Military Sanitation have not been obtained, despite of frequent efforts with the authorities, to recollect it.

It has not been said that the sector is not important, but its inclusion in the sector analysis is.

*PROSAMI*

The weakness of the report on human resources that work with or have been trained in the NGOs is outstanding and it coincides in the proposals to accomplish the role of health promoters, because PROSAMI is working successfully at that.

It mentions the PROSAMI experience in the training of doctors and public health technicians (2 months of training, practical experience, continuous and supervised education)

*VIGILANCE BOARD (February 28, 1994)*

We coincide in the following posed comments:

- 1) Related to the transference of nursing schools to the Ministry of Education, the MOH has 70 years of experience in nurse, but not the Ministry of Education; so, the total and precipitate transference, could be dangerous to allow the continuity of its functioning with the levels reached until today.
- 2) Related with the reference about the rural *obstetrics* technician, it has been incorporated to the final report.
- 3) *Moreover* the MOH also trains nurses at a superior technological level in the Nursing School in Santa Ana, which recovered its program in 1992.
- 4) The Sanitary Training School, despite of being responsible of carrying out formative courses, some year ago has been dedicating more to the coordination of seminary and workshops with 1 to 3 days of duration. As the *among countries* scholarships program, it is suggested to check it because it is sustained in an improvisation basis.

- 5) As the registration, control of the professional practice, it is necessary to improve the vigilance of quality of the human resource that is being formed. An *imperious* need of a coordination between the Education Ministry and the MOH, and more support to the Vigilance Boards.

As the self-financing proposal of the Health Council and Vigilance Boards, it is suggested to be done progressively, because without a budget from the State, at the present it would be hard to reorganize it.

*URBAN SCHOOL CONCHA V. DE ESCALON #2 (February 8, 1994)*

The comments mainly will be about the problems in the document edition.

*MEETINGS WITH HEALTH PERSONNEL AND REPRESENTATIVES FROM THE COMMUNITY*

Ten meetings were held with health personnel and representatives from the community, as follows:

07-02-94	San Salvador	San Salvador
09-02-94	Chalatenango	Sensuntepeque
09-02-94	San Miguel	San Francisco Morazán
14-02-94	Sonsonate	Usulután
16-02-94	Santa Ana	Santa Ana

In these meetings were showed the findings, conclusions and recommendations from ANSAL, about 4 thematic areas: Health Situation, Health Services, human resources and Financing. The comments are:

*HUMAN RESOURCES*

*Training and Training:*

- Promoting the of nurses and nursing auxiliaries with higher capacitation. There are problems of lack of training to the graduates from some private schools. The MOH should check the curriculums of these schools (San Miguel).
- Promote the of more health teachers (San Miguel).
- Give more training to the promoters and midwives. There are some promoters who know less and some old midwives who need more training. This training has to be permanent; recycling (Sonsonate).
- The MOH has to try to give training in the location where the officer works or at least near where he is and not to be moving him to San Salvador for any training and leave the service alone for several days. In cases where there is only one doctor in the Unity, try to send a substitute meanwhile (Sonsonate).

- The Universities have to be called to these meetings (ANSAL's) to modify the Pensum of these and adapt it to the reality that will face the doctor in the rural area (Sensuntepeque).
- There is no trained personnel to decentralize, and to render records, etc. (Usulután).
- It has to be a school of promoters in such a way that all of them be formed in the same way and not to have rivalry between themselves.

#### *ADMINISTRATION*

##### *Doctors, nurses, etc.*

- A non equal distribution of human resources, for example, the specialist doctors (San Miguel).
- The need to make conscience on the professional doctors about the need of developing the preventive medicine and promote the community development (San Miguel).
- A larger salary has to be given to the officers who perform community works in the rural area (San Miguel).
- Select the officer according to his capacity to be in the charge (San Miguel).
- A distortion in the use of the existing resources; for example, to use them in areas where they are not trained (San Miguel).
- There are problems in the health services due to lack of motivation, incentives and excess of work.  
For example, a nurse for 40 beds in the night shift is not enough (Sonsonate); but in the central level there is a lot of personnel sitting in front of their desks.
- Define the needs of the country in Human Relations and establish incentives to improve their distribution (Chalatenango).
- When doctors are per their social year, their training in the administrative area has to be improved.
- The human resources have to be in the community; it has been seen that MOH moves an officer far away from his home and has to travel on Mondays, arriving late to his job and on Fridays leaving early (Sonsonate).
- The resources do not have to be related with the politic situation and if possible, have to be from the community (Usulután).
- People trained by MOH goes to work to the NGOs, that perform very similar to MOH; PROSAMI, FUSAL, etc. A coordination has to exist in the collecting of resources (Usulután).

*SUMMARY*

It was highlighted the importance of the doctor for a better developing in community health work and preventive medicine. The service officers have to try to live in their workplace to avoid absences and a lowering in the health care schedule. Avoid the appointment and promoting the directive positions by political reasons. Take the capacity in account.

*Promoters and Empirical workers*

Analyze the distribution, concentration and responsibilities of the health promoters in the country.

- An exhaustive checking of the responsibility that health promoters give the IRA treatment (and EDA).
- Is insufficient the number of health promoters in rural areas, San Miguel and Sensuntepeque.
- In some places the promoter has to assist about 150 families.
- There is a need of promoters and trained empirical (Sonsonate). The supervision of promoters do not have to be a few minutes visit, but the supervisor has to be with the promoter in his daily duty and has to see how he performs his job (NGOs Sonsonate).
- Promote the participation of promoters and empirical in taking decisions of the health program (Usulután).
- Carefully increase the promoter role, not standardize it (Chalatenango). The promoter duties should increased, but he should also be educated, and avoid the healing halo (quacks?, Usulután).
- In Sensuntepeque the MOH promoter considered important to increase the capacity of health care from promoters and the need of coordination between promoters from different institutions (the ADS promoter said the same).
- The activities the promoters should do to improve the community health are: a) Promotion, prevention and education activities, b) improve the reference and cross reference system, and c) Give logistical support for the transportation of patients (Morazán).
- Lack of human resources for the community health in supporting to the promoters (San Miguel).
- The appointments of promoters should be reverted because of external causes to their training and service vocation (Usulután).
- It is important the attention that the NGOs promoters receive for them to approach to the MOH services. A good communication has to exist to coordinate actions and reach the same objective (this was said by an NGOs promoter in Sensuntepeque). This refers to cases when the MOH and OEF promoter's action was coordinated and some problems with a rubbish dumps were solved. But also there are cases (Villa Dolores) where there is no coordination between the promoters in the same canton.

There are some privileged areas that are assisted at the same time by MOH and NGOs promoters and the people receives the services even they do not drink the medicines after (this was said by NGOs in Sonsonate).

- The health promoter has to live in the community to get the confidence of the community. It was highlighted that some promoters (both from MOH and NGOs) do not live in the communities where they work (Usulután).
- The community leaders should be the elected as candidates to health promoters (Usulután).
- ANSAL considered the promoter's educational job unfit, every message has to be discussed and it must have the power of penetrate the community as in the case of family planning (Usulután).
- The MOH policy requires the promoter to perform the attentions from house to house, but the Apastepeque Mayor prefers to have a community clinic to render health care (he has already built 6 of them) and he believes the promoter's job is more effective in the clinic.

### *SUMMARY*

The promoter's role and the possibility of extending his working field were the most discussed points in the meeting.

In that case the positions are opposed:

The MOH officers believe in the institution's policy which gives the promoters sanitary education and promoting jobs and does not want to have a healing component (this reaction is stronger in the doctors).

The NGOs believe the promoter has to perform healing jobs in some well delimited and standardized fields (IRAS, emergency health care to wounds).

The NGOs promoters wish training and to perform more activities taking in count the necessities of the community and the access to the services problem. Other participants (majors EDUCO members) agree in extending the action field of promoter who sometimes is the only health resource in the canton.

As for the empirical wives, they wish more support and training from MOH. The need of promoters in cantons at rural areas is a consensus point, taking in count the hard coverage in scattered villages with hard roads. Some NGOs propose to check the promoter's coverage criteria because they think so many places need more promoters but MOH considers they are already covered. A component which difficult the access of rural woman to promoters is highlighted here, and is the fact that many of them are men.

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