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**SPECIAL EDUCATION IN JORDAN: A
PRESENT STATUS AND NEEDS
ASSESSMENT STUDY**

By

Yousef Farid Qaryouti

A DISSERTATION

**Submitted to
Michigan State University
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ABSTRACT

SPECIAL EDUCATION IN JORDAN: A PRESENT STATUS AND NEEDS ASSESSMENT STUDY

By

Yousef Farid Qaryouti

Special education services are fairly new in Jordan. Recently, Jordanian society has developed a significant interest in its handicapped children and their educational needs. Several initiatives have been made to improve and expand special education services in the country. A clear understanding of the present status of services and the country's needs is a fundamental preliminary for the improvement of special education, as well as other educational and social services.

Purpose

The purpose of this study was to investigate the various aspects of the literature on special education planning, to delineate the present status of special education in Jordan, and to assess the country's needs in this regard. It is believed that such a study will contribute significantly to the development of special education services by providing decision makers with the information they need to answer to the following two major questions:

1. What special education services currently exist?
2. What should there be in addition to the existing services?

The study also made recommendations on the following: What should be done to meet the country's needs in special education? How should that be done?

Procedures

To collect data on the present status of special education in Jordan the following instruments were used:

- Two questionnaires, one to collect data from special education centers and the second to collect data from voluntary associations.
- Informal interviews with several governmental officials.
- A review of relevant official documents at the Ministry of Social Development.

To estimate the number of handicapped children in Jordan within age group of the 5-18 years old the following prevalence rates were used: 1% for blindness; 1.5% for deafness and hard of hearing; 2% for mental retardation; 1.5% for physical impairment.

To estimate the number of special education teachers needed, the following student-teacher ratios were applied for each type of special education:

7:1 for blind and deaf

10:1 for mentally retarded

12:1 for physically handicapped.

The needs assessment, in general, was based on current special education models and practices in other developing countries and on the

recommendations of the United Nations specialized agencies and other international organizations.

Major Findings

The study found that special education services in Jordan have been provided by the government and 12 voluntary organizations. In general, existing special education centers were found to be limited in their number and coverage. Altogether, there were 25 special education centers consisting of 12 residential and 13 day centers. Of the total number of special education centers, 9 were government sponsored, 14 were sponsored by voluntary organizations, and 2 centers were sponsored jointly by the government and voluntary organizations.

The total number of handicapped children served was 1244 students.

This number represents less than 2% of the estimated number of handicapped children in Jordan. The wide gap between the number of handicapped children served and the total number of handicapped children is obvious.

The number of existing special education teachers was found to be 196 teachers, while the number of teachers needed in 1983 was estimated at 6599 (if all unserved handicapped children were to be served).

The study identified several essential needs and made detailed recommendations to meet them, which are reported in chapters IV and V.

DEDICATION

This work is dedicated to the children
of Palestine in refugee camps who suffer
from many social and psychological problems
resulting from their forced diaspora.

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CHAPTER I

INTRODUCTION AND BACKGROUND

Jordan is a small, developing country in the Middle East. It was declared as a political entity in 1923 and gained its independence in 1946.

The area of Jordan is estimated at 89,206 square kilometers. For administrative purposes the country has been divided into the following five districts:

- 1. Amman Governorate, which includes Amman (the capital), Madaba, Zerka City and other cities and towns around Amman.
2. Irbid Governorate, which includes Irbed City, Jarash, Ajloun, Ramtha and other towns around Irbid.
3. Al-Karak Governorate, which includes Al-Karak City, Al-Tafelah, Shaubak and other towns in the mid-southern part of the country.
4. Al-Balqa Governorate, which includes Salt, Baqaa and the mid-Jordan valley area.
5. Ma'an Governorate, which includes Ma'an Aqaba and the extreme southern part of the country. (See Appendix #1)

According to the housing and population census of 1979, the population of Jordan was 2,147,595 of which 50.6% were less than 15 years of age. These population figures do not include Jordanians who

were living abroad. Jordanians living abroad were estimated to be between 500,000 and 750,000 persons. The preliminary tabulation of the census revealed an annual net population growth of 38 per thousand and an average size household of 6.4 persons. The ratio of wage earners in the household is 1:5 persons (Jordan Department of Statistics, 1981).

Jordan has been recognized as one of the most advanced countries in the Arab homeland; and it is witnessing a high rate of health, educational, social and economic development. The death rate decreased from 21 per thousand in the 1950-54 period to 12 per thousand in 1975, and it is believed that the present rate is less than that of 1975. The illiteracy rate among the age group 65 years and older is 84.3%, while it is estimated at 7.5% among the age group 15-19 (Jordanian Department of Statistics, 1981). At present, one third of Jordan's population attends school. The country has three universities and 46 community colleges that serve 50,000 students. The number of Jordanians studying abroad is estimated to be between 60,000 and 90,000 students. In fact, Jordan provides most of the other Arab countries with their professionals and other highly educated people (Jordan Information Bureau, 1982).

Generally speaking, education in Jordan is regulated, sponsored and controlled by the Ministry of Education. Access to education is a fundamental right in Jordan, as expressed in official documents and statements. Under the Jordanian Constitution everyone is entitled to an equal opportunity for education. Article Six of the Constitution reads as follows:

The State within its potentialities, shall guarantee

security and equal opportunity for all citizens.

Article Twenty says,

Primary education is compulsory and free in all government schools.

Article Three of the Educational Act of 1964 reinforces the provision of equal learning opportunities for all citizens (Shami, 1978: p.6).

Despite the constitutional responsibility to provide education programs for all citizens, the Ministry of Education provides no special education programs for the handicapped. Special education programs have been started by voluntary organizations as part of their charitable activities and services.

The actual initiation of special education programs was in the mid 1960s when some of the voluntary organizations established a few programs for mentally handicapped children. As a result of the volunteer initiatives, the government became involved and started a few educational programs through special schools run and sponsored by the Ministry of Social Development (formerly the Ministry of Social Affairs). In 1977 a small Special Education and Rehabilitation unit was established to operate the governmental special schools, and to supervise and coordinate the voluntary organizations' services for the handicapped. In 1979 the Ministry of Social Affairs became the Ministry of Social Development, and the Special Education and Rehabilitation Unit was promoted to departmental status under the new ministry. In compliance with Article Seven of the rules and regulations of the ministry, the primary purpose of that department is to take necessary measures to care for, train and rehabilitate

handicapped citizens.

As a result of the increased interest in the handicapped that the country has witnessed in the past few years, several new agencies have been attracted to the field of special education, such as the Queen Alia Fund for Voluntary Social Work. In addition to the older associations, new parents' and consumer organizations were also established. Examples include the National Association for the Mentally Handicapped, the Queen Alia Association for the Deaf, the Jordanian Association for Cerebral Palsy, the Friends of the Blind Association, and the Deaf Co-operation Club.

The great interest also can be seen through the rapid growth of the field of special education and the significant increase in the number of handicapped people being-served. In 1978 the University of Jordan established the University Center for Special Education and Rehabilitation which is affiliated with the University Center for International Rehabilitation (UCIR) at Michigan State University. The main goal of the Jordanian center is to provide academic training for special education and rehabilitation personnel. In 1980 the Jordanian Institute for Social Work, under the sponsorship of the Ministry of Social Development, started a two-year training program leading to a diploma in special education. At present, there are about twelve Jordanian students continuing their graduate studies in the field of special education abroad, mainly in the United States and the United Kingdom. Recently, the national mass media have shown considerable interest in the handicapped and their education. All of the above are indications of the great interest and concern for special education

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that Jordanian society is now witnessing. According to Daoud (1981) these developments and activities may be due to the following:

1. The public became more aware of the handicapped and the necessity to provide them with special services.
2. Parents are coming to the forefront and demanding access to care and education. This is reflected by the long waiting lists at special schools.
3. The government is encouraging and supporting the expansion of special education and the opening of new schools for handicapped children. (Daoud, p.1)

In the observance of the International Year for Disabled Persons (1981), the Jordanian government passed a decision to form a national committee with financial backing and full national cooperation. The committee was composed of government officials and representatives of voluntary associations, and individual persons who have a special interest in the welfare of the handicapped. Subcommittees in eleven localities were also formed throughout the country to assist in the upgrading and coordination of activities during the year.

The main purposes of the national committee were to: educate the public on the prevention of disability, propose laws for the rights and protection of the handicapped, upgrade services, distribute aids and equipment to handicapped persons and organize conferences, seminars and lectures. During the year the committee participated in thirteen

regional and international meetings and conferences.

Despite these developments current special education programs serve only an estimated 2.5% of the target population (Jordan Committee for IYDP, 1981). The present programs are mainly special day schools for mentally handicapped, blind, deaf, and physically handicapped children. There are no special education programs for learning disabled, speech impaired and emotionally impaired children.

From this brief review it can be concluded that special education is a new field in Jordan. In response to the significant interest that society has developed in this regard, it is expected that the field will grow rapidly, especially since more than 97% of handicapped persons are not being served. It is expected that more comprehensive programs will be developed.

A better understanding of the country's needs is an essential element of this process. In fact there are a very limited number of studies that have been done in the field of special education in Jordan. There is a dire need to launch a comprehensive research program for better understanding of the current status of special education, to identify the needs and to propose practical solutions for the problems faced in the field (Frey & Qaryouti, 1981).

Statement of Need

As previously stated, special education programs are fairly new in Jordan. The coverage of the existing programs is very limited. At present there are about 17 special day schools and 3 boarding schools in the country. Each school specializes in providing special education

for one of the following: the mentally handicapped, deaf, blind, or physically handicapped. The total number of children being served is estimated to be more than 1100 students. This number represents a very small portion of the target population. On the other hand, no educational programs have been provided for certain types of disability, such as behavior disorders, speech impairment, learning disabilities, and multiple handicaps.

Recently a great deal of effort has been directed to establishing new schools to serve a larger number of handicapped children (Daoud, 1981). Unfortunately, less attention has been given to other essential elements such as quality of services, curriculum development, legislation, improvement of administrative organization, and planning to meet the dire need for broadening the scope of the field.

For many developing countries, the ability to provide adequate health, rehabilitation, special education, and other human services is clearly affected by limited fiscal and human resources. It is expected that any national plan should take this into consideration to maximize the utilization of available resources.

Experience in many countries has shown that comprehensive planning for rehabilitation should be undertaken at the earliest possible stage.

This planning is best based on the most complete information available as to the problems of disability within a country and the resources at hand to serve them (Warms and Hammerman, 1972).

In 1975 the Economic and Social Council of the United Nations (ESOCO) adopted a resolution pertaining to "Prevention of Disability and Rehabilitation of Disabled Persons." In this resolution ESOCO

requested governments to identify and evaluate existing services. This evaluation should include rehabilitation services and available resources prior to development of national plans in this field. Also both governmental and nongovernmental services should be included in this evaluation (Rehabilitation International, 1981).

According to the World Health Organization (WHO) report on Policy and Programmes for Disability Prevention and Rehabilitation (1981), the current status of needs should be assessed prior to the development or application of a new model. The WHO report concluded that the logical steps in planning are:

- Assessment of population needs
- Description of appropriate measures to be taken in order to deal with the needs, and
- Decisions on priorities for implementation.

A policy based on the above can contribute significantly to avoidance of inappropriate planning and operational deficiencies that most conventional services in rehabilitation have had in the past.

The second international conference on legislation concerning the disabled, organized in Manila in 1978 by Rehabilitation International, gave special attention to the situation in and the needs of developing countries. This conference also emphasized the importance of preparing a national plan for the development of services for disability prevention and rehabilitation. To develop such a plan, a clear understanding of needs should be reached (Rehabilitation International, 1978).

The technical advisory report of the United Nations Development Programme (UNDP) on Disability Prevention and Rehabilitation suggested

that general background information about the existing situation related to disability prevention and rehabilitation, as well as an estimate of the country's needs should be secured. This report further suggested that the numbers, types, and geographical distribution of disabled persons and the existing rehabilitation facilities and personnel resources should be surveyed before comprehensive planning begins for disability prevention and rehabilitation (Rehabilitation International, 1981).

The first Arabic Regional Conference for the mentally handicapped held in Tunisia in 1975, recommended that international organizations, such as the World Health Organization (WHO), International Labor Organization (ILO), United Nations International Children's Emergency Fund (UNICEF), and the United Nations Education, Science, and Culture Organization (UNESCO) encourage the various governments of the Arab countries to conduct comprehensive studies to identify the needs of each country, as a first step for establishing national plans to provide better services for handicapped persons and their families.

Daoud (1981) and Frey and Qaryouti (1982) concluded that, despite the growing concern for special education in Jordan, there is only limited information available from the few studies done in Jordan. A comprehensive national study is necessary that would investigate various aspects of special education, delineate its present status, and assess the country's needs. Such a study would not only provide the interested agencies and decision makers with valuable information necessary for developing better understanding and policy in the field of special education, but would also serve as a reference for measuring

developments in the field over a period of time. It is expected that the present study will open the door for more such studies in this field. Therefore, the general goal of this study is to research the current status of special education programs in Jordan and to assess the country's needs.

Statement of the Problem

The problem explored in this study is that of researching the present status of special education programs in Jordan and assessing the country's needs in this field, with special reference to the following: mentally handicapped, blind and partially sighted, deaf and hard of hearing, and physically handicapped children within the 5-18 year age group. The study covered existing special education programs and supportive services, whether they were provided by governmental agencies and organizations or voluntary associations.

More specifically the study addressed the following questions:

- What current special education programs are available?
- What are the major characteristics of the current programs?
- What are the numbers, types and other demographic characteristics of the handicapped population being served?
- What is the role of each individual agency working with the handicapped?
- What are the projected numbers, types and other demographic characteristics of the handicapped children not being served?
- What are the current specific needs for special education in Jordan?

- What are the projected needs for the near future?
- What could be done to meet these current and projected needs?
- What sequence in development of services is appropriate?

Purpose of the Study

The purpose of this study is to contribute to the development of the field of special education in Jordan by providing information on programs and needs that can assist decision makers in expanding, improving educational services for handicapped persons in Jordan in an orderly and rational fashion. This is a crucial first step for establishing necessary policies and strategies and for developing national short-term and long-term plans to meet the needs of handicapped children of Jordan.

Unfortunately such plans do not exist in Jordan at present. Also, it is expected that this study will highlight a variety of facts and variables that should be taken into consideration in order to provide more adequate services for the Jordanian handicapped in the future. The specific objectives of the present study are:

1. To describe the current system of service delivery and the various agencies involved in this process.
2. To investigate administrative arrangements for the current programs (sponsorship, personnel, funds)
3. To provide demographic statistics about coverage of the existing programs in terms of type of disability, age, sex, geographical area and degree of severity of handicapping conditions.

4. To conduct quantitative comparisons between governmental and volunteer services according to the number of students being served, the number of teachers assigned and the amount of funds being expended.
5. To estimate the number of children in each type of disability area needing special education services.
6. To estimate the country's type and amount of special education service needs based upon projected estimates of the number of handicapped children.
7. To provide recommendations for more adequate and effective programs for Jordanian handicapped children.

Needs Assessment -- A Brief Overview

Needs assessment may be used to obtain information to justify existing or proposed programs. The most common focus of the word "need" is the discrepancy between "what is" and "what ought to be" (Berrie, 1976). Yuskiewics (as cited by Al-Ghamdi, 1983) stated a "need assessment is a measurable discrepancy between what should be and what is." He defined need assessment as:

"...a systematic procedure by which educational needs are identified and ranked in order of priority. The process involves the use of both objective and subjective information" (p. 57).

There is almost total agreement among researchers, educators, and administrators that needs assessment should be part of all good planning procedures and that it is a necessary prerequisite to the planning process. Delaney and Nuttal (1978) conclude that needs

assessments have both immediate and ultimate purposes. The immediate one is to identify unmet needs. The ultimate goal is to provide information for planning services that will meet these needs. Berrie (1976) indicates that

. . .there are essentially no limits to the benefits which could result from a properly done needs assessment . . . a good needs assessment will significantly contribute to planning, increased involvement and communication among different societal groups, better information for decision making, meaningful feedback and evaluation. (p. 2)

Needs Assessment Procedures

According to Spitzer there are some essential questions that should be addressed prior to developing and conducting a needs assessment study. The most important questions are:

- For whom is the needs assessment?
- What is the target population?
- What data collection methods should be used?
- Who should be involved and how should they be involved?
- What constraints might hinder the needs assessment?

(Al-Chamidi, 1983)

Delaney and Nuttal (1978) point out a range of procedures available for conducting the needs assessment research. Among the many approaches they discuss that are of special relevance to this study is the survey questionnaire. They agree that:

. . .the survey approach is not the only useful one for

doing needs assessment studies, but when done correctly, it is the most scientifically valid, and hence, the best one for assessing needs and care patterns and for evaluating and restructuring service programs. (p. 29)

In addition to the survey method, Delaney and Nuttal recommend the secondary analysis method, which means utilization and analysis of existing social data as a meaningful input into the needs assessment process. Nuttal (1975) suggests four sources of information potentially relevant to an analysis of needs assessment. These are:

- Documents concerned with demographic characteristics of communities such as population and distribution.
- Reports regarding rates of incidence of problems associated with needs.
- Reports from previously conducted studies.
- Inventories of resources, facilities, and services. (Delaney and Nuttal, 1978)

In this study both the survey questionnaire method and secondary method were employed. All existing special education programs were surveyed. Also, a detailed analysis of relevant data from Jordan and other countries was conducted. More details of the methodology of this study are given in Chapter III.

Organization of the Study

This study consists of five chapters. The first chapter is an introduction and background to the study. It includes brief information on Jordan, and statement of the problem and of the purpose

of the study.

The review of relevant literature is given in Chapter II. The chapter includes a review of literature on special education in Jordan, estimates of the prevalence of handicapped children, student - teacher ratios, and principles and factors underlying special education in Jordan.

The third chapter is devoted to a description of the methodology and procedures of the study. Also, the chapter includes a definition of terms and a discussion on the limitations of the study.

The results of the study concerning the present status and needs of special education in Jordan are reported in Chapter IV. This chapter includes findings on special education organizations, special education provisions for handicapped children in Jordan, and needs assessment.

Contained in Chapter V are a summary of the study together with conclusions and recommendations for the development of special education in Jordan.

CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this chapter is to review the available literature pertinent to this study. The contents are divided into the following four major areas:

- Previous studies on disability prevalence and special education services in Jordan.
- Estimates of disability prevalence.
- Principles and factors underlying special education services in Jordan including:
 - a. Constitutional rights of handicapped children in Jordan.
 - b. The moral responsibility of the government to provide special education services.
 - c. Economic considerations affecting special education services.
 - d. Levels of social and educational development in Jordan's population.
- Student-teacher ratio.

Previous Studies on Special Education in Jordan

As a group, the handicapped in Jordan have had, until very

recently, a relatively low priority in terms of planning, interest and scientific study. According to Daoud (1981) the focus has been mainly on increasing the number of services in special education, and there have been few research efforts undertaken to evaluate the quality of programs.

Like the situation in other developing countries, statistics on special education in Jordan are still fragmentary and incomplete. This, of course, makes a study on the development and trends in this field rather hazardous. Needless to say, gathering and analyzing such statistics will provide a basic indicator for evaluating quantitatively the development of this sector of education.

This part of the review of literature will cover available studies in the field of special education in Jordan. The review includes the following two main areas:

- a. Studies on number of the handicapped persons in Jordan.
- b. Studies of existing special education services.

A. Studies on the Number of Handicapped Persons

A sample survey carried out by the Christian Reformed World Relief Committee (CRWRC) in the Irbed governorate in 1977 reported an average incidence of handicap equal to 2.91% of the total population sampled. The incidence of various types of handicapping conditions reported by the survey was as follows:

	<u>Percent of the Total Population</u>
blind	0.33
deaf	0.73

orthopedic handicap	0.94
mentally retarded	0.19
mentally ill	0.12
others	0.60

(Kok, 1977)

According to Rehani (1977) the percentage of the prevalence of the mentally retarded group reported in CRWRC's study was not an appropriate estimate of the real problem. He presented the following reasons to justify his argument:

1. The absence of well-recognized criteria of mental retardation.
2. The absence of a standardized intelligence test to be used to identify mentally retarded individuals in Jordan.
3. The interviewers who gathered data for the study used no objective means for verification of the reports given by the parents in the sample population.

It is also likely that parents felt that if their child was in school he could not be mentally retarded. Therefore, a large percentage of mildly and moderately mentally retarded individuals were not considered in CRWRC's study. Rehani believed that a realistic estimate of the mentally retarded would be approximately 2 - 2.7% of the total population. It is believed that it was not only the prevalence of the mentally retarded that was underestimated, as Rehani suggested, but that all prevalence percentages reported by the CRWRC study were very low. In addition to the factors indicated by Rehani above, there are other factors that contributed to an underestimation of the prevalence

of handicapped persons. The most important ones are:

- The illiteracy rate in the area where the study had been conducted was high. Many sources indicate that less educated people tend to have less information about disability (Warms and Hammerman, 1972).
- The people's attitudes toward disability, especially at the time of the study, were negative. In general, people in rural areas in Jordan tend to be hesitant to report handicapping conditions, because they are afraid that having handicapped family member will reduce their social status and limit their marriage opportunities.

In 1977 Rehani conducted a theoretical needs assessment study of rehabilitation services in Jordan. To estimate the number of handicapped persons, Rehani applied the prevalence figures reported by the CRWRC study for various types of disability, except for mental retardation for which he suggested a prevalence of 2.27%. Rehani relied on a hypothetical distribution to justify the prevalence rate he suggested for mental retardation. He concluded that "the percentage of handicapped in Jordan will be 4.99% of the total population" (p. 6).

By projecting the disability prevalence 4.99% for the 1976 population figures, Rehani estimated the number of handicapped at 100,643 persons (Rehani, 1977). As indicated above, Rehani based his estimates on the findings of CRWRC's study, except for mental retardation. Accordingly, what was said about the prevalence rates proposed by CRWRC can be applied to the Rehani study except for his estimate of the prevalence of mental retardation, which is probably

more appropriate.

The Queen Alia Fund carried out a survey to obtain basic facts about a number of socio-economic characteristics of the handicapped and the availability of services to them in Jordan. The survey, which covered the whole country, reported a total of 18,829 handicapped persons in the country, broken down as follows:

Deaf	3193
Blind	2088
Deaf-blind	1744
Partially paralyzed	4857
Fully paralyzed	926
Leg amputated	246
Hand amputated	352
Arm amputated	78
Hand and leg amputated	11
Leg and arm amputated	9
Severe retardation	2127
Mild retardation	2741
Emotional disturbance	457

Also, the survey indicated that 7.5% of the handicapped in Jordan were provided some special education services; 1.1% were provided with comprehensive services. Fifty percent of the handicapped were under 15 years of age, and the handicapped male to female ratio was 2:1. The survey report suggested that the cultural background and the method of data collection might negatively affect family registration of female handicapped members (Queen Alia, 1979).

These survey results are to be seriously questioned, because of the following:

1. The data were collected by interviewers, mainly recruited from the Ministry of Education. These interviewers had no previous training or work experience with the handicapped.
2. The interviewers relied on information given to them by the head of the family and did nothing to evaluate the validity or comprehensiveness of this information. Due to the limitation of public knowledge and awareness, the accuracy of this information is highly questionable--especially with respect to specific types of handicapped persons such as the mildly retarded, hard of hearing and emotionally impaired.
3. The absence of standard criteria to identify the handicapped. There was no systematic approach to defining the handicapped and identifying the severity of the handicapping condition. The same could be said for the different types of services being provided. Probably because of the ambiguity of the meaning of terms, 50.3% of the respondents to the survey questionnaire did not answer the question about services being provided. Accordingly, the validity of the survey results appears to be very poor.

The following are some additional facts that can give a clearer picture regarding the inaccuracy of some of the Queen Alia Fund survey results. The purpose here is not to provide a complete list of the

invalid findings of the survey, but merely to name a few.

-The survey data would suggest that the number of handicapped individuals in Jordan is less than .8% of the total population. This is an extremely low estimate.

-According to the survey findings, 45% of the emotionally handicapped are receiving educational services. This could not be true, because there are, as yet, no special educational programs for the emotionally impaired in Jordan. One can say that there are a limited number of emotionally impaired persons going to the public schools, especially in the early grades. That, however, could not in any way represent 45% of the group.

-The survey indicates that 14.5% of the severely mentally retarded are identified after they reached the age of 18 years. Again, such a finding is unrealistic, because the severely handicapped are easily identified in early childhood. These findings may be due to the inability of interviewers and/or respondents to differentiate between the mentally retarded and mentally ill.

-The results indicate that 0.8% of the severely retarded complete their high school education. One can ask how that could happen when there are no educational programs for the severely handicapped in Jordan, and when everyone agrees that the severely retarded are not able to attain high school graduation. One of the interesting findings of this survey is that only 0.6% of the mildly retarded complete their high

school education. How can it be that the chances of the severely retarded completing their high school education are better than those of the mildly retarded? Again these results may refer to the mentally ill and not the mentally retarded.

In his follow-up study to evaluate the accuracy of the numbers of the mentally retarded reported by the Queen Alia Fund study regarding the severity of handicapping conditions, Kaylani (1981) indicates that the procedures for collecting the data for the survey were not appropriate. He also concludes that the reported number of 4868 individuals who suffer from mental impairment represents a very small portion of the mentally retarded.

In 1979 Cantrell, a consultant for the World Health Organization, carried out a consultation visit to Jordan. He suggested that the number of handicapped persons in Jordan is expected to be far greater than the number presented in the Queen Alia Fund study.

B. Studies of Existing Services

There are only a few studies concerning existing special education services in Jordan. The researcher could only locate two such studies. A survey of the institutions serving the handicapped in Jordan, carried out by Paul Kok in March 1978, reported that only 549 handicapped persons were being served by a total of eight institutions. The study highlighted the following facts, as cited by Rehani (1977):

- 80% of those being served came from the greater Amman community;
- Three out of the eight institutions have no social worker;

- Seven institutions have no social work program;
- The average student-teacher ratio was ten students per teacher;
- The average overall client-staff ratio was 3.7:1.

The study concluded that agencies involved in the development of handicapped children tend to have extremely limited contact with the families of the children. One interesting finding was the wide difference between male and female clients being served. Seventy percent of the clients being served were male (Kok, 1978). Mention must be made that Kok included in his study two institutions that are not providing special education services. These institutions were the Al-Karamah Institution for the Homeless and the Al-Yadodeh Institution for the Mentally Ill.

Daoud (1981) conducted a study to evaluate the status of educational services for the mentally retarded. This study surveyed the six special education centers for mentally retarded children in operation at that time. The results of the study show that the total enrollment in special education programs for the mentally handicapped was 408 children. Daoud indicated that despite the fact that the country is lacking sufficient and fully reliable data, such as would enable the researcher to know exactly the extent of the needs for special education, the above mentioned number of children being served represents a very small portion of the target population. According to Daoud, the following limiting factors in the development of special education services in Jordan were identified:

- Lack of professional training for teachers. Accordingly, present programs are mostly staffed with untrained teachers.

-Lack of integration of general and special education services; thus all special education programs and services are being provided in the form of special and separate schools.

To pursue the improvement of special education programs in Jordan, Daoud argues for two immediate tasks; first, to establish a wide network of diagnostic centers to provide early diagnosis and facilitate early intervention; secondly, to extend preschool centers and establish a network of special kindergartens (Daoud, 1981).

A publication of the Holy Land Institute for the Deaf in Jordan states that a careful estimate, on the conservative side, would indicate about 3,000 deaf children between the ages of 0-15 years of age within the country. This publication also provides brief information about special education services for the deaf in Jordan. It said that, up to the date of its publication, there were five schools for the deaf with a total capacity of about 300 students. This figure makes it easy to recognize the great need for more educational facilities. The institute argues for efforts to improve public health programs, for early identification of the hearing-impaired child, and for increasing public awareness of the various issues related to deafness. (Holy Land Institute for the Deaf, 1980).

Summary

Special education is a relatively new field in Jordan. Research in this field did not start until very recently. Accordingly, the number of studies concerning various aspects of special education programs and the needs of handicapped children in Jordan are very

modest and contradictory.

Two studies were carried out in Jordan to estimate the numbers of handicapped persons in the country. These studies are the sample survey conducted by CRWRC in 1977 and the Queen Alia Fund survey of disabled persons completed in 1979. Both studies suggested very low estimates of prevalence, 2.9% and .8% respectively of the total population. It is believed that both studies are procedurally and substantively deficient with a resulting gross underestimation of the actual numbers of handicapped persons to be found in Jordan.

Estimates of Disability Prevalence

This part of the review of literature will deal with estimations of disability prevalence that have been proposed by certain international organizations and the results of national or sample disability surveys in other societies.

Most of the countries have used a prevalence formula to determine the number of its handicapped citizens, because conducting a general registration of handicapped persons in any individual country is a very difficult, expensive, and often unproductive process (UNESCO, 1979b; Warms and Hammerman, 1972). The UNESCO expert meeting on special education held on October 15-20, 1979, concluded that:

. . . mention must be made of a word of warning which was given by some members on the subject of comprehensive government surveys designed to assess the needs for special education services in any country or area.

The following disadvantages of such surveys were pointed out:

1. They are extremely expensive and funds could be better applied to providing immediate action;
2. In developing countries the pattern of handicap often changes rapidly.
3. They tend to create demands which cannot be met and are therefore unkind to parents.
4. They carry with them a danger of labeling and stigmatizing handicapped children (UNESCO, 1979b, p. 17).

Taking these facts into consideration, one can understand why the number of these surveys is limited. Special disability surveys of sample households are the most reliable way of estimating the numbers of disabled persons and their various needs, but such surveys are costly and require much time. They are not necessarily the most reasonable approach to be used.

The United Nations Development Programme concluded that qualified individuals can assist in the preparation of estimates based on existing data and experience in other areas. Such estimates are fully adequate for the early stages of planning (Rehabilitation International, 1981). Also, Helander et al. of the WHO suggested that national estimates of disability prevalence can be made by utilizing different sources of information, i.e. internationally available research materials and calculations of disability rates as well as locally available health statistics (Helander et al., 1980). Estimates from both developed and developing countries may be considered in estimating the disability prevalence in a developing country like Jordan, because disability prevalence in developed and developing

countries is believed to be roughly equivalent. Warms and Hammerman (1972) believe that in developed countries the problem of disability is increasing as a result of accidents and improved life-saving medical techniques. The problem is also increasing in the developing countries where as many as 10% of all children suffer from severe malnutrition and inadequate health services. Also literacy and education levels are minimal and infectious, disabling disease remains uncontrolled.

The prevalence studies reviewed in this study can be divided into three main categories:

- a. Estimates made by international organizations and international experts.
- b. Estimates made by authorities of certain countries.
- c. Estimates based upon actual surveys in different countries.

A. Estimates Made By International Organizations and International Experts

International organizations and the United Nations agencies believe that at least 10-15% of the population of any country is significantly physically or mentally handicapped (WHO, 1976; UNESCO, 1979b; UNICEF, 1980; R.I., 1981; UN, 1981).

Skov Jorgensen, the UNESCO consultant on special education, suggests that at the time of starting school, up to 5% of all children have difficulties preventing them from following ordinary education (UNESCO, 1979a). Lena Saleh, a UNESCO expert in special education who has had several consultation missions to developing countries, suggested that the most internationally accepted estimates of

prevalence ranges from 5-10% among the population of school-age children (Saleh, 1977). These experts' estimates are based on information available from developed countries.

Hellen Keller International (HKI) compiled the following prevalence rates of blindness in several countries:

Canada	.1%
U.S.A.	.2%
Haiti	1.3%
Afghanistan	2.0%
Egypt	2.6%
Chad	3.2%
Morroco	4.1%

(HKI, 1980)

Unfortunately the prevalence rates in Morroco, Chad and Egypt are very high. In fact, Chad and Morroco are frequently considered to be epidemic areas. HKI suggests that the most acceptable estimate of blindness prevalence in developing countries is 1% of the total population.

Al-Swasi, the director of the rehabilitation department in Libya, reported the following estimates of blindness in some Arab countries based upon WHO estimates as follows:

Yemen	4%
Saudi Arabia	3%
Iraq	0.5%
Libya	0.48%

(Al-Swasi, 1977)

It appears from the above figures that the prevalence rates of blindness for Yemen and Saudi Arabia are also very high.

Based on information reported from several Latin American countries, the Pan American Health Organization (PAHO) estimated the prevalence of various forms of disability in the general population in Latin America (as quoted by UNICEF) at the following percentages.

Locomotor problems	3.00
Mental retardation	3.00
Blindness	2.00
Deafness and muteness	2.00
Mental disability	
(of any population	
at any one time)	1.00
Cerebral Palsy	<u>0.06</u>
Total	11.06%

(UNICEF, 1980)

The United Nations Economic Commission for Western Asia (ECWA) estimated the prevalence of physical and mental disablement in Arab countries at 7-10% of the total population (ECWA, 1981). ECWA estimates were reportedly based on data available from other countries and international organizations.

Sadek, who has done some consultations for UNESCO on special education in a number of Arab countries, estimated the prevalence of Arab disabled children under 15 years old at 3.5 - 7.5% of the total population (Sadek, 1981). It must be noted that Sadek's estimate was based on his professional experience and information available from the

literature. Also, he did not include the learning disabled and speech impaired in his estimate; if these two groups were included, the prevalence rate he has proposed would be higher.

The Arab regional conference on the disabled held in Kuwait in 1981 agreed that at least 10% of the Arab population are physically, mentally or psychologically disabled (Kuwait Minister of Labour and Social Affairs, 1981).

B. Estimates Made by Authorities in Selected Countries

The Green Paper of Hong Kong estimated that 8% of Hong Kong's population had need for rehabilitation services of one kind or another (Government of Hong Kong, 1977). In Ireland it is estimated that 3% of the population suffers from a marked hearing loss. The prevalence of the mentally retarded is estimated to be .6%. By performing simple mathematical calculation on the numbers of disabled persons reported by the Ireland National Social and Economic Council, the following prevalence rates were projected: .06% for multiple sclerosis, .2% blind, .1% cerebral palsy, .1% polio, and .04% for epilepsy (Ireland National Economic and Social Council, 1980). Some of the prevalence figures reported by Ireland's National Social and Economic Council were based on sample surveys, some on expert opinion, and some on medical records. In general these estimates are considered to be low in comparison to prevalence figures from other countries.

In Pakistan, various government agencies and nongovernmental organizations provided estimates for the prevalence of different types of disabilities as follows: the National Society for the Prevention of

Blindness, Karachi, estimated the prevalence of blindness at 4% of the population. The Ministry of Health presented a conservative estimate of deafness at .03% of the total population. A study conducted by Dr. Zaki Hasan of the Department of Neuro-Psychiatry at Jinnah Postgraduate Medical Center in 1969 estimated the prevalence of mental retardation at 3% with 0.4% severely retarded (Abdullah, 1981).

Mr. Luthra, the "additional secretary" of social welfare of India, estimated that the total number of disabled persons in that country make up around 5% of the total population.

The United States Office of Education (USOE) estimated the prevalence rate of handicapped children within the 6-19 age group at 12.035%. The estimated prevalence of handicapped children by type was as follows:

Speech impaired	3.5
Mentally retarded	2.3
Learning disabled	3.0
Emotionally disturbed	2.0
Crippled and other	
health impaired	0.5
Deaf	0.075
Hard of hearing	0.5
Visually handicapped	0.1
Deaf-blind and other	
multihandicapped	0.6
Total	12.035%

(Hallahan and Kauffman, 1982)

The prevalence rates for the hearing impaired and the deaf, visually impaired, and crippled estimated by USOE may be low in comparison to prevalence rates for other countries, especially developing ones. Taking into consideration the sophistication of medical and health services in the United States, which allows early detection and prevention of diseases causing disabilities, the actual prevalence rate may very well be lower than in countries lacking such services.

C. Estimates Based Upon National Surveys
Conducted In Selected Countries

The Netherlands Central Bureau of Statistics carried out a survey based on a sample from the Netherlands population aged 5 years and older. The survey revealed that 8.7% of this age population appeared to be physically handicapped.

The definition of physically handicapped used for the survey states that:

. . .handicapped are those persons who have one or more functional disorders to at least a certain degree. . . that includes disorders in function of legs, arms, hands, sight, hearing, speech endurance and balance defective (The Netherlands Central Bureau of Statistics, 1976, p. 8).

The Bureau projected an estimate of 9.0% of the total population to be physically handicapped in the 1980s. The survey results indicated that the prevalence of hearing and visual disorders are 1.4%

and 0.7% respectively (The Netherlands Central Bureau of Statistics, 1976).

The Japanese School Health Statistical Survey estimated the prevalence of visually handicaps at .08% of the total school population. The hearing impaired and mentally retarded were estimated at 0.11% and 2.07% respectively (Japan League for the Mentally Retarded, 1977).

In Federal Republic of Germany, as of 1978, the percentage distribution of handicapped pupils in relation to a "normal" section of pupils of equal age was as follows:

Blind	.015%
Partially sighted	.10%
Deaf	.05%
Partially deaf	.18%
Mentally retarded	.60%
Motor handicapped	.20%
Learning disabilities	4.00%
Linguistic difficulties	.50%
Speech defect	1.00%
Socially handicapped	1.00%
Total	7.645%

(Commission of the European Communities 1980)

Again, the prevalence rates for blind, deaf, and motor handicapped persons appears to be low. The situation here may be similar to what was said about the prevalence rates in the United States where the level of health services is very advanced. Also the prevalence rate

for mentally retarded (.6%) is considered to be very low, while the prevalence of learning difficulties (4%) is considered to be high. It is possible that some of the mentally retarded might be classified and included under the category of learning difficulties.

In Denmark, as of 1977, there were 770,000 school children plus 90,000 registered pupils in special education who made up 10.46% of the total school population (Commission of the European Communities, 1980).

M. Rutter and others surveyed 2,199 Isle of Wight students aged nine to eleven years and found that 354 (16.1% of the total) had some form of handicap. That means approximately one in every six children had a chronic or recurrent handicap (Wall, 1979). Rutter's study revealed a high prevalence rate, because children with certain diseases and minor health problems were considered to be handicapped.

A sample survey of disabled persons, including only physically and mentally handicapped, was carried out in Nepal by Nepals' National Committee for the International Year of Disabled Persons in 1980. The committee sampled 8001 households in six districts including 12 villages. Of the 4538 persons included in the sample, 262 were found to be disabled. On the basis of these figures the committee estimated that 3.7% of the total population were mentally or physically impaired (orthopedic, blind, deaf) (Nepal Committee for the International Year of Disabled Persons, 1981). Although this estimate may be considered to be low in comparison to estimates in other countries, especially the more developed ones, the committee concluded that the estimate cannot be treated as low considering the narrow definition adopted for different types of disability for the survey and taking into account

various constraints like illiteracy, the apathetic attitude of people towards the survey, and the lack of trained personnel for conducting the survey.

A study to determine the number and needs of handicapped children in Jamaica was done by the Private Organization of Jamaica. This study sampled a small portion of the child population aged 0-16 years in eight communities believed to be representative of Jamaica. Medical, hearing, vision and cognitive tests were used to screen handicapped children. The Private Organizations of Jamaica reported that according to the findings of their study and the findings of a survey by the Ministry of Education in 1978, the prevalence of disabled children between five and 16 years of age can be estimated at 7.9% of that age group (Robinson and Sherlock, 1980).

Helander and his associates (1980, p. 14) reported that:

Results from a sample disability house-to-house survey in a developing country show the following rates of prevalence:

difficulty in moving the arms	
legs or other parts of the body	4.3%
difficulty in seeing	2.0%
difficulty in hearing	
and/or speech	1.6%
difficulty in learning	1.1%
strange behavior	0.8%
fits	0.6%

Based on their professional experience and available data from various surveys carried out in Egypt, Hommosani and Mohammad (1979)

proposed the following figures as conservative estimates of the prevalence of handicapped children in Egypt.

blind	0.5%
hearing impaired	1%
mentally retarded	3%
orthopedic cases	1%
severe disabilities (cerebral palsy, muscular dystrophy, etc.)	0.2%
Total	5.7

Although these estimates suggested by Hommosani and Mohammad are said to be conservative estimates, it is probably true that the prevalence rate for the visually impaired was grossly underestimated, because Hommosani and Mohammad did not include the partially sighted in their estimates. If they had done so, the prevalence of the visually impaired (blind and partially sighted) would be more than the reported 0.5% of Egypt's child population.

Summary

Children and adults with disabilities comprise a substantial part of any national population. However, actual counts using standard criteria are rarely available. Sample surveys and utilization of available information regarding prevalence in other countries, as well as experts' estimates are more frequently used to estimate the prevalence of handicapped persons in society.

The great discrepancy in existing estimates and statistics seems

to result from the following factors:

- There is no uniform, clearly defined concept or definition of disablement or handicap.
- Grossly different methods have been used for estimates of prevalence.
- Certain generic or specific types of handicapping conditions have been included or excluded in given estimates.
- There are differences in the age groups of the population for whom projections are made.
- Some areas or regions may be considered epidemic regions for a certain type or types of disabilities.

The most common prevalence rates reported from different countries are summarized in Table 2.1. These are based upon the literature previously cited.

Table 2.1
Summary of the Most Common Prevalence
Rates by Category of Handicap

Category of Handicap	The Range of Prevalence Rates	The Most Common Prevalence Rates	
Blind	0.5 - 4.1%	0.5 - 1.5%	(Includes partially sighted)
Deaf	0.3 - 2%	.8 - 1.6%	(Includes hard of hearing)
Mental Retardation	1.8% - 3%	2 - 3%	---
Physically Handicapped	.5 - 3.6%	.9 - 2%	(All types of physically handicapped)

Despite the variance in existing estimates and statistics, it can be concluded that data from many countries and the consensus of expert opinions suggest that at least 5-10% of children are either born with or acquire physical, mental, emotional, speech, learning or sensory impairments that interfere with their capabilities for normal development, unless active intervention and specialized services are given to them (UNESCO, 1979). Statistics on the numbers of handicapped children in Jordan are inadequate. Consequently, estimates of the prevalence rates of these conditions should be developed to provide a frame of reference for the development of special education and other related services.

Available data from several countries, especially Egypt and the United States, as well as estimates suggested by international organizations (WHO, UNESCO, Pan American Health Organizations, UNICEF) led the researcher to believe that the following prevalence rates of handicapping conditions may provide the best working estimate of disability prevalence among Jordan's child population:

Blind	1.0 - 1.5%
Deaf and hard of hearing	1.5 - 2.1%
Mentally retarded	2.0 - 3.0%
Physically handicapped	1.5 - 2.0%
Total	6.0 8.6%

Mention must be made that Jordan is free from any epidemic conditions that would argue for a higher prevalence rate for any particular type of disability. These suggested prevalence rates for

use in initial planning in Jordan will be discussed in detail in the following chapter.

Student-Teacher Ratios

The number of students for each specialist teacher varies considerably between countries and from one type of handicap to another.

A UNESCO (1981) study on statistics of special education for the period 1973-1977 found that the average number of students per special education teacher in various regions and countries was as follows:

Latin America:

Four to five students in the Bahamas, Cuba, and Argentina.

Seven students in Brazil.

Ten to eleven in twelve other countries.

Arab states:

Two to three in Sudan, Bahrain and Saudi Arabia.

Four to six in Egypt and Kuwait.

Seven to eight in Iraq, Jordan, Syria and Tunisia.

Asia:

Six to eight students in Bangladesh, Burma, Cyprus, Indonesia, Iran and Turkey.

Nine to eleven in India, Nepal, Sri Lanka and Thailand.

Twelve to fourteen in Hong Kong, Korea, the Philippines, and Singapore.

Europe:

From the overall figures available, the characteristic

pupil-teacher ratio for certain handicaps in Europe is as follows:

- for visual or hearing handicaps, 2 to 5 students per teacher in 15 countries, 6 to 8 students per teacher in 8 countries.
- For mentally retarded and physically handicaped, 3 to 9 per teacher in 18 countries, half of which have between 3 and 6 students to every teacher. The maximum number was 13.

In its document on Special Education in the European Community, the Commission of the European Communities (1980) reported the following class quota* in some European countries:

- in Denmark it ranges from 5 to 10 students.
- in Luxembourg classes for slow learners, partially hearing and partially sighted children and children with specific learning difficulties have an average of 12 students. Classes for the mentally retarded, deaf, blind and motor handicapped have an average of 7 students.
- in the Federal Republic of Germany the following quota numbers were reported for special education classes:
 - blind, 10 students per class.
 - deaf, 8 students per class.
 - mentally retarded, 8 students per class.
 - motor handicapped, 6 to 10 per class.

*By reading the whole document the researcher arrived at the conclusion that the class quota is a term which has been used as an equivalent to student-teacher ratio.

partially sighted, 12 students per class.

partially deaf, 10 students per class.

(Commission of the European Communities, 1980)

The following student-teacher ratio averages in Ireland were derived from statistics reported by the Ireland National Economic and Social Council, in 1980:

- for mild and moderately mentally retarded, 13.3 students per special teachers.
- for blind and partially sighted, 6.45 students per special teacher.
- for deaf and hearing handicapped, 5.72 students per teacher.
- for physically handicapped, 10.64 students per special teacher.

(Ireland National Economic and Social Council, 1980)

A statistical study on special education in Japan revealed the following average numbers of students per special education teacher in special schools for handicapped students:

- for the blind, 3 students per teacher.
- for the hearing, impaired 3 students per teacher.
- for the mentally retarded, 4 students per teacher.
- for the crippled, 3 students per teacher.
- for the health impaired, 3 students per teacher.

(Japan League for Mentally Retarded, 1977)

In Nigeria, as of 1979, the average student-teacher ratio was:

- for the blind, 7.35 students per special teacher.
- for deaf and hard of hearing, 11.07 students per special education teacher.

-for physically handicapped (homes and schools), 12.62
students per special teacher.

(UNESCO, 1979a)

Simple statistical analysis of the numbers of handicapped students and special teachers of special education schools in Egypt provided by Abdelzaher and Al-Assawi (1981) revealed the following student-teacher ratios:

- for the blind, 5.13 students per teacher.
- for partially sighted, 6.43 students per special teacher.
- for deaf and hard of hearing, 5.95 students per special teacher.
- for mentally retarded, 6.52 students per teacher.

(Abdelzaher and Al-Assawi, 1981)

A summary of the student-teacher ratios reviewed in this study by special education category is provided in Table 2.2.

Summary

Detailed data on student-teacher ratios are rarely available. Most countries, with few exceptions, reported their data in general terms. Therefore, statistics on student-teacher ratios for each type of disability and for various subgroups within each disability group do not exist for many countries.

Table 2.2
Summary of Student-Teacher Ratios in Several
Countries by Special Education Category

Sp. Ed. Category	Range of Student-Teacher Ratio	Countries
Blind	6-10	Luxembourg, Egypt, Ireland
	3	Nigeria, Federal Republic of Germany Japan
Deaf	6-11	Egypt, Ireland, Federal Republic of Germany
	3	Nigeria, Luxemborg, Japan
Mentally Retarded	7-13	Luxemborg, Federal Republic of Germany,
	4	Nigeria, Ireland, Japan
Physically Handicapped	6-13	Federal Republic of Germany, Ireland, Nigeria Egypt
All Categories	2-3	Japan, Iraq, Syria,
	6-8	Tunisia, Bangladesh,
	9-11	Turkey, Brazil, Iran, Indonesia, India, Nepal, Thailand, Sri Lanka, most of Latin America.
	12-14	Hong Kong, Korea, the Philippines, Singapore

The review of literature shows large differences in the student-teacher ratios of different countries. The ratios range from 3 students per special teacher in several countries in Europe, some Arab countries and Japan to 14 students per special teacher in Hong Kong, Korea, the Philippines and Singapore. The most frequent ratios ranged from 6-10 students per teacher. In most countries the student-teacher ratios for the blind and deaf groups are almost equal. The same thing can be said about the ratios for the mentally retarded and physically handicapped groups. A general pattern can be seen among various groups in different countries; i.e., the ratios for the blind and deaf were lower than the ratios for the mentally retarded and physically handicapped.

Considering these facts and the current student-teacher ratios of special education in Jordan found in this study, as well as other factors discussed in detail in chapter III, it is believed that the following student-teacher ratios should appropriately be considered for initial planning in Jordan:

Seven students per teacher for blind and deaf students.

10 students per teacher for the mentally retarded.

12 students per teacher for the physically handicapped.

Principles and Factors Underlying Special Education Services in Jordan

There are many reasons to cause Jordan, as well as other countries, to consider special education services as a public responsibility and investment. This part of the literature review

will emphasize the most important principles underlying special education services in Jordan. These include constitutional, moral, economic and social-cultural developments.

a. Constitutional Principles

Jordan's people intend that their constitution, political organizations and social policies be based upon respect for all persons and the responsibility of the government to ensure equal opportunities for all citizens. The second article of the sixth amendment of Jordan's constitution reads as follows: "The state should guarantee equal educational opportunities for all individuals without any kind of discrimination." Also, the twentieth amendment says: "Education is compulsory and free for all citizens."

Item number seven of the third article of the Educational Act (Number 16) of 1964 gives more emphasis to the principle of equal learning opportunities by saying: "Educational opportunities should be accessible for all individuals according to their capabilities." Also article number eight of the same act declares that: "The aim of education is to assist students to achieve normal physical, mental, social and emotional development."

(Ministry of Education, 1980)

Although there are no direct or special constitutional provisions concerning the right of handicapped children to appropriate education, the above constitutional and legislative statements imply that handicapped children are also entitled to appropriate educational opportunities. If the Jordanian government is to comply with the national constitution and the various claims of justice and equality,

handicapped children should not be denied their right to appropriate educational programs.

b. Moral Principles

There is a growing international movement to secure the human rights of handicapped persons. The UN designation of 1981 as the International Year of Disabled Persons was the best affirmative of this fact. This part of the review of literature calls attention to several international statements, declarations and resolutions and their implications for Jordanian society, as well as other societies, to ensure the equality and dignity of disabled persons and to take the necessary measures to affirm the same.

The enormous number of such international declarations and statements makes it a difficult job to provide a detailed account. As Rehabilitation International concludes, it needs several volumes to present such statements from the UN and other international bodies (R.I., 1981).

For the purpose of this study, only some Arab regional bodies and the UN declaration will be cited. Also, only the most significant to Jordan's situation will be reviewed.

Disability prevention and rehabilitation was a topic given specific emphasis by the provision of the Declaration of Social Action for the Arab States issued in 1971 and the Strategy of Social Action in the Arab Homeland issued in 1979. Both were adopted by Ministers of Social Affairs and the Conference of Arab Ministers of Education. All stress the importance of attending to the welfare of disabled persons

and their rehabilitation and integration into the mainstream of Arab social life.

The Arab regional conference on the disabled held in Kuwait from April 1st to April 5th, 1981, adopted the Arab Declaration of the Plan of Action concerning the disabled persons in the Arab Homeland. This declaration aims to cope with the problem of disability in a comprehensive manner and to assist disabled persons to fully participate in and contribute to the life of their communities *pari passu* with other citizens. The declaration proclaims that:

Disabled persons are human potential that should be safeguarded, as well as an integral part of human resources to be taken into consideration in the planning for and promotion of development resources in the society.

Moreover, the Declaration specifically affirms that:

All disabled persons should be assured of their right to care, education, rehabilitation and employment without discrimination based on sex, origin, social position, or political allegiance. (Kuwait Ministry of Labour and Social Affairs, 1981, p. 46).

The preamble and the text of the declaration is included in its entirety in Appendix 3C to show the historical and philosophical basis and its extremely comprehensive scope.

Article 26 of the Universal Declaration of Human Rights proclaimed by the General Assembly of the UN declared that "everyone has the right to education." Principle five of the declaration of the Rights of the Child adopted by the General Assembly in 1959 was more precise in addressing the rights of handicapped children to appropriate education.

The principle reads:

"The child who is physically, mentally, or socially handicapped shall be given the special treatment,

education, and care required to his particular condition." (R.I., 1981).

Also the UN Declaration on Social Progress and Development has proclaimed the necessity of protecting the rights and assuring the welfare and rehabilitation of the physically and mentally "disadvantaged" (R.I., 1981).

In 1971 the UN General Assembly, without a single dissenting vote, adopted the Declaration on the Rights of Mentally Retarded Persons and called for national and international actions to ensure that it will be used as a common basis and frame of reference for the protection of these rights. Article 2 of this declaration reads:

. . .the mentally retarded person has a right to proper medical care and physical education and to such education, training, rehabilitation and guidance, as will enable him to develop his ability and maximum potential (See Appendix 3A.) (R.I. 1981, p. 2).

In 1975 the UN General Assembly adopted and proclaimed the Declaration of the Rights of Disabled Persons. This declaration describes in greater detail the principles of entitlement of disabled persons to measures that will enable them to become as self-reliant as possible and facilitate their social integration or reintegration. The key point in this resolution is the strong affirmation of the disabled persons' inherent rights to respect and human dignity:

Disabled persons have the inherent right to respect for their human dignity. Disabled persons, whatever the origin, nature and seriousness of their handicaps and disabilities, have the same fundamental rights as their fellow citizens of the same age, which implies first and

foremost the right to enjoy a decent life, as normal and full as possible. (R.I., 1981, p. 4)

Article six of this declaration gives special emphasis to the right of the handicapped to all necessary treatment, services, education, training, and technical aids. This declaration argues that despite the level of social and economic development existing in a given country, governments are to take into consideration the special needs of handicapped children. These needs should be included in national planning programs. (See Appendix 3B.)

The World Conference on Actions and Strategies for Education, Prevention and Integration of Handicapped Persons held in Malaga on November 1981 proclaimed the Declaration of the World Actions and Strategies for Education, Prevention and Integration. The first article of the declaration reads:

. . .every disabled person must be able to exercise his fundamental right to have full access to education, training, culture and information. (International Year of the Disabled Persons, 1981, p. 7)

Summary

It is clear that related international statements and declarations attempt to establish claims upon society that are asserted and recognized as inherent rights and not as charity or sympathy. So the rights embodied in these declarations are not merely aspirations, but moral assertions that should be met and incorporated in national legislation and development plans. Since Jordan is a signator of all these declarations concerning disabled persons, the government should

comply, in so far as is possible, with the moral responsibilities assumed by those declarations and statements.

C. Economic Considerations

Disability often produces multiple adverse effects: loss of income and productivity, costs for the special care needed and the costs of welfare expenditures for disabled persons. Accordingly, the costs of disability accrue and are even greater when rehabilitation and special education are not provided. The costs of disability can be reduced by early diagnosis and effective prevention and rehabilitation measures. Several studies in different countries indicate that the costs of special education are minor when compared with the cost of institutionalization. Therefore providing special education services, which help to avoid institutionalization, will be a source of long-term savings to society (Hammerman and Maikowski, 1981; UNESCO, 1978).

The UNESCO expert meeting on special education held in October 1979, discussed the economic principles relating to treatment of handicapped persons. The meeting concluded that:

Studies of rehabilitation and education across the world document that the economic advantages from such programs in productivity, payment of taxes by handicapped persons and reduced need for welfare assistance and disability stipends, outweigh the costs. Failure to educate and train handicapped persons in proportions equal to the provisions of services for the non-handicapped, because of the problem being perceived as a lower priority, results in later expensive programmes to care for the untreated disabled.

Developing nations, as they formulate new approaches to educating children, should be aware of the problems other nations have had in following this approach of giving a low priority to the handicapped. Handicapping conditions are caused by, and cause underdevelopment and dependency (UNESCO, 1979b, p. 6).

A United Nations expert group was convened in December 1977 to discuss the socio-economic implications of investment in rehabilitation services. The expert group concluded that:

The results of available research studies do not appear to demonstrate any conflict between the humanitarian basis for rehabilitation service provisions, and the basic principles of socio-economic planning. Disability will create a cost to society regardless of whether or not rehabilitation services exist. In fact, it appears that the more a society recognizes these costs, and the more it attempts to ameliorate them through the provision of adequate disability prevention and rehabilitation services, thus greater is the overall economic return that may be expected. (UNICEF, 1980, p. 16)

Several studies and expert estimates indicate that, considering the impact of disability on the family and society, up to 25% of any society is directly or indirectly affected by its consequences (Hammirman and Maikowski, 1981; UN, 1982). Accordingly, the economic returns of special education and rehabilitation should not only be evaluated on the basis of tangible economic savings but should include

the social factors affecting the quality of lives involved.

In the USA every dollar spent on rehabilitation returns anywhere from \$17 to \$35 to the economy (Warms and Hammerman, 1972). A cost-benefit analysis of special education programs for the mentally retarded in the USA found the lifetime earnings of the mildly retarded to be many times the cost of their education (Hammerman and Maikowski, 1981).

In Czechoslovakia it was estimated that after nine years, the contribution of a rehabilitated and employed person with a handicap amounts to nine times the cost of the special education and rehabilitation given (UNESCO, 1978). A follow-up study of the graduates of a school for physically handicapped youth in Prague's Jedlicka Institution found that 83% of the graduates were employed and only 17% entered special welfare institutions for the unemployable. Of the graduates of a special school for the mentally retarded in Prague, over a period of 13 years, 95% (11,300 out of 11,900 young people) found employment and only 5% became full "invalid pensioners" (Hammerman and Maikowski, 1981).

A study done in New Zealand to learn about the income of special education clients who were successfully placed in work situations found that those clients on average earned about 70% of the national average income (UNESCO, 1978).

In 1978, Wood and her associate carried out a study in Peru concerning the economics of a special education program in the Manucci School. This school provides an instructional program and a sheltered workshop for moderately and severely retarded children, several

psychotic and autistic children, and one class for deaf children. The total number of children served by this school was 80 students. The investment benefits from the Manucci School were calculated by estimating the increase in income of the student and his/her family as well as in the state tax resulting from six years of special education. The calculation of the student income was based on a conservative estimate of monthly income that would be typical for the majority of students, especially for graduates who were employed at higher paying jobs. The study assumed that the Manucci graduates will have a working life span of 30 years. The results of the study noted that the estimated annual return for the Manucci school investment was 10% per year. The study concluded that it is apparent that programs for the education of the handicapped, using the Manucci school model, are likely to offer relatively attractive investment returns for developing countries (Fink, 1978, p. 197).

Summary

Special education programs will necessarily entail additional expenditures, and Jordan is faced with the fact that it does not have sufficient funds to meet all its needs and purposes. Several sources indicate that the cost of failing to provide early identification and education of handicapped children and to train them and place them in the work force is much greater than the cost of special education and rehabilitation services (UNESCO, 1978, 1979b; Hammerman and Maikowsky, 1981).

Several studies and experts noted that the contribution of a

rehabilitated and employed person with a handicap is many times the cost of special education and rehabilitation. Therefore, special education and other support services for the handicap in Jordan should be perceived as positive social and economic investments.

D. Levels of Social and Educational Development in Jordan

Another factor underlying special education services in Jordan is the significant level of educational, social and medical development that has been accomplished. As indicated in the first chapter, Jordan is believed to be one of the leading countries among Arab states in terms of educational, social, and health services.

In recent years Jordan's society has become more aware of its handicapped children and their needs (Daoud, 1981). The social commitment is best reflected by the establishment of several voluntary associations to serve handicapped children, the government's increasing efforts and involvement in this area and the several initiatives to establish academic and inservice training programs for special education teachers.

Taking into consideration the state of the art of educational and social services and the development of other aspects of the life of Jordan's society, one may assume that demands for special education will be extremely high and the society will become more willing to respond to those demands. The growing public interest in special education, the increased number of voluntary association, and the new social and academic organizations attracted to the field especially the

Queen Alia Fund for Voluntary Social Work and the University of Jordan, lead the researcher to believe that Jordan has been building the basic foundation to develop a comprehensive special education system, which in the near future may more nearly meet the needs of Jordan's handicapped children.

Summary

The review of literature indicated that limited information on the number of handicapped children and their needs is available in Jordan. The review of various constitutional statements, related international declarations and factors relating to the economics of special education lend support to the argument that it is the government's constitutional and moral responsibility to provide handicapped children with special education program services.

Available information on disability prevalence and student-teacher ratios in different countries were also reviewed in this chapter. In light of the findings in this regard, the prevalence rates and student-teacher ratio for each type of disabled child in Jordan will be discussed and projected in the next chapter.

CHAPTER III

METHODOLOGY AND PROCEDURES

This chapter presents the research design and the steps that were followed in conducting this study. Special emphasis is given to a description of the methods used in this study to estimate the number of handicapped children and to assess the need for special education in Jordan.

The following elements are discussed in this chapter:

Methodology

- estimates of handicapped persons aged 5-18 in Jordan.
- estimate of program and service needs.

Procedures

- data sources.
- instruments.
- data collection.
- data analysis.

Definition of terms.

Limitations.

Methodology

a. Estimate of handicapped persons aged 5-18 in Jordan.

To estimate the population of handicapped children, a review was

made of the various procedures and methods of estimating of disability prevalence that have been used and/or recommended by the United Nation's specialized agencies, and other international organizations. All these organizations and agencies agree that in the early stages of planning for national special education programs, qualified individuals can assist in the preparation of estimates based on existing data, the experience of other societies, and internationally available statistics on disability prevalence (Helander et. al. 1980; R.I., 1981; UNESCO, 1979; WHO, 1980). The researcher considered all available UN and international organization estimates of disability prevalence, and the results of national surveys, studies, and estimates in several developing and developed countries. The great majority suggest that, in any given society, at least 10% of the child population has difficulties preventing them from benefiting adequately from ordinary education (ECWA, 1981; Helander et. al. 1980; Renker, 1981; R.I. 1981; UNICEF, 1980; UNESCO, 1979b; WHO, 1976). Using such a compendium of information, but considering only four selected categories, led the researcher estimated the following prevalence rates for handicapped Jordanian children:

Mentally retarded	2.0 - 3.0%
Blind and partially sighted	1.0 - 1.5%
Deaf and hard of hearing	1.5 - 2.0%
Physically handicapped	1.5 - 2.0%
TOTAL	6.0 - 8.5%

For the purpose of this study, the lower estimates of prevalence were applied to estimate the number of handicapped children for each

type of disability. This choice was made to avoid possible over-estimation of the population of handicapped children in view of the country's limited resources. Demographic data from the 1979 national census was the base reference for estimating Jordan's population, assuming a natural annual growth rate of 38 per thousand. (Department of Statistics, 1976, 1981). The population of children 5-18 years of age was based on an estimated percentage (38.8%) of the total population. This percentage was derived from a study of the distribution of Jordan's population conducted by the Department of Statistics (Department of Statistics, 1976).

An estimated number of handicapped children needing special education services was made for each type of disability and for each governorate, as well as for the whole country

b. Estimate of Program and Service Needs

The estimate of the type and number of special education programs and services needed covered the following major areas:

- number of teachers needed.
- prevention measures.
- administrative arrangements and interagency relations.
- public awareness.
- related services.
- legislation.

The number of needed special education teachers was estimated based upon the following assumptions:

- Current special education organizational arrangements and

patterns in Jordan will continue to be in effect for the near future.

- 100% service coverage of the 5-18 year population of handicapped children will be the standard used to project the numbers of teachers needed.
- Services ought to be distributed throughout the five geographical regions in order to foster education near the child's home.

An additional factor believed to be of special significance in Jordan relates to the economic resources available for the support of projected programs and services. Jordan is a developing country with limited financial resources. Accordingly, special education services as well as other social services must adopt the philosophy and practice of providing good quality services at minimum cost. This consideration is especially critical in order to gain governmental and public support and to ensure that the required programs and services are affordable.

As indicated by the review of literature, data for other countries show that student-teacher ratios for both the deaf and blind are almost the same. The same thing can be said about the ratios for the mentally retarded and physically handicapped. Also, the literature indicates that the student-teacher ratios for the blind and the deaf are lower than the ratios for the mentally retarded and the physically handicapped. Based on these staffing patterns, ratios were proposed at a point somewhere between current ratios in Jordan and the most frequent ratios reported in other developing and developed countries. These ratios are shown in Table 3:1.

Table 3.1
Student Teacher Ratios by Category

Category of Handicap	Currently in Jordan	Most Frequent in Other Countries	Proposed Ratio for Jordan
Blind	3:1	6-10:1	7:1
Deaf	8:1	5-10:1	7:1
Mentally Retarded	6:1	10-12:1	10:1
Physically Handicapped	26:1	10-12:1	12:1

This projection redistributes the teachers more evenly across categories of disablement, allowing for a much improved ratio in the physically handicapped programs.

There are many different factors, such as the severity of handicap, the program's area of emphasis, economic conditions, population density, prevalence rates and other factors that may affect the average student-teacher ratio for each type of handicapped child. These factors make it a difficult task to suggest specific ratios for particular handicap groups. In light of these facts, the suggested ratios should be viewed as a departure point to be used in initial planning. Further specific modification can then be considered on the

basis of experience and unique needs.

Projections concerning the number of handicapped children and the number of teachers needed were made for the calendar years, 1984-1987. To estimate the number of handicapped children, the estimated number of children within the 5-18 year age group was multiplied by the proposed prevalence rate for each category. The projected number of handicapped children in each handicap category was divided by the suggested number of students per teacher--see the suggested student-teacher ratios--to estimate the number of teachers needed.

For other aspects of the needs assessment carried out by this study, current special education models and practices in other developing countries, recognized and recommended by the UN specialized agencies and other international organization, were used as a standard reference. Other information available from developed countries was considered in light of the level of development of special education services in Jordan, and in light of the social, political, and economic facts of Jordanian society. The results of the needs assessment are reported in Chapter four.

Procedures:

a. Data Sources:

The researcher collected data on present special education programs within Jordan from the following sources:

- a - All known special education centers.
- b - Voluntary associations working in the field of special

education.

- c - The statistical report of the Jordanian Department of Statistics.
- d - Documents from the Ministry of Social Development.
- e - Interviews with officials of related governmental agencies, voluntary associations, and the University of Jordan.

Data collected include the number of students being served; demographic characteristics of the served population; and numbers, types, and characteristics of professionals working in the field.

b. Instruments:

To collect the necessary data pertaining to the status of special education services in the country the following instruments were used:

1. Questionnaires: The researcher developed two questionnaires in English. After the doctoral committee approved them, the researcher translated them into Arabic. Five Jordanian doctoral students at Michigan State University were asked to evaluate the Arabic version of the questionnaires. Several changes in the wording of questions were made in line with recommendations made by three evaluators. The two questionnaires are:

-Questionnaire for Special Education Centers.

This questionnaire was designed to collect data from special education centers (both governmental and voluntary) regarding their area of specialization, demographic characteristics of students, the number of teachers, and other professionals, type of services being provided, annual expenditures, educational curricula and certain other

administrative matters (see Appendix 2a).

-The Jordanian Voluntary Associations Questionnaire

This three-page questionnaire was designed to collect data from the headquarters of the voluntary associations working in the field of special education. Questions focused upon administrative structure, funding sources, the type of services and community relations of the voluntary association, and other questions pertaining to goals, problems and other related issues (see Appendix 2b).

2. Informal interviews: Interviews were conducted with the following officials: the Undersecretary of Education, the Director of Special Education and Rehabilitation at the Ministry of Social Development, the Director of the University Center for Special Education and Rehabilitation, the Assistant Undersecretary of the Ministry of Social Development, and the Director of Social Services. Interview questions were tailored to deal with matters within each agency's jurisdiction. The typical questions posed for each such interview are contained in Appendix 2c. The information gathered from these interviews served only to improve the author's understanding of the various issues related to special education services in Jordan.

3. Review of official documents: The researcher conducted a review of related documents at the Ministry of Social Development, specifically the Ministry Charter, the Ministry five-year plan, documents of the National Committee for the Year of Disabled Persons, and reports of UN and other international experts on their visits to the country. These documents are available in the Library of the Ministry of Social Development and are listed within the references of

this dissertation.

c. Data Collection:

Data was collected by the researcher himself and a research assistant. The research assistant was a graduate student in counseling at the University of Jordan and director of the Laboratory School for the Mentally Retarded, sponsored by the University Center for Special Education and Rehabilitation at the University of Jordan. The researcher trained the research assistant on how to administer and code the questionnaires.

A visit was made to each special education center to fill out the questionnaire for that center. Also, a visit was made to the office of each voluntary association to fill out the questionnaire for voluntary associations. Of the 25 questionnaires for special education centers, the author filled out 19 while the research assistant completed six questionnaires. Of the 12 questionnaires for voluntary associations, the author administered eight and the research assistant filled out the other four questionnaires.

The special education center questionnaires were filled out during meetings with the centers' directors, social workers or teachers. Twenty questionnaires were filled out during meetings with the center director, five with social workers, and only one questionnaire was filled out while meeting with a teacher who was acting director at the time of the interview.

The questionnaires for voluntary associations were filled out during interviews with the president or secretary general of each

association. Six questionnaires were filled out while meeting with presidents, and the other five while meeting with secretaries general.

The author conducted interviews with officials from the Ministries of Education and Social Development as well as other officials of the Queen Alia Fund for Voluntary social Work and the University Center for Special Education and Rehabilitation at the University of Jordan. Each interview required 40-60 minutes. The purpose of these interviews was to discuss the current and future activities of their respective departments and agencies in the field of special education. Cooperation and coordination of activities between various concerned bodies was discussed. Various issues related to future developments in the field of special education were also discussed. All interviews were conducted between July 15, 1982 and September 10, 1982.

d. Data Analysis

Since the nature of this study is descriptive and explanatory, descriptive statistics were used for data analysis. Statistical analysis is presented in terms of frequencies, percentages, averages and ratios.

Definition of Terms

In a study of this type which depends upon data from a wide variety of persons who have many different perspectives, backgrounds and responsibilities, it is not possible to expect uniform understanding or acceptance of terms. Consequently, rather generic and common labels were frequently encountered in the interviews and data

collection. However, for purposes of projections and recommendations, the following definitions are used and intended as the basic definitions to be adopted within Jordan.

-Special education: An enriched form of general education, aimed at enhancing the quality of living for those who labour under a variety of handicapping conditions; enriched in so far as it makes use of specially trained educational personnel who are aware of the application of methodological advances in education and technological equipment to offset certain types of handicaps (UNESCO, 1981).

-Handicapped children: Those children and youth between 5-18 years of age who, because of their mental state of congenital or acquired defects, or chronic diseases, display inadequate vital/or social function and require the special help and support of society in the form of comprehensive care and special instruction, in order to make possible their further development, integration into society and further inclusion in the work process (UNESCO, 1978).

In this study both terms handicapped and disabled were used interchangeably.

-Mental retardation: refers to significant subaverage general intellectual functioning existing concurrently with deficit in adaptive behavior during the developmental period (Grossman, 1973; UNESCO, 1977).

The mentally retarded as a group may be subdivided into the following subcategories:

-Mild mentally retarded: (Educable mentally retarded):
Individuals who can acquire practical skills and functional reading and

arithmetic abilities with special education and who can be guided toward social conformity. The expected I.Q. of such individuals ranges from 50-70 (WHO, 1980; UNESCO, 1981).

-Moderate mentally retarded: (Trainable mentally retarded):

Individuals who can learn simple communication, elementary health and safety habits, and simple manual skills but do not progress in functional reading or arithmetic. The expected I.Q. of such individuals approximately ranges from 35-49. (WHO, 1980; UNESCO, 1981).

-Severely mentally retarded: Individuals who can profit from systematic habits training. The expected I.Q. of such individuals approximately ranges from 20-34 (WHO, 1980; UNESCO, 1981).

-Profound mentally retarded: Individuals who may respond to skill training in use of legs, hands and jaws. The average I.Q. of such individuals approximately ranges from 0-19 (WHO, 1980; UNESCO, 1981)..

-Hearing impaired: Individuals who have a hearing disability that may vary in severity from mild to profound; it includes the subsets of deaf and hard of hearing.

-Deaf: A deaf person is one whose hearing disability prevents successful processing of linguistic information through audition, with or without a hearing aid. Such persons must be taught a means of communication by use of special educational techniques such as speech-reading, auditory training, and sign language (UNESCO, 1977; Hallahan and Kaufman, 1982).

-Hard of hearing: A hard-of-hearing person is one who, generally with the use of a hearing aid, has residual hearing sufficient to

enable successful processing of linguistic information through audition (Hallahan and Kauffman, 1982).

-Visually impaired: Individuals who have a visual disability that may vary in severity from mild to profound; it includes the subsets of blind and partially sighted (Heward and Orlansky, 1980)

-Blind: A blind person is totally without, or has so little, visual input that he or she learns primarily by means of Braille and other nonvisual educational materials (UNESCO, 1977).

-Partially sighted: Persons who have seriously defective vision; they can be given instruction and read normal black print, but the visual defect has nevertheless to an extent demanded special optical aids and/or educational attention (UNESCO, 1977).

-Physically Handicapped: Those whose nonsensory physical limitations or health problems interfere with school attendance or learning to such an extent that special services, training, equipment, materials or facilities are required (Hallanhan and Kaffman, 1982).

-Special day school: A school organized to serve one or more types of handicapped children exclusively in which there are no arrangements for sleeping overnight (UNESCO, 1977). In Jordan these schools are referred to as special education day centers.

-Residential special school: A boarding school organized to serve one or more types of handicapped children exclusively. All or some of the school students are served on a residential basis.

-Rehabilitation: A continuing process which includes use of measures aimed at reducing the impact of disabling and handicapping conditions and at enabling the disabled and handicapped to achieve

social integration. Rehabilitation aims not only at training disabled and handicapped persons to adapt to their environment, but also at intervening in their immediate environment and society as a whole in order to facilitate their social intergration (WHO, 1981).

Limitations

The following are limitations of the study:

1. This descriptive study does not provide an in-depth analysis of the present situation or the needs of special education in Jordan. No attempt was made to assess the quality or effectiveness of current programs, nor the specific and/or unique needs of known students.

2. The study was restricted to the following four types of disabilities: blindness, deafness, mental retardation and physical handicaps

3. Due to the lack of valid devices for assessment and classification and commonly accepted definition of terms, the researcher accepted the center's classification of the children being served. Consequently, the data on numbers and types of handicapped students may vary greatly from that which would be obtained if the definitions contained in the prior definition of terms were carefully applied. Given this limitation it is expected that the reliability and validity of demographic information is less than that which would be desired for detailed planning. For this study however the data are judged to be sufficient for the purposes of initial planning and the formation of policies needed to improve special education services.

4. Children were only classified according to the major

disability without provision for enumeration of secondary or multiple handicaps.

5. There was a very small number of visually impaired and physically handicapped students attending public schools. The study did not include them, because the Ministry of Education does not keep specific information about them. It is also assumed that the handicapping conditions of such students are relatively mild.

CHAPTER IV

PRESENT STATUS AND NEEDS OF SPECIAL EDUCATION IN JORDAN

The main purpose of this research was to study the present situation and to assess the needs of special education in Jordan. In this chapter, findings related to this purpose are reported in four sections.

The first section discusses general issues concerning the organization of special education and the role of governmental and voluntary organizations in the delivery of services. This section also describes the current approach to identification of handicapped students and educational practices in the field.

The second section is devoted to a description of the statistical and demographic characteristics of current programs and the population of handicapped children being served. More specific data on the following components are reported and discussed: the number of special education centers; their types and distribution according to sponsorship and location, the number of students and their distribution according to sex, age group, disability group and severity of handicap, as well as their distribution among various regions. This section also reports the findings regarding the educational training of special education teachers and other staff members and data on the costs of special education in Jordan.

Section three deals with needs assessment and includes projections of the numbers of handicapped children and special education teachers needed as well as other administrative, informational and educational needs. A summary of the present status and needs of special education is given in section four.

Organization of Special Education

Special education services in Jordan have been provided by both governmental agencies and voluntary associations. The following governmental agencies are involved in special education and related services: the Ministry of Social Development, the Queen Alia Fund for Voluntary Social Work, the Ministry of Public Health, and the University of Jordan. There are also a number of national and foreign voluntary associations providing and sponsoring special education services. More details about these governmental and voluntary organizations are provided below.

Governmental Agencies

1. The Ministry of Social Development.

The Ministry of Social Development (MSD) is the main governmental body responsible for the welfare, education, and rehabilitation of handicapped persons. It is the Department of Special Education and Rehabilitation within the MSD that coordinates and supervises the Ministry efforts with respect to special education and rehabilitation. Article Seven of the Charter of the MSD lists the following special

education and rehabilitation purposes:

- To sponsor and supervise governmental special education programs.
- To provide professional guidance for the work of voluntary associations in the field of special education.
- To develop and support vocational rehabilitation services.
- To improve the professional skills of special education workers.
- To issue related rules to regulate and control special education in Jordan.
- To educate the public about disability prevention and rehabilitation. (Ministry of Social Development, 1981)

The MSD regulations require that the Special Education and Rehabilitation Department shall include the following divisions: the Division for Educational Guidance, the Division of Instructional Affairs, and the Division of Registration and Vocational Rehabilitation. Despite these regulations, the Department is still functioning on a very limited basis. The Department staff is composed of six members including the director. Except for the director, no one of the staff members has acquired academic training in the education of handicapped children. Only one staff member has acquired academic training in rehabilitation counseling. Due to the limited amount of trained staff and professional expertise, and other funding and administrative factors as well, the Department has done very little to improve the quality of special education or to provide professional and technical assistance to teachers and administrators of special education centers. The most significant effort in this regard was two inservice training programs; the first one was for teachers of mentally

retarded children. This program began in 1979 and ended in late 1980. About 25 teachers from different special education centers for the mentally retarded participated in this two-year inservice training. Training sessions were held only on every Thursday (the whole day) of the 1979/1980 and 1980/1981 academic years. Also, intensive training was given in the summer vacation of 1980. The following main topics were covered by the training program: introduction to special education, introduction to mental retardation, educational characteristics of mentally retarded children, teaching methods, curricula development, child assessment, and some other topics related to education of mentally retarded children.

The second inservice training program was a three-month program for teachers at the Queen Alia Center for the Deaf. This program was organized in 1979 in cooperation with Italy. Two Italian experts in deaf education gave lectures and practical training for teachers who participated in the program.

In addition to its direct special education services, the MSD provides financial support to voluntary associations interested in special education. Usually the Department of Voluntary Associations under the MSD consults with the Department of Special Education and Rehabilitation regarding decisions about financial assistance to voluntary associations working in the field of special education.

The other important organization under the MSD is the Community College of Social Work, formally the Institute of Social Work. This college provides a two-year, post-high school program of study leading to a diploma in social work. In the beginning of the 1980/1981

academic year the college started an additional two-year training program to qualify special education teachers. This program offers training leading to a diploma of special education. The program is expected to have a significant positive impact on the short-and long-term future of special education in Jordan. The graduates of this program are expected to contribute to an improvement in the quality of special education services and to add to the numbers of trained personnel in the field.

2. The Ministry of Public Health .

The Ministry of Public Health is the governmental body responsible for providing, regulating and supervising health services in the country. The Ministry provides medical services free of charge to public servants and their families, and at nominal charge to the general public. The Ministry's medical services are provided through a network of hospitals and clinics scattered throughout the country. Also the Ministry operates a small number of maternal and child health centers. In addition to its direct medical services the Ministry controls and regulates the medical services of the private sector.

The contribution of the Ministry of Public Health in the field of special education is very limited. The main contributions that may be noted are free medical care for the students at special education centers and the contribution of a nurse and physical therapist to a center for the physically handicapped.

3. The Queen Alia Fund for Voluntary Social Work .

The Queen Alia Fund is mainly administered and supervised by the government, but it is financed by governmental, voluntary, and foreign contributions.

This fund was created in 1977 to develop and improve the quality of social services in general, with particular emphasis on services provided for the handicapped. Since its creation, the fund has shown a serious interest in upgrading special education services. In 1979, the fund carried out a survey to determine the number of handicapped persons in the country. Despite the many deficiencies of the survey, it is a valid indicator of the fund's interests in the welfare of the handicapped.

The fund has provided financial support to voluntary associations, especially those working with or for the handicapped. As of the date of this study, the fund was sponsoring the construction of two centers, one for the education of the deaf and the other for the physically handicapped (The Queen Alia Fund for Voluntary Social Work, 1983).

4. The University of Jordan.

The University Center of Special Education and Rehabilitation was formally established in 1979 at the University of Jordan with the cooperation of the University Center for International Rehabilitation at Michigan State University. The following were said to be the center's main goals:

- To provide academic training for special teachers and other professionals to work with handicapped persons.
- To gather and disseminate information on disability.

- To conduct studies and research relevant to disability prevention and rehabilitation.

- To set up model programs for the education and rehabilitation of handicapped persons.

Currently, the center, under the umbrella of the College of Education, provides a graduate program in special education (two years of additional study beyond the B.A.). In 1981 the center established a small laboratory school for mentally retarded children (University Center for Special Education and Rehabilitation, 1983).

Voluntary Associations

As of the date of this study, there were 12 voluntary associations working in the field of special education in Jordan. In addition to these 12 associations, there were a number of other voluntary associations interested in handicapped persons, but they did not provide special education programs or services.

In general there were three types of voluntary associations operating in the country. These are:

National Associations: Associations established in Jordan by the Jordanian people and funded by contributions from the general public.

Regional Associations: Associations or organizations established, funded and supervised by participants from Jordan and other countries. These associations usually operate in more than one country.

Foreign Associations: Associations that operate in Jordan but are funded and directed mainly by foreign countries.

The 12 voluntary associations providing special education services

may be classified according to the association type (national, regional and foreign) and the disability group of interest as shown in Table 4.1

Table 4.1
Distribution of Voluntary Associations According
to Type and Disability Group of Interest

Disability Group	Type of Association			Total
	National	Regional	Foreign	
Blind	--	1	--	1
Deaf	3	--	1	4
Mentally Retarded	5	--	1	6
Physically Handicapped	1	--	--	1
Total	9	1	2	12

The distribution of these voluntary associations according to area of interest, number of special education centers sponsored, and number of students served is given in Table 4.2.

Table 4.2
Distribution of Voluntary Associations According to Area
of Interest, Number of Special Education Centers
Sponsored and Number of Students Served

Handicap Category	Name of Association*	No. of Centers	No. of Students
Blind	Regional Office of the Middle East Committee	1	40
	(Subtotal)	(1)	(40)
Deaf	The Bible Land Association	1	59
	The Queen Alia Association	1**	90
	Al-Raja' Association	1	46
	Al-Zerka Association	1	30
	(Subtotal)	(4)	(225)
Mentally Retarded	Ja'an Association	1	11
	The Mental Health Association	4	181
	The National Association	2	30
	The Swedish Organization	1	40
	Al-Tafeeleh Association	1	18
	Young Moslem Women	1	101
	(Subtotal)	(10)	(381)
Physically Handicapped	Al-Hussain Association	1**	49
	(Subtotal)	(1)	(49)
	TOTAL	16	695

*Not the complete names

**Sponsored jointly with the government

These organizations are briefly described below:

1. The Regional Office of the Middle East Committee for the Welfare of the Blind.

The Regional Office of the Middle East Committee for the Welfare of the Blind is a regional association composed of eight Arab countries, Turkey, and Iran. The main goals of the regional office are to foster regional cooperation and to facilitate exchange of information on blindness prevention and rehabilitation. The regional office also acts as the regional committee for the World Council for the Welfare of the Blind. In 1974 the regional office established a rehabilitation center for the education and training of blind girls in Amman.

2. The Bible Land Association for the Deaf.

The Bible Land Association is sponsored by the Anglican Episcopal Church in cooperation with the Christian Deaf Community of Switzerland and Lebanon. The Bible Land Association moved into Jordan in 1964 and established the Holy Land Institute for the Deaf in Salt City. Since that date, the institute has continued to provide educational programs for deaf children.

3. The Queen Alia Association for the Welfare of The Deaf.

The Queen Alia Association was formed in 1978 in Amman to provide educational services for the deaf and to assist their families. Currently, this association sponsors the Queen Alia Center for the Deaf

jointly with the Ministry of Social Development.

4. Al-Raja' Association for the Welfare of the Deaf.

Al-Raja' Association was started in Amman in 1975 to provide educational services for the deaf, especially young children. This association is interested in implementing oral methods for education of the deaf. Currently the association sponsors a school for the deaf in Amman.

5. Al-Zerka Association for the Handicapped.

This association was established in 1981 in Zerka City. The main aims of the association are to establish special education and rehabilitation programs for deaf children and to establish a "care home" for cerebral palsied children. So far this association has established a day school for the deaf in Zerka City.

6. Ja'afar Association for Mentally Handicapped Children.

This association was established in 1982 as a nonprofit organization by a parent of a severely mentally handicapped person in Naour town. Currently, the association operates a small residential center for severely mentally handicapped children. All children are served on a residential basis.

7. The Mental Health Association.

The Mental Health Association (MHA) was organized in 1970. In 1972 the MHA established a hostel for former mental patients. Soon

after that the MHA switched its interests from the mentally ill to the mentally retarded. At present the MHA sponsors four centers for the mentally retarded; two of these centers are located in Amman, a third in Al-Baga'a Camp, and the fourth in Zerka City.

8. The National Association for the Mentally Handicapped.

The National Association for the Mentally Handicapped (NAMH) was established in 1978 as a parents association. The main goals of the NAMH are:

To arouse the community and the authorities concerned to attend to the mentally handicapped and to accept them as citizens entitled to the same rights as any other citizen.

To offer counseling, guidance, and support to families of the mentally handicapped and to assist them in better accepting and adapting to them and to carry out any activities that will lead to the benefit of the mentally handicapped (NAMH, 1979, p. 2).

So far the NAMH has established one chapter in Irbed City. At present the association sponsors two educational centers, one in Amman and the other in Irbed. A comprehensive center of the NAMH in the Amman area is under construction.

9. The Swedish Organization for Individual Relief.

The Swedish Organization is a nonprofit organization founded in Sweden in 1938 to "assist and rehabilitate needy and suffering people regardless of race, nationality, political or religious beliefs" (The

Swedish Organization, 1981, p.3). The organization depends on contributions from private citizens in Sweden. In 1966 the Swedish organization opened its first "care home" for the mentally retarded in Jerusalem. In 1968 the organization started a residential home and a day school for the mentally retarded in Amman. There were at that time no special services for the mentally handicapped in Jordan. At present the Swedish Organization runs a care home for severely disabled children, a day center for the mentally retarded and a vocational training program in the Amman area.

10. Al-Tafeeleh Association for Voluntary Social Work.

Al-Tafeeleh Association was formed to serve Al-Tafeeleh community. This association is engaged in several social and charitable activities. In 1979 the association established a small special education center in Al-Tafeeleh.

11. The Young Moslem Women's Association.

The Young Moslem Women's Association (YMWA) (YMWA) was established in 1972. This association is involved in several activities, one of which is the operation of a day school for mentally retarded children in the Amman area. Also the YMWA provides counseling and guidance services to families of mentally retarded children.

12. Al-Hussain Association for the Care of Paralyzed Children.

This association was founded to care for paralyzed and other physically handicapped children.

At present the Al-Hussain Association sponsors, jointly with the Queen Alia Fund, a residential school for physically handicapped children.

Special Education Provisions for Handicapped Children

a. Numbers and Demographic Characteristics of Handicapped Children Presently Served

This study revealed that all current special education services in Jordan were provided through special schools for certain types of disabilities. Mainstreamed and integrated programs did not exist. There were two types of special schools, day schools and residential schools. The students in day schools were typically bussed to their schools. Students in residential schools could reside in the school or be bussed depending on how far their homes were from the schools. All the schools were coeducational except for one school that was limited to blind females.

At the time of this study there were 25 special education centers (special schools) in Jordan. Twelve centers were residential and the other 13 were day centers. These special education centers served disability groups as follows: two centers for the education of the blind, six for the deaf, 15 for the mentally retarded, and two for the physically handicapped. The distribution of special education centers and the number of students served according to type (residential or day school), disability group, and service provider is given in Table 4.3. The figures in Table 4.3 indicate that the largest number of centers were sponsored by voluntary organizations, i.e., 14 (56%) of the total

Table 4.3

Distribution of Special Education Centers and the Numbers
of Students Served According to Handicapped
Category and Service Provider

Hand Category	Service * Provider	Numbers and Percentages of Sp. Ed. Centers and Students					
		Number of Sp. Ed. Centers			Number and Percentages of Student		
		residen- tial	day school	Total	residen- tial	day school	Total
Blind	G	1	0	1	66	34	100
	V	1	0	1	40	0	40
	J	0	0	0	0	0	0
	T	2	0	2	106	34	140
		(100%)		(100%)	(76%)	(24%)	(100%)
Deaf	G	2	0	2	70	144	214
	V	1	2	3	59	76	135
	J	1	0	1	30	60	90
	T	4	2	6	159	280	439
		(67%)	(33%)	(100%)	(36%)	(64%)	(100%)
Mentally Retarded	G	1	4	5	18	165	183
	V	3	7	10	25	365	381
	J	0	0	0	0	0	0
	T	4	11	15	43	521	564
		(26%)	(73%)	(100%)	(8%)	(92%)	(100%)
Physically Handicapped	G	1	0	1	52	0	52
	V	0	0	0	0	0	0
	J	1	0	1	49	0	49
	T	2	0	2	101	0	101
		(100%)	0	(100%)	(100%)	0	(100%)
All Categories	G	5	4	9	206	343	549
	V	5	9	14	124	432	556
	J	2	0	2	79	60	139
	T	12	13	25	409	835	1244
		(48%)	(52%)	(100%)	(33%)	(67%)	(100%)

*G: government

V: voluntary associations

J: jointly sponsored program T: Total

This coding will be used in the next tables.

number of special education centers. The total number of residential and day centers were 12 and 13 respectively. Table 4.3 also shows that the total number of handicapped children served was 1244 children; 409 (33%) of them in residential settings and 835 (67%) in nonresidential settings.

Table 4.4 presents the distribution of the numbers and percentages of handicapped students according to type of disability and service providers (sponsors of the special education centers).

Table 4.4
Distribution of Numbers and Percentages of Students According
to Type of Disability and Service Provider

Service Provider	Number of Students Served by Type of Disability									
	Blind		Deaf		MR		Phy.Hand.		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
G	100	71.43	214	48.75	183	32.45	52	51.49	549	44.13
V	40	28.57	135	30.75	381	67.55	--	--	556	44.69
J	--	--	90	20.50	--	--	49	48.51	139	11.17
Total	140	11.25	439	35.29	564	45.34	101	8.12	1244	100%

The figures in Table 4.4 show that of the 1244 students being served, 549 (44.13%) were served by governmental centers, 550 (44.69%) were served by voluntary associations, and 139 (11.17%) were served by jointly sponsored programs. Also, Table 4.4 shows that the largest group of handicapped students being served was the mentally retarded. These 564 students composed 45.34% of the total. The second largest number served the deaf group which numbered 439 (35.29% of the total).

Table 4.5

Distribution of Students Served According to Age Group,
Handicap Category and Service Provider

Handicap Category	Service Provider	Numbers of Students in Each Age Group					Total
		3-5	6-9	10-12	13-15	16-18	
Blind	G	0	52	32	14	2	100
	V	0	0	0	4	36	40
	J	0	0	0	0	0	0
	T	0 (0%)	52 (37%)	32 (30%)	18 (12%)	38 (27%)	140 (100%)
Deaf	G	20	127	54	13	0	214
	V	30	60	26	11	8	135
	J	19	53	16	2	0	90
	T	69 (16%)	240 (55%)	96 (22%)	26 (6%)	8 (2%)	434 (100%)
Mentally Retarded	G	2	50	82	48	1	183
	V	22	132	155	72	0	381
	J	0	0	0	0	0	0
	T	24 (4%)	182 (32%)	237 (42%)	120 (21%)	1 (0.2%)	564 (100%)
Physically Handicapped	G	0	18	19	15	0	52
	V	0	0	0	0	0	0
	J	0	9	13	14	13	49
	T	0 (0%)	27 (27%)	32 (32%)	29 (29%)	13 (13%)	101 (100%)
All Categories	G	22	247	187	90	3	549
	V	52	192	181	87	44	556
	J	19	62	29	16	13	139
	T	93 (8%)	501 (40%)	397 (32%)	193 (16%)	60 (5%)	1244 (100%)

The distribution of the numbers of students being served according to age group, type of disability and service provider is reported in Table 4.5.

It is apparent from Table 4.5 that 501 students (40%) of the total number of handicapped children served were in the 6-9 year age group. The number of students within the 10-12 year age group was 397 students. These 397 students comprised 32% of the total. The lowest number of students (60) was found for the 16-18 year age group; this number represents only 5% of the total. The low number of students in the 16-18 year age group was due to the fact that it is a common practice in Jordan to transfer handicapped students to vocational rehabilitation programs when they reach age 16. It is clear in Table 4.5 that neither the preschool age blind nor the physically disabled children have been served in any type of special education program.

Table 4.6 presents the distribution of handicapped children being served in each disability category according to the severity of handicap reported by the centers.

Figures in Table 4.6 indicate that of the total number of handicapped children being served, 170 (14%) were mildly handicapped, 554 (45%) were moderately handicapped, and 520 (42%) were severely handicapped.

Table 4.7 shows the reported number of students being served according to sex, type of disability and service providers.

Table 4.6
Distribution of Handicapped Children Being Served According
to Type of Disability and Severity of Handicap

Disability Group	Disability Degree			Total
	Mild	Moderate	Severe	
Blind	-- --	21 (15%)	119 (85%)	140 (100%)
Deaf	17 (4%)	133 (30%)	289 (66%)	439 (100%)
Mentally Retarded	153 (27%)	329 (58%)	82 (15%)	564 (100%)
Physically Handicapped	-- --	71 (70%)	30 (30%)	101 (100%)
Total	170 (14%)	554 (45%)	520 (42%)	1244 (100%)

The geographical distribution of children served is shown in Table 4.8. The total number of children being served is distributed among the five governorates as follows: 849 (68%) of the total in Amman, 255 (21%) in Irbed, 78 (7%) in Al-Balga, 56 (5%) in Al-Karak and only 6 (0.5%) in Ma'an. From the above figures and percentages, it is apparent that children from Amman were the largest group. Also the difference between the number of students from Amman and students in other governorates is very large. In fact, children from Amman comprise more than two-thirds of the total number of children being served. In comparing the proportion of the population of each governorate and the distribution of children being served among the five governorates (see Table 4.9), one can conclude that there is not equal access to special education services in each governorate.

Table 4.7

Distribution of Students Being Served According to Sex,
Handicap Category and Service Provider

Handicap Category	Governmental				Voluntary				Jointly Sponsor				All	
	M	F	T	M	F	T	M	F	M	F	T	M	F	M
Blind	56 (56%)	44 (44%)	100 (100%)	-	40 (100%)	40 (100%)	-	-	-	-	-	56 (40%)	84 (60%)	140 (100%)
Deaf	120 (58.4%)	88 (41.1%)	214 (100%)	82 (60.7%)	53 (34.3%)	135 (100%)	58 (64.4%)	32 (35.6%)	90 (100%)	266 (60.6%)	173 (39.4%)	439 (100%)		
Mentally Retarded	119 (65%)	64 (35%)	183 (100%)	231 (80.6%)	150 (39.4%)	381 (100%)	-	-	-	350 (62.1%)	214 (37.9%)	504 (100%)		
Physically Handicap	36 (69.2%)	16 (30.8%)	52 (100%)	-	-	-	22 (44.4%)	27 (55.1%)	49 (100%)	58 (57.4%)	43 (42.6%)	101 (100%)		
All Categories	337 (61.4%)	212 (38.6%)	549 (100%)	313 (50.3%)	243 (43.7%)	556 (100%)	80 (57.6%)	59 (42.4%)	139 (100%)	730 (58.7%)	514 (41.3%)	1244 (100%)		

Table 4.8

Distribution of Handicapped Children Being Served
According to Category, Residence
and Service Provider

Handicap Category	Service Provider	Number and Percentage of Handicapped Students Served by Region					Total
		Amman	Irbed	Al-Balga	Al-Karak	Ma'an	
Blind	G	34	35	10	18	3	100
	V	26	8	2	4	0	40
	J	0	0	0	0	0	0
	T	60 (43%)	43 (31%)	12 (9%)	22 (16%)	3 (3%)	140 (100%)
Deaf	G	120	86	4	4	0	214
	V	109	13	11	1	1	135
	J	80	7	0	3	0	90
	T	309 (70%)	106 (24%)	15 (3%)	8 (2%)	1 (003%)	439 (100%)
Mentally Retarded	G	110	61	12	0	0	183
	V	312	13	36	20	0	381
	J	0	0	0	0	0	0
	T	422 (75%)	74 (13%)	48 (9%)	20 (4%)	0 0	564 (100%)
Physically Handicapped	G	21	27	0	4	0	52
	V	0	0	0	0	0	0
	J	37	5	3	2	2	49
	T	58 (57%)	32 (32%)	3 (3%)	6 (6%)	2 (2%)	101 (100%)
All Categories	G	285	209	26	26	3	549
	V	477	34	49	25	1	556
	J	117	12	3	5	2	139
	T	849 (68%)	255 (21%)	78 (6%)	56 (5%)	6 (0.5%)	1244 (100%)

Table 4.9
Proportions of Population and Children Being
Served in Each Governorate as of 1982

Governorate	Total # of children Age 5-18	% of Total Population	Handicapped Children Served	% of Children Served
Amman	514519	55.2	849	68.2
Irbed	264374	28.4	255	20.5
Al-Balga	65760	7.1	78	6.3
Al-Karak	54725	5.9	56	4.5
Ma'an	32535	3.5	6	0.5
Total	931914	100.0	1244	100.0

b. Teachers and Other Staff Members

Employed by Special Education Centers

Data were gathered about the number of teachers, their sex and academic training. Table 4.10 describes the distribution of teachers according to sex, the disability group with which they work, and the organization under which they serve (governmental centers, voluntary associations and jointly sponsored programs).

The numbers in Table 4.10 show that the total number of special education teachers was 196; 180 (92%) of them were female and the remaining 16 (8%) were male. The largest number of male teachers was for teachers of the blind. The academic training of these special education teachers is reported in Table 4.11.

Table 4.10

Distribution of the Numbers of Teachers According to
Sex, Disability Group and Organization
Under Which They Serve

Sponsorship	Disability Groups and Sex of Teachers									
	Blind		Deaf		Mentally Retarded		Physically Handicapped		Total	
	M	F	M	F	M	F	M	F	M	F
	G									
G	6	15	0	23	1	37	0	2	7 (8%)	77 (92%)
V	5	21	3	17	0	51	0	0	8 (8%)	89 (92%)
J	0	0	1	12	0	0	0	2	1 (7%)	14 (93%)
Sex & Group Total	11	36	4	52	1	88	-	4	16 (8%)	180 (92%)
Total	47 (24%)		56 (28%)		89 (45%)		4 (2%)		196 (100%)	

Table 4.11

Distribution of Teachers According to the Level of
Education, Disability Group and Organization
under Which They Serve

Handicapped Conditions	Program Sponsorship	Levels of Education Acquired									
		Below High School		High School		Diploma		B.A. Degree		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
Blind	G	5	23.81%	5	23.81%	4	19.05%	7	33.33%	21	100%
	V	12	40.15%	4	15.38%	3	11.45%	7	26.92%	26	100%
	J	-	-	-	-	-	-	-	-	-	-
	T	17	36.17%	9	19.15%	7	14.89%	14	29.72%	47	100%
Deaf	G	3	13.05%	4	17.39%	16	69.57%	-	-	23	100%
	V	4	20%	2	10%	13	65%	1	5%	20	100%
	J	-	-	1	7.09%	10	76.92%	2	15.39%	13	100%
	T	7	12.50%	7	12.50%	39	69.04%	3	5.36%	56	100%
Mentally Retarded	G	-	-	12	31.58%	24	63.16%	2	5.26%	38	100%
	V	-	-	18	35.29%	30	58.82%	3	5.88%	51	100%
	J	-	-	-	-	-	-	-	-	-	-
	T	-	-	30	33.71%	54	60.67%	5	5.62%	89	100%
Physically Handicapped	G	-	-	-	-	2	100%	-	-	2	100%
	V	-	-	-	-	-	-	-	-	-	-
	J	-	-	1	50%	1	50%	-	-	2	100%
	T	-	-	1	25%	3	75%	-	-	4	100%
Total	G	8	9.52%	21	2.5%	46	54.76%	9	10.71%	84	100%
	V	16	16.49%	24	24.74%	46	47.42%	11	11.34%	97	100%
	J	-	-	2	13.33%	11	73.33%	2	13.33%	15	100%
	T	24	12.24%	47	23.98%	103	52.55%	22	11.22%	196	100%

The levels of academic training of teachers as shown in Table 4.11 ranged from less than high school education to university degrees. Of the 196 teachers, 24 (12.24%) had less than a high school education and 22 (11.22%) had university degrees. The majority of teachers, 103 (52.55%), had acquired a diploma degree. Most of these teachers acquired their diploma from community colleges for teacher training, formerly called teacher training centers. It is important to mention that these colleges provide no training in special education. Table 4.11 points out that the largest number of teachers with less than a high school education were employed as teachers for the blind.

The average student-teacher ratio was calculated for each type of disability and service provider. The obtained ratios are presented in Table 4.12. The ratio for physically handicapped (26:1) was extremely high if compared with the ratios for other types of disability.

In addition to special education teachers, the special education centers in Jordan employed 85 other professionals and 152 non-professionals. Table 4.13 presents the distribution of professionals according to job classification, sex, and the disability group with which they worked. The following main points may be noted in Table 4.13.

Two centers had no director's position. In each of these two centers there was a teacher who was assigned additional responsibilities as an acting director; only one center employed a speech therapist; only, one center employed a family counselor; seven centers had no social worker. It can be concluded that several centers lacked some of the specialized, essential services that a special school

Table 4.12

Average Student-Teacher Ratios for Each Category
of Handicapped and Service Provider

Handicapped Category	Service Providers	Number of Students and Teachers		Student-Teacher Ratio**
		No. of Students	No. of Teachers	
Blind	G	100	21	5:1
	V	40	26	2:1
	J	-	-	-
	T	140	47	3:1
Deaf	G	214	23	9:1
	V	155	20	8:1
	J	90	13	7:1
	T	459	50	8:1
Mentally Retarded	G	183	38	5:1
	V	381	51	8:1
	J	-	-	-
	T	561	89	6:1
Physically Handicapped	G	52	2	26:1
	V	-	-	-
	J	51	2	26:1
	T	103	4	26:1
All Categories	G	549	84	7:1
	V	576	97	6:1
	J	141	15	10:0
	T	1266	196	7:1

Table 4.13

Distribution of Professionals Working in Existing
Special Education Centers According to Job
Classification, Sex and Disability Group

Job Classification	Disability Group and Sex									
	Blind		Deaf		MR		Phy. Hand.		Total	
	M	F	M	F	M	F	M	F	M	F
Director	-	2	2	4	6	7	1	1	9	14
Secretary	-	2	-	1	1	3	-	1	1	7
Social Worker	-	2	1	3	7	4	-	1	8	10
Family Counselor	-	-	-	-	1	-	-	-	1	-
Physical Therapist	-	-	-	-	1	2	2	-	3	2
Speech Therapist	-	-	1	-	-	-	-	-	1	-
Physical Ed. Teacher	1	-	2	-	1	-	1	-	5	-
Vocational Ed. Teacher	2	6	3	5	1	-	-	-	6	11
Nurse	-	1	-	1	-	1	1	3	1	6
Sub Total	3	13	9	14	18	17	5	6	35	50
	16		23		35		11		85	

should be expected to have.

Table 4.14 shows the number of non professional employees and their distribution according to sex and occupation.

Table 4.14
Distribution of Non Professional Employees
According to Sex and Occupation

Occupation	Sex		Total
	M	F	
Driver	36 (100%)	-- --	36 (100%)
Housekeeping Supervisor	5 (11.90%)	37 (88.10%)	42 (100%)
Housekeepers/ and food servants	9 (16.36%)	46 (83.64%)	55 (100%)
Others	19 (100%)	-- --	19 (100%)
Total	69 (43.39%)	83 (54.01%)	152 (100%)

The numbers in Table 4.14 indicate that the majority of the employees in each occupational category were female, except for the driver category where all the drivers were male. This is due to the fact that women in Jordan have not entered this field.

Table 4.15 summarizes the total number of staff members employed by each service provider, students being served and the student-staff ratios. It appears from Table 4.15 that the overall student-staff ratio was (3:1), three students for each staff member. Student-staff ratios for the three different service providers were almost equal.

Table 4.15
Average Student-Staff Ratio for
Each Service Provider

Service Provider	No. of Students	No. of Staff	Student-Staff Ratio*
G	549	185	3:1
V	576	204	3:1
J	141	45	3:1
Total	1266	434	3:1

*Ratios were rounded to the nearest whole number.

c. Costs of Special Education

Data on the costs of special education programs were collected to estimate the average annual cost of serving each handicapped student. It was rather difficult for the directors of special education centers to give the exact annual cost for their centers. Accordingly, each director of a special education center was asked to give an estimate of the cost of operating his/her center to the nearest thousand Jordanian Dinars. The directors were encouraged to base their estimate upon whatever relevant data were available.

Mention must be made that the cost analysis reported by this study is restricted to directly observable operating costs as reported by the special education centers (such as salaries, rent, food expenses, etc.). The reported costs did not include other governmental or voluntary association expenditures for administration, planning, and other organizational costs.

The average annual cost per student is of special importance for estimating the funds needed to provide special education services to all handicapped children. Unfortunately, it was not possible to collect separate data on the cost of residential and day students, because most of the centers were providing both types of service (i.e. residential and day school) at the same time. The study did not attempt to break down the cost figures to determine the most cost-efficient way to provide special education for handicapped children in Jordan. For further careful planning and in view of the study findings, a special study to determine the most cost-efficient method is needed.

The results of this study indicate that the costs of all current special education programs can be estimated at 898,000 Jordanian Dinars (J.D.) per year for the calendar year 1981-1982. The estimated costs of various programs and the average annual cost per student are shown in Table 4.16

As shown in Table 4.16, the average annual cost per student was reported to be 709 J.D. The highest cost was for the blind (1935 J.D.) and the lowest was for the deaf (556 J.D.). Figures in Table 4.16 point out that the costs of all government special education centers for the calendar year 1981-1982 total had 320,000 J.D. (36% of the total operating costs of all special education centers). The costs of

Table 4.16
Estimated Average Annual Cost per Student According
to Category of Handicapped and Service Provider

Handicap Category	Service Provider	Number of Students	Estimated J.D. Annual Total Cost	Average Annual Cost/Student
Blind	G	100	83000	830
	V	40	16000	4000
	J	0	0	0
	T	140	243000	1736
Deaf	G	214	90000	420
	V	155	45000	290
	J	90	50000	556
	T	459	185000	403
Mentally Retarded	G	183	117000	639
	V	381	291000	764
	J	0	0	0
	T	564	408000	723
Physically Handicapped	G	52	30000	577
	V	0	0	0
	J	51	32000	627
	T	103	62000	602
All Categories	G	549	320000	583
	V	576	496000	861
	J	141	82000	582
	T	1266	898000	709

the voluntary associations' centers were estimated at 496,000 J.D. (55% of the total), while the costs of jointly sponsored centers were estimated at 82,000 J.D. (9% of the total costs for all special education centers).

The high cost reported for the blind is due to the extremely high cost of the voluntary center for the blind. The average annual cost for each blind student in the voluntary center was about five times the annual cost per blind student served by the government center for the blind. The extremely high annual cost per blind student served by the voluntary center may be due to the following:

1. This center is sponsored by a regional voluntary association that pays higher salaries to its employees.
2. The low student-teacher ratio (2:1) of the center in comparison to the student-teacher ratio of 5:1 at the government center for the blind.
3. All the students in the voluntary center were served on a residential basis, while only 66% of the students of the government center were served on a residential basis and the other 34% were served as day school students.
4. The voluntary center pays a high rate of rent, because it occupies a large new building in the most expensive part of Amman City, while the government center pay a very low rate of rent because its buildings are located in a less expensive area of Amman and the rental rate at the time the Center was initiated was much less.
5. The voluntary center provides 25 J.D. monthly to each

student as financial assistance, while the government center does not provide such financial assistance to its students.

d. Current Special Education Practices.

1. Identification and Assessment of Handicapped Students.

Unfortunately, there are no systematic procedures for identifying children requiring special education and other support services in Jordan. The identification of potentially handicapped children in Jordan typically occurs through recognition of handicapping problems by parents or doctors. Even after the child is referred to one of the special education centers, the opportunities for comprehensive assessment are very limited. Of the five special education centers for the deaf, only one center has an auditory assessment unit. In none of the centers for the mentally retarded are there well-established procedures to assess the child's mental or social abilities. Usually these schools accept the child for a three-month trial period. In this period teachers of the child decide whether or not the center is able to meet the needs of the child. However, an interview usually is conducted with the child. During the interview the child will be tested by using items from the child's environment to decide on the ability to comprehend verbal language, to respond to verbal directions, to do some of the activities of daily living and to communicate and interact in a social setting.

As of the date of this study, the researcher was not aware of the existence of any standardized test or scale for assessment of mental

impairment in use in Jordan. No doubt this made the assessment process more difficult and much more variable between special education centers.

For the blind and physically handicapped the situation is not much different. Usually physicians determine the degree of visual impairment, but the special education centers have no well-established procedures for evaluating the educational or psychosocial aspects of the child in order to better understand the needs of that child. It can be concluded that all of the current special education centers in Jordan relied upon subjective methods for identifying and classifying potential handicapped children.

Very recently the researcher heard about a new assessment center established by the Ministry of Social Development in Amman to provide assessment and referral services for handicapped children. The new center is also expected to develop appropriate assessment devices for use in assessing different types of handicapped children.

2. Educational Curriculum

In general schools for the blind, deaf and physically handicapped were applying the educational curricula published by the Ministry of Education for non handicapped children. Usually, teachers modified these curricula very little and simply tacked on activities of daily living and topics on prevocational training. The special education centers for the blind added Braille and mobility training to the Ministry of Education curricular areas.

Special education centers for the mentally retarded did not have

formal curricula for use in educating retarded children. Teachers were responsible for developing individualized programs for each child according to general guidelines set up by each center. The following topics could be identified as areas of common interest incorporated by all special education centers for the mentally retarded.

- activities of daily living.
- verbal and communication skills.
- basic reading and writing skills.
- basic arithmetic skills.
- social skills.
- gross and fine motor skills.

Teachers used some tasks developed locally and some activities and tasks translated from foreign curricula as a base reference for the individualized programs developed for their students.

3. Support Services

All centers provided transportation for students served on a day school basis. Food was provided by all centers. The day school students received lunch, while residential students received three meals a day. All centers provided medical care to their students when the need arose. The medical care is provided free by the Ministry of Public Health upon the centers' request.

Some of the residential centers provided clothing and financial assistance to needy children. All centers for the physically handicapped provided physical therapy to their students.

Needs Assessment

This section describes the needs of handicapped children and their families. This needs assessment is based on the main services required by handicapped children, their families and the society as a whole.

The needs assessment is divided into the following parts:

- a. The needs of existing programs.
- b. Estimating the number of unserved children and the number of teachers required to meet the needs of unserved population.
- c. Assessing the needs for prevention and identification.
- d. Assessing administrative and organizational needs.
- e. Assessing information and research related needs.

a. The Needs of Existing Programs

In reviewing the present situation of special education services in Jordan, presented earlier in this chapter, the following factors may be identified as essential needs to improve the quality of existing services.

1. There is a great shortage of trained teachers to work in special education programs. Training existing teachers to work with handicapped children should be upgraded and a supplementary population of newly educated teachers should be provided as well.
2. It is clear that there is a lack of well-established procedures and policies for child assessment and placement. Current assessment and placement practices are subjective and are not based upon standard criteria. Therefore, there is an

essential need to formulate standard procedures and policies as well as valid and reliable assessment scales and devices.

3. There are no well-established curricula for the mentally retarded. There also are no guidelines for the necessary adaptation of programs being used in educating the blind, the deaf and the physically handicapped. Accordingly, it is obvious that there is a need to develop educational curricula for the mentally retarded, as well as to adapt existing curricula used in educating the deaf, the blind, and the physically handicapped. Adaptation should deal with the curricular contents to include mobility training, vocational emphases and alternative communication systems as well as adaptation in teaching methods. Unfortunately all centers for the deaf are orally oriented and ignore other methods of communication because of the lack of the existence of an Arabic sign language. Therefore, serious consideration should be given to developing an Arabic sign language.
4. Most existing centers lacked one or more areas of professional service such as therapists, diagnostic personnel, physical education teachers, family counselors, etc. The specialized services offered by these professionals are deemed to be essential elements in any remedial or educational program.
5. At the time of the study, there were no established procedures for cooperation and coordination among the different organizations and departments interested in the welfare and

education of handicapped children. In fact, the researcher concluded from his interviews with several officials of the different organizations that unhealthy competition and conflict of interest sometimes appear among these organizations. Therefore, there is an urgent need to work out ways and methods to foster better coordination among the various organizations and associations concerned with special education in the country.

b. Estimating the Number of Handicapped
Children Age 5-18 in Jordan

Population data are needed to estimate the number of handicapped children. Of specific interest are figures on the 5-18 year old population.

The 5-18 year old population in Jordan was estimated based upon the statistics of the 1979 Housing and Population Census and the Multi-Purpose Household Survey of 1976, both conducted and published by Jordan's Department of Statistics. Also the natural growth rate of Jordan's population (38 per thousand) was used to make projections of the Jordanian population for the period 1983-1987.

Based on the above-mentioned data, the Jordanian 5-18 year old population was estimated at 38.8% of the total population. The estimated and projected numbers for the total population and the 5-18 year old age group are given and distributed among the five governorates as shown in Table 4.17.

By applying the prevalence rates suggested in chapter three, the number of handicapped children age 5-18 years old was estimated to be

58,044 children in 1983. The projected number of handicapped children for the period 1983 - 1987 is shown as distributed among the five governorates by type of disability in Table 4.18.

c. Estimating the Number of Needed
Special Education Teachers

The numbers of needed special education teachers were estimated based upon the assumptions and student-teacher ratios discussed in chapter three.

The estimated number of needed teachers for 1983 and the projected numbers for the 1984-1987 period were reported for each handicap category and governorate as shown in Table 4.19.

d. Needs for Prevention

With current knowledge, the means are at hand to prevent significant proportions of the mental and physical handicaps in any society. The UNICEF document on Childhood Disability, Its Prevention and Rehabilitation (1980) indicates that:

In developing areas, millions of children are born with or acquire impairments, many of which could be prevented and most of which could be limited in their effects on the lives of the children and the families concerned by simple measures that are potentially within the capabilities of the people and communities involved. (p. 23)

Table 4.17

Estimated Numbers of Jordan's Population and 5-18 Year
Age Group for 1983, 1984, 1985, 1986, and
1987 by Governorates

Governorate	Population	Estimated Population by Year				
		1983	1984	1985	1986	1987
Amman	Total Population	1376472	1428778	1483072	1539429	1597927
	5-18 Age Group	534071	554365	575431	597297	619995
Irbid	Total Population	707271	734147	762045	791001	821061
	5-18 Age Group	274421	284849	295673	821059	852259
Al-Balga	Total Population	175925	182610	189550	196753	204230
	5-18 Age Group	68259	70853	73545	76340	79241
Al-Karak	Total Population	146404	151967	157742	163736	169958
	5-18 Age Group	56805	58963	61204	169986	176445
Ma'an	Total Population	87039	90346	93779	97343	101042
	5-18 Age Group	33771	35054	36387	37770	39205
Total	Total Population	2493111	2587849	2686187	2788262	2894216
	5-18 Age Group	967327	1004086	1042241	1081846	1122957

Table 4.18

Estimated Numbers of Handicapped Children in Each
Handicapped Category and in Each Governorate
for the Period 1983 - 1987

Governorate	Handicapped Category	Estimated Number of Handicapped Children				
		1983	1984	1985	1986	1987
Amman	Blind ¹	5341	5544	5754	5973	6200
	Deaf ²	8011	8315	8631	8959	9299
	Phy. Hand. ³	8011	8315	8631	8959	9299
	Men. Retd. ⁴	10682	11088	11508	11945	12399
	Total	32045	33262	25893	26877	27898
Irbid	Blind	2744	2848	2957	3069	3186
	Deaf	4116	4272	4434	4602	4777
	Phy. Hand.	4116	4272	4434	4602	4777
	Men. Retd.	5488	5696	5914	6139	6372
	Total	16464	17088	17739	18413	19113
Al-Balga	Blind	683	709	735	760	789
	Deaf	1025	1064	1103	1145	1188
	Phy. Hand.	1025	1064	1103	1145	1188
	Men. Retd.	1366	1418	1470	1526	1584
	Total	4099	4255	4411	4579	4753
Al-Karak	Blind	568	590	612	635	659
	Deaf	852	885	918	953	989
	Phy. Hand.	852	885	918	953	989
	Men. Retd.	1136	1180	1224	1270	1319
	Total	3408	3540	3672	3812	3956
Ma'an	Blind	338	351	364	378	392
	Deaf	507	527	564	585	608
	Phy. Hand.	507	527	564	585	608
	Men. Retd.	567	702	728	756	784
	Total	2028	2105	2185	2268	2354
Total	Blind	9674	10041	10422	10818	11229
	Deaf	14511	15062	15633	16227	16844
	Phy. Hand.	14511	15062	15633	16227	16844
	Men. Retd.	19348	20082	20844	21636	22458
	Total	58044	60247	62532	64908	67375

¹ Estimated at 1% of the 5-18 year old population.

² Estimated at 1.5% of the 5-18 year old population.

³ Estimated at 1.5% of the 5-18 year old population.

⁴ Estimated at 2% of the 5-18 year old population.

Table 4.19

Estimated Numbers of Needed Special Education Teachers for
Each Handicapped Category in Each Governate for
for 1983 - 1987 Period

Governorate	Handicapped Category	Estimated Number of Needed Teachers*				
		1983	1984	1985	1986	1987
Amman	Blind	763	792	822	853	866
	Deaf	1144	1188	1233	1279	1328
	Phy. Hand.	668	693	719	745	775
	Men. Retd.	1068	1109	1151	1195	1240
	Total	3643	3782	3925	4072	4229
Irbid	Blind	392	406	422	438	455
	Deaf	588	610	633	657	682
	Phy. Hand.	343	356	370	384	398
	Men. Retd.	549	570	591	614	637
	Total	1872	1942	2016	2093	2172
Al-Balga	Blind	98	101	105	109	113
	Deaf	146	152	158	164	170
	Phy. Hand.	85	87	92	96	99
	Men. Retd.	137	142	147	153	158
	Total	466	482	492	522	540
Al-Karak	Blind	81	84	87	90	94
	Deaf	121	126	131	136	141
	Phy. Hand.	71	74	76	79	82
	Men. Retd.	113	118	122	127	132
	Total	386	402	415	432	449
Ma'an	Blind	48	50	52	54	56
	Deaf	72	75	78	81	84
	Phy. Hand.	42	44	46	47	49
	Men. Retd.	58	70	73	76	78
	Total	220	239	249	258	267
Total	Blind	1382	1434	1488	1544	1603
	Deaf	2073	2152	2233	2318	2406
	Phy. Hand.	1209	1255	1303	1352	1404
	Men. Retd.	1935	2009	2084	2164	2246
	Total	6599	6850	7108	7378	7659

* Estimate based upon the following student-teacher ratios:

7:1 for the blind and deaf.

10:1 for the mentally retarded.

12:1 for the physically handicapped.

In Jordan, the Ministry of Public Health plays an important role in implementing and providing medical care. In the matter of disability prevention, the Ministry has no specific policy statements or plans, but it runs a number of maternal and child health centers. These centers provide a comprehensive range of prenatal and postnatal services. Expectant mothers are given complete physical examinations at these centers and a routine check-up. After the birth, the baby is given a complete physical examination at the center once a month for the first year. It must be noted, however, that only a small percentage of the total number of expectant mothers have access to these centers.

Also the Ministry of Public Health conducts an immunization program for various childhood diseases and infections such as rubella, measles and poliomyelitis. This immunization program covers all children.

The maternal and child health services and the immunization program are expected to reduce the incidence of many acquired disabilities but not those disability cases caused by other factors. Without using specific medical tests, it would be difficult to discover the young mildly and moderately handicapped children. It can be concluded that available preventive measures are very limited and inadequate. Therefore, there is an essential need to establish a comprehensive prevention program based on a well-established policy and plan. The needed program should not be restricted to medical measures. Other social and educational measures should be included. Further specific recommendations are included in chapter five.

e. Administrative - Legislative Needs

1. As of the date of this study, Jordan lacked any specific legislation to protect the educational rights of handicapped children or to regulate existing educational practices in the field.

Establishment of national legislation to ensure and protect the rights of handicapped children is an essential step in providing comprehensive and equal special education opportunities as well as regulating and monitoring existing programs to ensure quality services.

2. As mentioned before in this chapter, the role of the existing Department of Special Education and Rehabilitation is very limited because of the small size of the staff and the very small number of professionals within the unit. Accordingly there is a need to expand the role of the department and to support it with more professional staff members.

3. Current and past activities in the field of special education resulted from initiatives taken here and there without any clear relationship to a carefully formulated plan. Neither short-term nor long-term planning in this field exists. Accordingly, to avoid unnecessary expenditures and to be better prepared for attending to the needs of Jordanian handicapped children, national plans are badly needed.

4. Voluntary associations are a vitally important source of special education services. They retain a capacity for innovation and experimentation that is sometimes not possible in government operated programs. Thus, government and voluntary associations should become

partners in planning and program development in the field of special education. The necessary policies to achieve this goal and encourage on-going cooperation with these organizations should be adopted.

5. So far there has been very little attention given to monitoring and evaluating national progress in the field of special education in Jordan. Therefore, there is a need to establish an evaluation and monitoring system to better learn from current practices and to eliminate obstacles facing the development of special education services. Suggestions include statistical reports, surveys, data banks, regulations, provision of guidance and supervision, and so forth.

f. Information and Research Related Needs

Information about handicapped children in Jordan is very limited. Existing programs lack well-established special education curricula, materials and assessment devices. Programs of public information concerning various issues of disability prevention and rehabilitation do not exist. Accordingly, there are fundamental needs to:

1. Develop and implement a massive program to inform and educate governmental officials, parents, and the general public about people with disabilities and their potential, and about disability prevention and rehabilitation.

2. Establish a research program to acquire more information about disability characteristics in the country and to create a better understanding of the country's needs in the area of special education.

3. Develop educational curricula.

4. Develop and validate assessment devices and procedures.

Summary

Results pertinent to the following topics discussed in this chapter were the organization of special education service delivery and the needs of the country for special education programs and services. The results indicate that special education service in Jordan have been provided by several governmental agencies and voluntary associations. At the time of this study, there were 12 voluntary associations providing special education services. Governmental services were mainly provided under the auspices of the Ministry of Social Development. The results revealed that there were 25 special education centers in Jordan; twelve centers were residential and the another 13 were day centers. Of the 25 centers, 11 were sponsored by the government and the other 14 were sponsored by voluntary associations.

The total number of students being served was reported to be 1244; 564 (45.34%) of which were mentally retarded, 439 (35.29%) were deaf, 140 (11.25%) were blind and 101 (8.12%) were physically handicapped.

Of the total number of handicapped students, 549 (44.13%) were served by government-sponsored centers, 556 (44.69%) by voluntary associations and 139 (11.17%) by jointly sponsored centers (government and voluntary associations). The majority of students being served came from the Amman governorate.

The number of teachers employed by existing programs was found to be 196; 180 (91.48%) of them were female. None of the teachers have earned any type of degree in special education. The majority of these

teachers have diploma degrees in other related fields, such as elementary education and social work. A small number of these teachers have attended inservice training programs.

The needs assessment conducted by this study pointed out several needs that are essential for improving the quality of existing programs and widening the field as well. Based on the prevalence rates of handicapped children in Jordan suggested by this study, the number of handicapped children within the 5-18 year age group in Jordan was estimated for each year in the 1983-1987 period.

The number of needed special education teachers was estimated based upon the student-teacher ratio suggested for each disability group. The number of handicapped students served as of the calendar year 1981-1982 and the estimated number of handicapped children within the 5-18 year age group, as well as the number of special education teachers for 1981-1982 and the estimated number of needed teachers for 1983 were summarized in Table 4.20 to show the extent of Jordan's needs for special education programs and special education teachers.

Table 4.20

Numbers of Handicapped Children Served as of the Calendar Year 1981/1982,
 Estimated Number of Handicapped Children 5-18 Year Old in 1983,
 Number of Special Education Teachers as of the Calendar
 Year 1981/1982, and the Estimated Number of
 Teachers Needed in 1983.

	Handicapped Children		Special Education Teachers	
	Number of Handicapped Children Served in 1981/1982	Estimated No. of Handicapped Children in 1983	Number of Teachers in 1981/1982	Estimated No. Teachers Needed in 1983
Blind	140	9674	47	1382
Deaf	439	14511	56	2073
Mentally Retarded	564	14511	89	1209
Physically Handicapped	101	19348	4	1935
Total	1244	58044	196	6599

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The first four chapters of this study dealt with the nature and the purpose of the study, a review of the relevant literature, a presentation of the methodology and procedures, and the study results.

The present chapter is devoted to a summary, to conclusions and to recommendations based upon the study results.

Overview of the Study

This research attempted to study the present status and to identify the needs of Jordan in the special education area. It is intended that the findings of this research may serve as a basis for establishing a framework of understanding to assist authorities and concerned people in their efforts to meet the needs of handicapped children in Jordan. The study specifically sought answers to the following major questions:

1. What current special education programs are available?
2. What are the major characteristics of the current programs?
3. What is the role of each individual agency and association working in the field of special education?
4. What are the numbers and demographic characteristics of the handicapped children being served?
5. What is the estimated number of handicapped children

within the age group 5-18 years who are not served?

6. What are the needs of Jordan in the area of special education, and what could be done to better attend to these needs?

In order to answer these and some other related questions, the following three instruments were used to collect relevant data:

1. Two questionnaires; the first was used to collect data from all special education centers pertaining to the status and characteristics of existing special education services. The second questionnaire was designed to collect data from associations. This questionnaire included questions relevant to the administrative structures and types of services of the voluntary associations.
2. Informal interviews with officials of several governmental departments and agencies. The purpose of these interviews was to learn about each agency's policies and contributions to existing special education programs and to the welfare of handicapped children in general. The responses to these interviews were not recorded. The information gathered from these interviews served as a supplement to the author's knowledge, gained from his work as a director of a special education center in Jordan, to describe the role of various governmental agencies in the field of special education.
3. Review of relevant official documents in the Ministry of Social Development. These documents include the charter of the Ministry, the report of the National Committee for the International Year of the Disabled Person, the Ministry's five

year plan and other relevant documents.

Documents collected for the purpose of this research were analyzed by utilizing descriptive statistics. This included frequencies, percentages, averages and ratios.

Summary of Major Findings

a. Findings Regarding the Organization of Special Education

Special education services in Jordan have been provided by governmental agencies and voluntary associations. The study found that the Ministry of Social Development is the major governmental agency responsible for special education. The other governmental agencies involved in this regard are the Queen Alia Fund for Voluntary Social Work, the University of Jordan and the Ministry of Public Health.

The study revealed that there were 12 voluntary associations involved in providing special education services. Of the 12 associations, 9 were national, 1 was regional and the other 2 were foreign sponsored.

The 12 associations were distributed according to the major area of interest as follows:

one association for the blind.

one association for the physically handicapped.

four associations for the deaf.

six associations for the mentally retarded.

b. Findings Regarding Special Education
Provisions for Handicapped Children

The study found that current special education services were provided through 25 special education centers distributed in various parts of the country. Of the 25 centers, 12 centers were residential and the other 13 were day centers. These special education centers served disability groups as follows; one center for the physically handicapped, two for the blind, six for the deaf, and 15 for the mentally retarded.

Sponsorship of these centers was as follows: Fourteen were sponsored by voluntary associations, nine were sponsored by the government, and two were sponsored jointly by the government and voluntary organizations.

The total number of handicapped children served was found to be 1244; 564 (45.34%) of them were mentally retarded, 439 (35.29%) were deaf, 140 (11.25%) were blind, and 101 (8.12%) were physically handicapped.

Data collected for this study indicates that the number of students served by voluntary association sponsored centers comprised (44.13%) of the total number of students served, while the percentage of students served by government and by jointly sponsored centers represented (44.69%) and (11.17%) respectively. The majority of students served came from the Amman area. It was found that special education services for young, blind, and physically handicapped children did not exist and are very limited in the case of the deaf and

mentally retarded.

The study revealed that there were 196 teachers working in existing special education centers, 180 (92%) of these teachers were female. None of the teachers had earned a degree in special education, but some of them had attended inservice training programs and workshops. Data on student-teacher ratios yielded an overall student-teacher ratio of 7:1. The lowest ratio (3:1) was reported for the blind while the highest (26:1) was reported for the physically handicapped.

In regard to the operating costs of existing special education centers, the study estimated the average annual cost per student was 709 Jordanian Dinars. Some differences were found between the average annual costs per student of different programs. Further research is needed to study and identify the nature and factors affecting these differences, although it is apparent that many such factors can be readily identified, e.g., provision of residential services in addition to the educational program, and student-teacher ratios.

c. Findings Regarding Current Special Education Practices

1. Identification and Assessment

The study found that there were no systematic procedures or well-developed devices for child assessment and identification. Assessment and classification practices are subjective and heavily dependent upon the teacher judgment. Recently one center for the deaf brought in an auditory assessment unit. All centers adopted a policy of requiring a

three-month trial period for new students before decisions on their final admission to the center can be made.

2. Educational Curricula

In contrast to current practices in public schools in Jordan, there were no published curricula used by special education center for the mentally retarded. Teachers in those centers bear the responsibility of developing their own curricula. In general, teachers were able to utilize some pieces of foreign curricula to develop instructional activities for their students. Centers for the blind, deaf and physically handicapped were found to be using the same curricula as public schools with some modifications made by the teachers. Centers for the blind adopted braille as a major avenue for instruction. All centers for the deaf were found to use the oral method in teaching deaf students.

3. Support Services

All centers provided their students with lunch for day school students and three meals a day for residential students. All necessary medical services for handicapped students were provided free by the Ministry of Public Health. Other supportive services, such as speech therapy and counseling, were found to be very limited.

d. Findings Regarding Jordan's Needs in the Area of Special Education

This section reports the major needs identified by this study.

These needs can be classified in four areas:

1. Numbers of Handicapped Children and Number of Teachers Required to Serve Them

The numbers of handicapped children age 5-18 years were estimated for each category and each governorate. Projections were made for each year during the 1983-1987 period (see Table 4.17).

Based on certain assumed student-teacher ratios for each special education category, the required numbers of teachers in each governorate were projected for each year within the 1983-1987 period (see Table 4.18).

2. Needs for Prevention of Handicapping Conditions and Identification of Handicapped Students

In the area of prevention and identification, the study concluded that there were urgent needs to:

- Establish national policies for prevention and identification.
- Implement a comprehensive program for prevention. This program should include medical, social and educational measures.

3. Administrative Needs

The study identified several administrative needs for the improvement of special education services. These included needs to:

- Enact legislation to ensure and protect the right of handicapped children to education and other related services.
- Strengthen the Department of Special Education and Rehabilitation by providing the department with more qualified professionals and more authority to supervise and monitor the special education services in the country.
- Institute better coordination and cooperation among the various

associations and agencies working in the field of special education.

- Formulate regulations and guidelines to foster quality special education services.

4. Information and Research-Related Needs

- There is an essential need to develop a research program to provide a scientific and continuing data base for planning, adaptation, implementation and evaluation of disability prevention and special education services.
- There is a need to develop an information program to educate the public about various aspects of disability and the disabled persons.
- There is a need to exchange information and to learn about the successful efforts and policies in other parts of the world, especially the developing countries.
- There is an urgent need to develop needed educational curricula, assessment devices and procedures.

Conclusion

The data collected for this descriptive study provide the basis for the following conclusions:

- Work for handicapped children has shown steady growth in the last few years. This can be seen through the government's and voluntary associations' efforts to increase the number of special education centers. Also it can be seen through the increasing

awareness and commitment of Jordan's society to handicapped children. This awareness and commitment have been the vehicles for the volunteer initiatives in creating new associations to care for handicapped children.

-Despite the recent developments in the field of special education and the growing interest in educational provisions for handicapped persons which have been developed by Jordanian society, it can be concluded that special education is still not an integral part of national educational and social plans. As of the date of this study, there was no national policy or plan formulated specifically for special education in Jordan.

-Although the Jordanian constitution, in principle, guarantees the right of all citizens to equal educational opportunities, there are no specific legislative provisions to guarantee these opportunities for handicapped children.

-Existing special education services are available only to a very limited number of handicapped children. The great majority of handicapped children receive no special education services (see Table 4.20).

-All existing special education services are provided through special education centers that are operated at sites separate from ordinary school buildings and grounds. Other less segregated or more integrated forms of special education do not exist.

-Existing special education services suffer from a severe shortage of trained teachers and other professionals.

-As of the date of the study, the country lacked special education services for certain types of handicapped children, namely the emotionally impaired, the learning disabled, and children with multiple handicaps.

-Special education services have never been systematically evaluated.

-Educational opportunities for young handicapped children are very limited in comparison to services for older school age handicapped children.

In general it can be concluded that special education is in the early stages of development. Recently, the country has witnessed several initiatives that can serve as a base for further development of the field of special education in the near future.

Recommendations

It is recognized that certain handicap conditions may be viewed as more stigmatizing than these, but to the author's knowledge he is not aware of any major stigmas generally attached to any of the conditions studied within the Jordanian context. However, it is also true that certain types of handicapping conditions recognized in countries with high developed programs are not recognized as handicapping conditions in Jordan, such as learning disability, non-psychotic emotional disturbance and speech impaired. It is probable that recent increases of interest in special education programs in Jordan will lead to recognition of and interest in these other conditions.

The conclusion of the study and the personal experience of the researcher as a director of a special education center in Jordan for three years led to several recommendations regarding improvement in the quality of existing services and preparation for more adequate and comprehensive services to meet the needs of all handicapped children in Jordan. Current models and practices in other developing countries and recommendations made by specialized UN agencies, as well as other international organizations, served as guidelines for the recommendations of this study. Whenever it was possible, the unique political, economic and social facts of Jordan were taken into consideration. In view of the fact that special education services in Jordan are in the initial stages, and there is still much work to be done and tremendous needs to be met, an extremely large number of recommendations could be proposed. At present, however, it would be more appropriate to limit recommendations to those that may have a clear and significant impact on special education services and on society in general. It is clear that some of these recommendations need more time to be implemented. Before proposing any recommendation in certain areas of special education, it would be appropriate to present the following two general recommendations which are considered to be essential for efficacious attainment of the other recommendations. These two recommendations are:

1. A national council for the welfare and rehabilitation of handicapped persons should be established. Such a council should be linked directly to the Prime Minister's office to give it the power and

authority needed. The council should include representatives of various governmental agencies interested in or relevant to special education and rehabilitation services. Also, representatives of handicapped persons, parents and voluntary associations and professionals should be included.

The importance of establishing a national body to plan, coordinate, supervise and upgrade the development of services for handicapped has been recognized and proclaimed in several international statements. Of specific importance is a conclusion of the UN Expert Meeting on Planning, Organization, and Administration of National Rehabilitation Programs in Developing Countries held in Geneva, 1971, which says:

"The most effective way of achieving a coordinated and comprehensive rehabilitation plan is through the establishment of a national rehabilitation board" (Warms and Hammerman, 1972, p. 47).

To emphasize the importance of having such a national council, the Economic Commission for Africa declared that

". . .a permanent national coordinating body should be established" (Rehabilitation International, 1981, p. 52).

In the same spirit, the Economic and Social Council for Asia and the Pacific called for the

". . .setting up of appropriate governmental machinery for the implementation and coordination of all policies and actions on the various aspects of prevention and rehabilitation" (Rehabilitation International, 1981, p. 42).

The council should be the body responsible for dealing in a comprehensive manner with the welfare of the handicapped and various issues related to the disability problem in the country.

2. It is assumed that the suggested national council would design a national plan for disability prevention, rehabilitation and special education. The plan should be a component of high priority in any program for national development. The plan should clearly define priorities and include specific provisions for the financing of needed activities, including the training of professionals and procurement of equipment. A comprehensive national plan for disability prevention, special education and rehabilitation would include legislative, administrative, prevention, social, educational and other measures to deal with the disability question in the country. A sound and integrated planning perspective requires sustained planning for short-, medium- and long-term periods.

Taking all the above into consideration, as well as the results of the study, the following recommendations are presented for the consideration of the suggested national council (if it should be established) or any designated authority to deal with disability problems in Jordan. These recommendations deal with the major issues and activities that may be included in the national plan for the improvement of Jordan's capabilities to meet the preventive and educational needs and demands of disabled and handicapped children.

Policy and Administrative Recommendations

1. In order to guarantee and protect the rights of handicapped persons in Jordan, the necessary legislation should be enacted and adequately enforced. Appropriate plans and policies should be adopted to ensure full implementation of these provisions. Handicapped

persons, their families, and voluntary associations should be a vital part of the formulation of plans and policies. Also, various international statements, recommendations and declarations should be consulted prior to the formulation of such legislation. It is strongly believed that the proceedings of the two conferences of Rehabilitation International on legislation concerning the disabled in developing countries held in 1971 and 1978 can be of substantial assistance.

The necessity of formulating national legislation was expressed by many sources. UNESCO advised that:

Member States should adopt as a matter of law or policy a recognition of the rights of disabled persons to an education and to full participation in society. . . legislation must be specific and precise to enable the access of disabled children to ordinary schools. . .
(UNESCO, 1979, p. 22)

It is important to say that adopting relevant legislation will not only recognize and protect the rights of handicapped persons, but it will also help to educate the public and improve their understanding and contribute to their social maturation as well.

The UNDP Advisory Note proclaimed in 1978, as well as other international recommendations suggested the following:

- a-Legislation for the handicapped should form an integral part of the general legislation protecting the rights of all citizens.
- b-Legislation should include specific measures for:
 - facilitating the prompt identification and prevention of disability and guaranteeing effective organization of services

for handicapped persons.

- affirmative action to provide equal access to social and educational service for handicapped persons in their community.
 - arrangements for coordination among the ministries and agencies responsible for various aspects of disability prevention and rehabilitation.
 - the preparation of a national plan for the development of services.
 - making available the necessary funds for planning and implementing the relevant activities.
 - involving the voluntary associations in the planning and delivery of services.
 - assuring the provision of free educational, medical, social, vocational and other services needed to enable all handicapped persons to enjoy their rights and develop their full potentialities.
- c-Legislation should be consistent with the UN declarations concerning the rights of handicapped persons (R.I. 1981; UNESCO, 1981).

2. Unfortunately, special education services do not exist in Al Karak and Ma'an governorates. Similarly, there are no voluntary associations for the handicapped in these two regions. Therefore, the people of these governorates should be encouraged to initiate action in this regard. It is important that the Ministry of Social Development

and other agencies as well, launch a campaign to educate the people of these governorates about handicapped children and their needs, and inform them of the achievements of the voluntary associations operating in other parts of the country. This recommendation is made with the expectation that time will be required for enactment of national legislation, and planning and implementation of programs and services. Consequently, voluntary initiatives remain an important activity for development.

3. It is recommended that an umbrella organization for all voluntary associations for the handicapped should be formed. Such an organization could serve to control and unify any different views among voluntary associations and strengthen their role as advocacy groups (Helander et al., 1980).

4. The Ministry of Social Development should reinforce the Department of Special Education and Rehabilitation with more professionals and experts in order for the department to carry out its full responsibilities and achieve its goals. A small cadre in each area of special education should be situated in the department to upgrade its capabilities and improve its performance.

5. The delivery system should be periodically and carefully evaluated. Such a critical evaluation will lead to avoidance of mistakes and weaknesses, and will result in the improvement of the existing system of service delivery.

6. A special office to work with international organizations and agencies should be established within the Department of Special

Education and Rehabilitation. The purpose of such an office should be to secure assistance from UN agencies and organizations (UNICEF, UNDP, WHO, UNESCO and others) as well as from other nongovernmental international organizations. This office can also promote the exchange of information and experience with other countries. It is important to note that UN agencies and other international organizations are sources for technical assistance in the form of consultation, advice, training, and equipment. In recent years, several of the Western countries have established funds and agencies for technical assistance in developing countries in the field of disability prevention and rehabilitation. The availability of such technical assistance was further increased after the International Year of Disabled Persons. (UN, 1981; Jason, 1981).

Recommendations Regarding Disability Prevention and Identification

Although the researcher is not a medical professional and not wholly aware of the medical aspects of disability, he believes that a number of children become handicapped as a result of medical and health causes that can be prevented. Expanded and more effective efforts to prevent childhood impairment should be developed. These efforts should be, for the most part, components of more general programs for the development of health, education and social services. Accordingly, the Ministry of Public Health and other related governmental agencies should coordinate a national program of prevention and early identification at all levels of Jordanian society. The proposed

program should include at least the following measures.

1. Maintain and promote the existing immunization program against communicable diseases.
2. Increase the number of existing maternal and child health centers and make them available in every community to ensure effective prenatal and postnatal services.
3. Create a genetic counseling program. Such a program will reduce the incidence of genetic disorders such as Down's Syndrome and hereditary deafness.
4. Require medical examination, especially blood tests, from couples before marriage to control for Rh and other blood incompatibilities.
5. Establish safety regulations and training programs for the prevention of accidents at home, on the road and in leisure-related activities.
6. Carefully consider measures to control the imprudent use of medication specifically by pregnant women to prevent side-effects on unborn children. At present, people are able to obtain drugs, including those with potentially harmful effects, with ease.
7. Develop a system for early detection and intervention. A periodic health examination for infants and young children, and periodic screening tests (vision, hearing, nutrition, and general development) for high-risk children should be applied.
8. Institute a system for the registration of handicapped and high-risk children. Maternal and child health centers,

hospitals, and private physicians could be enlisted for this purpose (WHO, 1976; UNICEF, 1981).

Recommendations for Special
Education Teachers Preparation

For the development of a national special education program, the availability of trained teachers is an essential element.

Unfortunately, Jordan has not established a strategy for special education teacher preparation. Very recently, a small program for special education teachers was started by the University of Jordan and the Community College for Social Work. These programs do not provide training in specific areas of special education, but they provide training in general special education. Each program provides training for a small number of teachers.

The shortage of trained teachers will become more severe given the current trend to expand special education services. Therefore, programs to train special education teachers should be given a high priority. In this regard the study presents the following recommendations:

1. Modification in present curricula for training teachers of nonhandicapped students to include instruction regarding handicapped students, their educational needs and approaches.
2. Government - sponsored teacher training centers should start programs to train special education teachers in addition to their regular programs. These centers provide two-year teacher training following high school. Therefore, these

centers, with some adaptations of their current programs, should be able to initiate similar training programs for various categories of special education.

3. A plan for inservice and on-the-job training should be developed. It would be preferable to organize these inservice activities in relation to an existing programs of formal specialized training and to grant a degree for trainees. Such arrangements for inservice training would motivate untrained teachers to participate in these inservice training programs and avoid creating conflicts between teachers with formal training and those trained on the job (Boucibci and Brau, 1981).
4. Those higher education institutions with teacher training programs (University of Jordan, Yormouk University) should consider the establishment of B.A. programs in various categories of special education and other related specialities.

Recommendations Regarding Information and Research Activities

To adopt and implement an effective national plan for disability prevention and rehabilitation, a better understanding of the disability question is necessary. Also, the importance of preparing and disseminating information about early detection and intervention can not be over emphasized. Accordingly, it is strongly recommended that a national research and information center be established to insure the

presentation of systematic information about the realities of disability, its consequences, prevention and rehabilitation. The recommended center should serve the following functions.

1. Propose and establish a system for continuous gathering and reporting of statistical data regarding the magnitude and scope of special education needs. The system should strive for increased standardization, reliability and validity of the data to be obtained.
2. Provide decision makers and other concerned officials with needed information for better decision making.
3. Improve the capabilities of the country to take advantage of existing knowledge of special education and other issues related to handicapped children. Particular attention should be given to identification of information and program delivery alternatives used in developing countries which may have application in Jordan.
4. Provide a system of information exchange within the country and between Jordan and other countries.
5. Develop and operate a resource library for professionals, parents, and other concerned groups and individuals.
6. Conduct research to develop curricula, assessment devices and procedures, and to encourage scientific research in the area of disability prevention and rehabilitation.
7. Carry out activities designed to involve mass media and disseminate information to educate the public and promote their awareness of various issues concerning the causes of

disability, prevention, needs of handicapped children and their education and rehabilitation.

Recommendations for Integrating
Special Education Services.

Integration of special education within the normal education system is an increasingly common practice in many countries. The integration principle has been strongly recommended by almost every organization interested in the welfare and education of the handicapped as shown in their published statements. It is not intended to discuss the advantages of integrated special education programs in this study, because integration is a principle upon which the great majority of professionals have agreed. Unfortunately, all existing special education programs in Jordan are segregated. Therefore, the final goal regarding administrative arrangements of special education should be to educate the handicapped within regular school settings to the maximum extent appropriate to the students need. This could not be done unless the responsibility for providing special education services is shifted to the Ministry of Education. It is believed, however, that this shift toward integrating special education services will not occur in the near future for many different political and practical reasons. The political reasons are beyond the scope of this study. The practical reasons include the following:

- The teachers in general education lack the knowledge and experience as well as the necessary skills for educating special students.

-A large number of school buildings are rented and not readily accessible for certain types of handicapped students. Also, building modifications are difficult to implement in rented facilities.

-Current curricula and teaching methods are not designed for children with special educational needs.

Based on these facts, and many others, the various authorities should realize the need to start preparing the school system to be ready for integrating handicapped children in the future. The following recommendations may be appropriate as a means to foster greater integration of handicapped students within both educational and community activities.

1. Activities to increase the interaction between special education centers and neighboring schools should be conducted. These activities may include visits, joint recreational projects, exchange of teachers for short times, etc.
2. The special education centers interaction with the community should be intensified. This can be done in many ways, such as open house activities, encouraging community groups to use the center's building for their activities, setting up voluntary activities to be performed by handicapped students for the community such as cleaning streets, planting trees, recreation, arranging social nights, and similar interaction projects.
3. Instruction about children with special needs should be included within the training programs of general education

4. New school buildings should be accessible to all persons including the handicapped.
5. A number of experimental special classes in general education schools should be started and coordinated jointly by the Ministries of Education, and Social Development.

Recommendations for
Further Research

In addition to these recommendations regarding research and information, which have been suggested as long-term functions for the recommended information and research center, the following short term research activities are recommended:

1. Research to determine the effectiveness of existing special education centers is greatly needed.
2. The implementation of a national comprehensive plan for disability prevention and rehabilitation will involve heavy additional capital. A detailed study to estimate the costs of special education under such a plan is recommended.
3. Further research on disability prevalence is recommended to determine the magnitude of the disability problem in the country.
4. Research on various needs identified by this study to explore possible and appropriate methods to meet the needs is strongly recommended.

Recommended Sequence for Planning
and Improvement of Special Education Services

Based on the results and recommendations of this study, it is recommended that planning for the development of special education services in Jordan should assume the following sequence:

1. The first step is to establish a national council for the welfare of the handicapped. The council then should adopt the necessary measures to achieve the next steps.
2. The second step is to enact the legislation prescribed earlier in this study.
3. The third step is to develop a primary national plan with specific priorities for fostering training programs for teachers and adopting measures for prevention. This plan should be viewed as a temporary one designed to initiate programs and services.
4. The fourth step is to gather additional necessary data and information concerning special education and resources needed to meet the needs of the country in this regard.
5. The final step is to formulate a comprehensive national plan with short-, medium- and long-term objectives to meet the program and service needs of handicapped children.

BIBLIOGRAPHY

- Abdullah, T. (1981). The Situation of Disabled Children in Pakistan. (Report) Islamabad-Pakistan: UNICEF.
- Abdelzaher, F. & El-Ezzawi, S. (Eds.). (1981). International Year for the Invalids. UNESCO and the Arab Republic of Egypt. 19(4).
- Acton, N. (1979, September). Disability and the Developing World. Brookings Symposium on Disability and the Developing World. Symposium conducted in Washington, D.C.
- Al-Ghamidi, A.M., (1982). The Professional Development of Inservice Teachers in Saudi Arabia: A Study of the Practice and Needs. Doctoral dissertation, Michigan State University, E. Lansing, Mi.
- Berrie, P.J. (1976). Needs Assessment. Ankeny, Ia: Area 11 Education Agency, Bethesda, MD: (ERIC Document Reproduction Service No. ED, 128 947).
- Bucibci, M., & Brau, M. (1981). Training Specialized Staff for the Mentally Handicapped: An Approach for Developing Countries. Assignment Children, 53/54, 105-114.
- Cantrell, E. (1979). Rehabilitation of Handicapped Children in Jordan. (Assignment Report prepared for WHO No. EMT1/30/EM/JOR/HSD/000/RB).
- Commission of the European Communities (1980). Special Education in the European Community, Brussels: Author.
- Daoud, F.S. (1981). The Present Status of Special Education Programs for the Mentally Handicapped in Jordan. Amman: The National Association for Mentally Handicapped.
- Delaney, A.M. & Nutal, R.L. (1978). Report on Needs Assessment Methodology. New York: American Foundation for the Blind.
- Elmandjra, M. (1981, May). Assessment of the Efforts of the United Nations System. Paper presented for the World Symposium of Experts on Technical Co-operation Among Developing Countries and Technical Assistance in the Field of Disability Prevention and Rehabilitation Conducted by the United Nations secretariate for International Year of Disabled Persons, Vienna.
- Fink, A.H. (Ed.). (1978). International Perspectives on Future Special Education. Proceedings of the first World Congress on Future Special Education Reston, VA: Council of Exceptional Children.

- Frey, W.D. & Qaryouti, Y.F. (1981). Proposal to establish a regional center for special education at the University of Jordan. E. Lansing, Mi: Michigan State University, University Center for International Rehabilitation.
- Govenment of Hong Kong (1977). Integrating the disabled into the community: a united effort. (Report). Hong Kong: Government Press.
- Grossman, J.J. (Ed.) (1973) Manual on Terminology and Classification in Mental Retardation. Washington, D.C. American Association on Mental Deficiency.
- Hallahan, D.P. & Kauffman (1982). Exceptional Children: Introduction to Special Education (2nd ed.). Englewood Cliffs, N.J.: Prentice Hall.
- Hammerman, S. & Maikowski, S. (Eds.). (1981). The Economics of Disability: International Perspectives. New York: Rehabilitation International.
- Helander, E., Mendis, P. & Nelson, G. (1980). Training the Disabled in the Community: An Experimental Manual on Rehabilitation and Disability Prevention for Developing Countries (version 2). Geneva: World Health Organization.
- Helen Keller International Incorporated. (1980). Blindness in the Developing World: A Background Paper. (Report). Ottawa, Canada: International Development Research Center.
- Herr, R.S. & Herr, S.S. (1980). Human rights and disabled persons: an international perspective. Amicus, 5 (1), 14-20.
- Heward, W.L. & Orlanki, M.D. (1980). Exceptional Children. Columbus, OH: Charles E. Merrill Publication Company.
- Homossani, S. & Mohamed, M. (1979). Disabled Children in Egypt, (Report). Cairo: Ministry of Social Affiars.
- International League of Societies for the Mentally Handicapped. (1975). Proceedings of the Arab Regional Conference on Mental Retardation. Bruxelles: Author.
- Ireland National Economic and Social Council. (1980). Major Issues in Planning Services for Mentally and Physically Handicapped Persons. Dublin: The Stationary Office.
- International Year of Disabled Persons. (1981). Declaration of the World Conference on Actions and Strategies for Education, Prevention and Integration. Paris: UNESCO.

- Japan League for the Mentally Retarded. (1977). Education, Medical Care and Welfare for the Mentally Retarded in Japan. Tokyo: Kagakusha Co. Ltd.
- Jason, K. (1980). Technical Co-operation for Disability Prevention and Rehabilitation: Consideration for Future Action. Paper presented for the World Symposium of Experts on Technical Cooperation among Developing Countries and Technical Assistance in the Field of Disability Prevention and Rehabilitation conducted by the United Nations Secretariat for International Year of Disabled Persons, Vienna.
- Jordan Information Bureau. (1982). Majles Al-Ta'aleem Ala'ali (The Council of Higher Education). Al Urdun, 1(2) 4-5.
- Jordan Department of Statistics. (1976). The Multi-Purpose Household Survey. Amman: Author.
- Jordan Department of Statistics. (1981). Main Findings of Advance Tabulations: Housing and Population Census. Amman: Author.
- Jordan Ministry of Education. (1980). Tareech Altarbeyah Walta'aleem Felardun (The history of education in Jordan). Amman: Author.
- Kaylani, A. (1981). Validity of the Queen Alia Registration of the Mentally Handicapped in Jordan (Report). Amman: University of Jordan, College of Education.
- Kok, P. (1977). A Survey of the Handicapped in the Irbed Governorate of Jordan. Amman: CRWRC.
- Kok, P. (1978). A Study of the Institutions Serving the Handicapped in Jordan. Amman: CRWRC.
- Kominski, E.S. (1978). Needs Assessment in Education: More Discrepancy than Analysis. Bethesda, MD. (ERIC Document Reproduction Service No. Ed 161 161).
- Kulkarni, Madhav. (1982). A Model of Rehabilitation Conselor Education In India (unpublished paper). E. Lansing, MI: Michigan State University, University Center for International Rehabilitation.
- Kuwait Ministry of Labour and Social Affairs. (1981). Efforts of the State of Kuwait During IYDP. Kuwait: Author.
- Nepal Committee for International Year of Disabled Persons. (1981). A Preliminary Report on Sample Survey of Disabled in Nepal 1980. Nepal: Author.
- The Netherlands Central Bureau of Statistics. (1976). The Physically Handicapped in the Netherlands: 1971-1972. The Hague: Author.

- Rehani, S. (1971). Status and Need Assessment Study of Rehabilitation Services in Jordan (Report). E. Lansing, MI: Michigan State University, University Center for International Rehabilitation.
- Renker, K. (1981). World Situation of Disabled Persons. Paper presented for the World Symposium of Experts on Technical Assistance in the Field of Disability Prevention and Rehabilitation Conducted by the United Nations secretariate for International Year of Disabled Persons, Vienna.
- Rehabilitation International. (1978). Conclusion and Recommendations of the 2nd International Conference on Legislation Concerning the Disabled. New York: Author.
- Rehabilitation International. (1981). International Statements on Disability Policy. New York: Author.
- Robinson, J. & Sherlock, H. (1980). Children at Risk: A Study to Determine the Numbers and Needs of Handicapped Children in Jamaica. Kingston, Jamaica: Private Voluntary Organizations.
- Sadek, F.M. (1981). Nathra amma ela tarbiyat Al-Moa'keen fel dowal alarabia (Special education in rab countries). Al-Tarbeya Al-Jadeedah. 24, 50-58.
- Saleh, L. (1977). Special Education in the State of Bahrin. (Report prepared for UNESCO, No. FMR/ED/SCH/771/143). Paris: UNESCO.
- Shami, M.A. (1978). Curricula and Standards of Education and Training in Secondary Schools and Teacher Training Institutes in Jordan. Amman: Ministry of Education.
- Swassi, A. (1977). Khadamt Al-Moa'wakeen (Services for the handicapped in Libya). Tripoly: Secretariat of Public Health.
- United Nations. (1982). World Programme of Action Concerning Disabled Persons (Report No. A/37/351/Add. 1). New York: Author.
- United Nations Children's Fund. (1980). Childhood Disability: Its Prevention and Rehabilitation (Report No. E/ICEF/L. 1411). New York: UNICEF.
- United Nations Economic Commission for Western Asia. (1981, April). Assessment of the Situation and Needs of Disabled Persons in the Region of Western Asia. Paper presented at the Arab Regional Conference, Kuwait.
- UNESCO. (1977). Terminology: Special Education. Paris: Author.
- UNESCO. (1978). Economic Aspects of Special Education (Document No. SOA/ESDP/1974). Paris: Author.

- UNESCO. (1979a). Handicapped Children: Early Detection, Intervention and Education. Paris: Author.
- UNESCO. (1979b). UNESCO Expert Meeting on Special Education. (Report No. ED-79/Conf. 606/Col. 28). Paris: Author.
- UNESCO. (1981). The Protection of the Rights of Disabled Persons Afforded Under Various International Instruments. Paris: Author.
- UNESCO. (1981). Statistics on Special Education: 1972/1973 to 1976/1977 (Document No. STE/SPECED). Paris: Author.
- Wall, W.D. (1979). Constructive Education for Special Groups. Paris: UNESCO.
- Warms, D. & Hammerman, S. (1972). The Rehabilitation Decade: The First Years, 1970-1972. New York: Rehabilitation International.
- WHO. (1976, April). Reports on Specific Technical Matters: Disability Prevention and Rehabilitation. (Report No. A29/INF. Doc/1). Geneva: Author.
- WHO. (1980). International Classification of Impairment, Disabilities, and Handicaps. Geneva: Author.
- WHO. (1980). Disability Prevention and Rehabilitation: Report of the WHO Expert Committee on Disability Prevention and Rehabilitation (Technical Report Series 668). Geneva: Author.
- Zanolli, N.V. (1981, September). Report on Bilateral Technical Cooperation and Assistance to Developing Countries. Paper presented for the World Symposium of Experts on Technical cooperation among Developing Countries and Technical Assistance in the Field of Disability Prevention and Rehabilitation Conducted by the United Nations secretariate for International Year of Disabled Persons, Vienna.
- Documents Reviewed: (Available at the Library
of the Ministry of Social Development).
- Holy Land Institute for the Deaf. (1980). Al-som fel ordun (The Deaf in Jordan).
- Ministry of Social Development. (1981). TaQreer A'an enjazat Al-lagnah Al-wataneyah lel A'am Al-dowali lel Moa'wa Queen (Report of the achievements of the national committee for the international year of disabled persons).

Ministry of Social Development. (1981). Nashra A'an Modereyat Altarbeyah Alkhasah (Pamphlet: Special Education Department).

Ministry of Social Development. (1981). Nashra A'An Maktab Al-hay'at Al-tatawoeyah (Pamphlet: Office of Voluntary Association).

National Planning Council. (1981). Khetat Al-tanmeyah Al ektesadeyeh wal egtemae'yen: 1981-1985. (National economic and social development plan).

National Association for the Mentally Handicapped. (1979). Al-dostour. (By-laws).

Queen Alia Fund for Voluntary Social Work. (1979). National Survey of the Handicapped in Jordan.

Queen Alia Fund for Voluntary Social Work. (1981). An Evaluation Study of Voluntary Social Work in the East Bank of Jordan.

Queen Alia Fund for Voluntary Social Work. Project Proposal. (Undated).

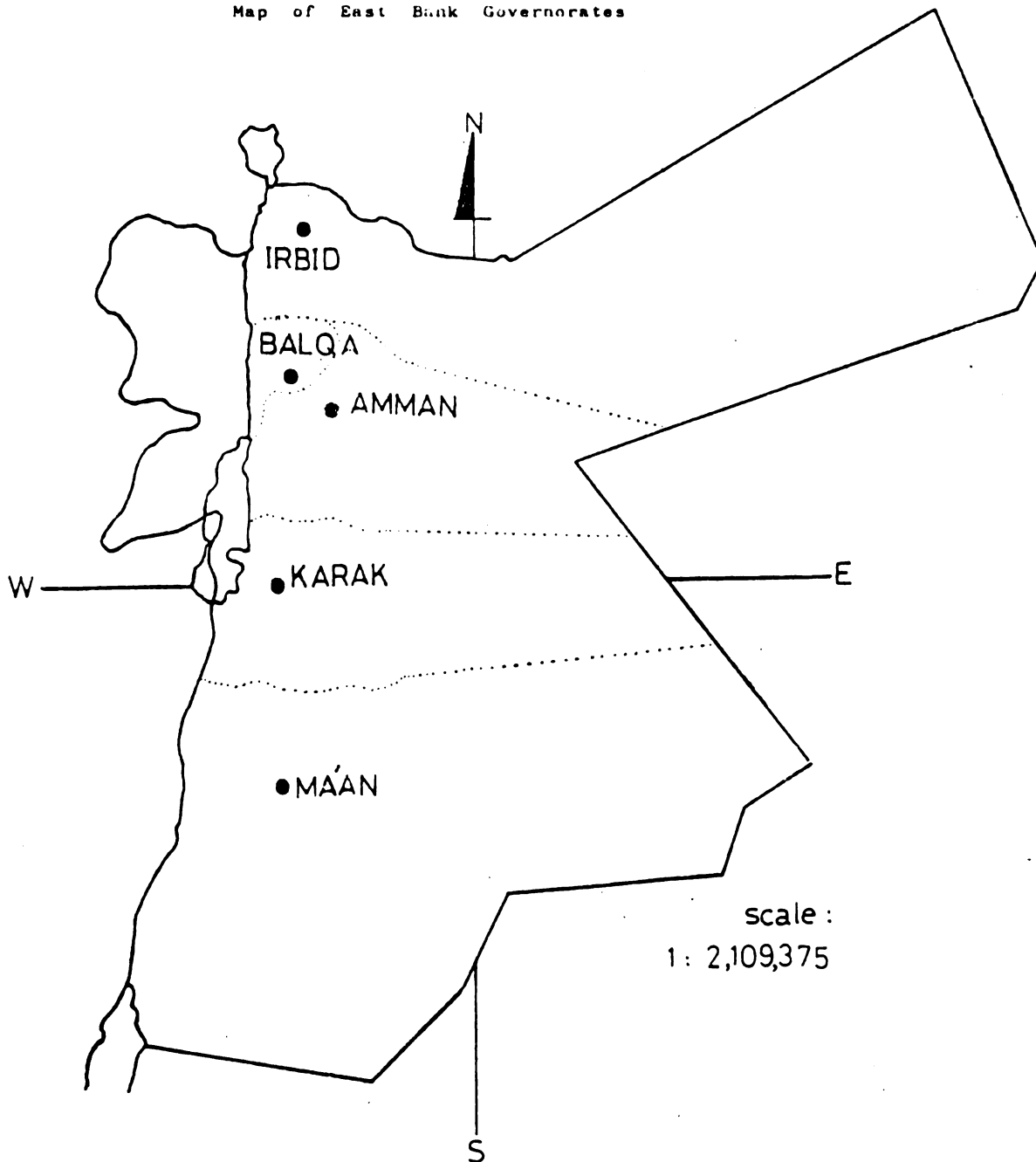
Swedish Organization for Individual Relief. (1980). The Swedish Organization Activities in Jordan. (Report).

University Center of Special Education and Rehabilitation. (Pamphlet)

APPENDICES

APPENDIX 1
MAP OF JORDAN

THE HASHEMITE KINGDOM OF JORDAN
Map of East Bank Governorates



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APPENDIX 2a

SPECIAL SCHOOLS QUESTIONNAIRE

"Special Schools Questionnaire"

1. Name of the school: _____
2. Mailing address: _____

3. Phone Number: _____
4. Date of establishment: _____
5. Sponsoring agency: _____
6. Type of handicapped student served: _____
7. Student's age range: _____
8. The school is a: day school. _____
boarding school. _____
other (explain) _____

9. Student characteristics:

Age Group	Number of Students		Degree of Impairment		
	M	F	Mild	Moderate	Severe
3 - 5					
6 - 9					
10 - 12					
13 - 15					
16+					
Total					

10. Students' home residences.

Geographic Area	Number of Students		Total
	M	F	
Amman			
Irbed			
Balga			
Al-Karak			
Ma'an			
Total			

11. Teacher characteristics:

No.	*Ed. Training	Sex		Age	**Past Experience	***Inservice Training	Annual Salary
		M	F				
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total							

*Levels of educational training: below high school, high school, diploma (2 years after high school), BA, MA, or Ph.D.

**Work experience prior to current job.

***Includes: intern training, inservice training, and short-term training (workshops).

12. Other professionals:

Other Professional Personnel	No.	Sex		Part-time	Full-time	Total Annual Salary
		M	F			
Principal						
Secretary						
Social Worker						
Family Counselor						
Psychologist						
Clinical Psychologist						
Speech Therapist						
Physical Therapist						
Occupational Therapist						
Nurse						
Physical Educator						
Other						
Total						

13. Other employees:

	No.	Sex		Annual Salary
		M	F	
Driver				
Custodial				
Housekeeper				
Other				

14. Support services being provided:

_____ Pre-vocational training.

_____ Vocational training.

_____ Speech therapy.

_____ Family counseling.

_____ Physical-therapy.

_____ Occupational therapy.

_____ Medical services.

_____ Transportation.

_____ Boarding.

_____ Food.

_____ Clothing.

_____ Financial assistance.

_____ Others (please specify) _____

15. Total annual expenditures: J.D.

16. Funding sources:

Source	Annual Amount

17. Briefly describe the educational curriculum being used at the school.

18. Briefly describe the school's assessment and placement procedures.

Researcher's Notes:

APPENDIX 2b

JORDAN DISABILITY VOLUNTARY ASSOCIATION QUESTIONNAIRE

"Jordanian Disability Voluntary Association Questionnaire"

1. Formal name of the association: _____

2. Mailing address: _____

3. Phone number: _____
4. With which disability group is the association interested?

5. Date of foundation: _____
6. The association is a:
local group _____.
national group _____.
Other (specify) _____
7. The association's membership _____

8. What are the association's primary goals?

9. What are the association's current activities?

10. Describe the association's relations with other related voluntary groups and governmental agencies:

11. What are the major funding sources?

12. What are the major barriers that might interfere with achieving the association's goals?

Researcher's notes:

DATE: _____

APPENDIX 2c

TYPICAL QUESTIONS POSED IN THE INTERVIEW
WITH GOVERNMENT OFFICIALS

Typical Questions Posed in the
Interviews with Government Officials

1. What are the major functions of your agency?
2. What specific role, if any, does your agency play in the area of disability prevention and rehabilitation?
3. Does your agency have any written policy statements regarding disability prevention and rehabilitation?
4. Do you expect any changes on the part of your agency with regard to disability prevention and rehabilitation?
5. Are there any ways in which your agency cooperates with other agencies, and if so, could you describe these?
6. What do you recommend in order to improve special education and other related services in Jordan?

APPENDIX 3a
UNITED NATIONS DECLARATION ON THE RIGHTS
OF MENTALLY RETARDED PERSONS

United Nations Declaration on the Rights of Mentally Retarded Persons

General Assembly Resolution 2856 (XXVI)
Adopted December 20, 1971

Mindful of the pledge of the States Members of the United Nations under the Charter to take joint and separate action in co-operation with the Organization to promote higher standards of living, full employment and conditions of economic and social progress and development,

Reaffirming faith in human rights and fundamental freedoms and in the principles of peace, of the dignity and worth of the human person and of social justice proclaimed in the Charter,

Recalling the principles of the Universal Declaration of Human Rights, the International Covenants on Human Rights, [Resolution 2200A (XXI)] the Declaration of the Rights of the Child [Resolution 1386 (XIV)] and the standards already set for social progress in the constitutions, conventions, recommendations and resolutions of the International Labour Organization, the United Nations Educational, Scientific and Cultural Organization, the World Health Organization, the Nations Children's Fund and of other organizations concerned,

Emphasizing that the Declaration on Social Progress and Development [Resolution 2542 (XXIV)] has proclaimed the necessity of protecting the rights and assuring the welfare and rehabilitation of the physically and mentally disadvantaged,

Bearing in mind the necessity of assisting mentally retarded persons to develop their abilities in various fields of activities and of promoting their integration as far as possible in normal life,

Aware that certain countries, at their present stage of development, can devote only limited efforts to this end,

Proclaims the Declaration on the Rights of Mentally Retarded Persons and calls for national and international action to ensure that it will be used as a common basis and frame of reference for the protection of these rights:

- The mentally retarded person has, to the maximum degree of feasibility, the same rights as other human beings.
- The mentally retarded person has a right to proper medical care and physical therapy and to such education, training, rehabilitation and guidance as will enable him to develop his ability and maximum potential.
- The mentally retarded person has a right to economic security and to a decent standard of living. He has a right to perform productive work or to engage in any other meaningful occupation to the fullest possible extent of his capabilities.
- Whenever possible, the mentally retarded person should live with his own family or with foster parents and participate in different forms of community life. The family with which he lives should receive assistance. If care in an institution becomes necessary, it should be provided in surroundings and other circumstances as close as possible to those of normal life.

-
- The mentally retarded person has a right to a qualified guardian when this is required to protect his personal well-being and interests.
 - The mentally retarded person has a right to protection from exploitation, abuse and degrading treatment. If prosecuted for any offense, he shall have a right to due process of law with full recognition being given to his degree of mental responsibility.
 - Whenever mentally retarded persons are unable, because of the severity of their handicap, to exercise all their rights in a meaningful way or it should become necessary to restrict or deny some or all of these rights, the procedure used for that restriction or denial of rights must contain proper legal safeguards against every form of abuse. This procedure must be based on an evaluation of the social capability of the mentally retarded person by qualified experts and must be subject to periodic review and to the right of appeal to higher authorities.

APPENDIX 3b
UNITED NATIONS DECLARATION ON THE RIGHTS OF
DISABLED PERSONS

United Nations Declaration on the Rights of Disabled Persons

General Assembly Resolution 3447 (XXX)
Adopted December 9, 1975

Mindful of the pledge made by Member States, under the Charter of the United Nations, to take joint and separate action in co-operation with the Organization to promote higher standards of living, full employment and conditions of economic and social progress and development.

Reaffirming its faith in human rights and fundamental freedoms and in the principles of peace of the dignity and worth of the human person and of social justice proclaimed in the Charter.

Recalling the principles of the Universal Declaration of Human Rights, [Resolution 217 A (III)] the International Covenants on Human Rights, [Resolution 2200 A (XXI)] the Declaration of the Rights of the Child [Resolution 1386 (XIV)] and the Declaration on the Rights of Mentally Retarded Persons [Resolution 2856 (XXVI)] as well as the standards already set for social progress in the constitutions, conventions, recommendations and resolutions of the International Labour Organization, the United Nations Educational, Scientific and Cultural Organization, the World Health Organization, the United Nations Children's Fund and other organizations concerned.

Recalling also Economic and Social Council Resolution 1921 (LVIII) of 6 May 1975 on prevention of disability and rehabilitation of disabled persons.

Emphasizing that the Declaration on Social Progress and Development [Resolution 2542 (XXIV)] has proclaimed the necessity of protecting the rights and assuring the welfare and rehabilitation of the physically and mentally disadvantaged.

Bearing in mind the necessity of preventing physical and mental disabilities and of assisting disabled persons to develop their abilities in the most varied fields of activities and of promoting their integration as far as possible in normal life.

Aware that certain countries, at their present stage of development can devote only limited efforts to this end.

Proclaims this Declaration on the Rights of Disabled Persons and calls for national and international action to ensure that it will be used as a common basis and frame of reference for the protection of these rights:

- The term "disabled person" means any person unable to ensure by himself or herself wholly or partly the necessities of a normal individual and/or social life, as a result of a deficiency, either congenital or not, in his or her physical or mental capabilities.
 - Disabled persons shall enjoy all the rights set forth in this Declaration. These rights shall be granted to all disabled persons without any exception whatsoever and without distinction or discrimination on the basis of race, colour, sex, language, religion, political or other opinions, national or social origin, state of wealth, birth and any other situation applying either to the disabled person himself or herself or to his or her family.
-

- Disabled persons have the inherent right to respect for their human dignity. Disabled persons, whatever the origin, nature and seriousness of their handicaps and disabilities, have the same fundamental rights as their fellow-citizens of the same age, which implies first and foremost the right to enjoy a decent life, as normal and full as possible.
 - Disabled persons have the same civil and political rights as other human beings; article 7 of the Declaration of the Rights of Mentally Retarded Persons applies to any possible limitation or suppression of those rights for mentally disabled persons.
 - Disabled persons are entitled to the measures designed to enable them to become as self-reliant as possible.
 - Disabled persons have the right to medical, psychological and functional treatment, including prosthetic and orthetic appliances, to medical and social rehabilitation, education, vocational education, training and rehabilitation, aid, counseling, placement services and other services which will enable them to develop their capabilities and skills to the maximum and will hasten the process of their social integration or reintegration.
 - Disabled persons have the right to economic and social security and to a decent living. They have the right, according to their capabilities, to secure and retain employment or to engage in a useful, productive and remunerative occupation and to join trade unions.
 - Disabled persons are entitled to have their special needs taken into consideration at all stages of economic and social planning.
 - Disabled persons have the right to live with their families or with foster parents and to participate in all social, creative or recreational activities. No disabled person shall be subjected, as far as his or her residence is concerned, to differential treatment other than that required by his or her condition or by the improvement which he or she may derive therefrom. If the stay of a disabled person in a specialized establishment is indispensable, the environment and living conditions therein shall be as close as possible to those of the normal life of a person of his or her age.
 - Disabled persons shall be protected against all exploitation, all regulations and all treatment of a discriminatory, abusive or degrading nature.
 - Disabled persons shall be able to avail themselves of qualified legal aid when such aid proves indispensable for the protection of their persons and property.
- If judicial proceedings are instituted against them, the legal procedure applied shall take their physical and mental condition fully into account.
- Organizations of disabled persons may be usefully consulted in all matters regarding the rights of disabled persons.
 - Disabled persons, their families and communities shall be fully informed, by all appropriate means, of the rights contained in this Declaration.

APPENDIX 3c
ARAB DECLARATION OF ACTION
CONCERNING THE DISABLED

**ARAB DECLARATION OF PLAN OF ACTION CONCERNING
THE DISABLED**

**ADOPTED BY KUWAIT REGIONAL CONFERENCE ON THE
DISABLED**

Held in Kuwait from 26 to 30 Jumada I 1401 A.H.

(1 - 5 April 1981)

Arab Declaration of Plan of Action Concerning the Disabled

Kuwait Regional Conference on the Disabled, convened from 26 to 30 Jumada I 1401 A.H. corresponding to 1 to 5 April 1981, at the invitation of the Kuwaiti National Committee on IYDP Celebrations with the technical co-operation of the United Nations Economic Commission for Western Asia (ECWA), and attended by delegations from the Arab States, Arab Regional Organizations, United Nations Organizations and Specialized Agencies, the Special Representative of the Secretary-General of the United Nations for the International Year of Disabled Persons and a number of experts from Arab and non-Arab Countries;

Desiring to contribute to the national, regional, and international efforts being exerted during the IYDP for which the United Nations General Assembly has designated the year 1981 in order to urge all states to step up their efforts towards coping with the problems of disablement and of disabled persons;

Believing in the letter and spirit of divine laws enjoining respect for the human dignity - of all people - to whom God has entrusted this earth and upon whom He has imposed the duty of social solidarity to support each other in realizing the general good;

Recalling the principles established by Arab civilization at its height which call for justice, compassion, and enabling the human potential of the individual and the community to proceed unhampered in bolstering the foundations of that civilization;

Recalling the Charter of the United Nations and the Universal Declaration of Human Rights (1945), the Declaration on the Rights of Disabled Persons (1975), the Declaration on the Rights of Mentally Retarded Persons (1971), the Declaration of the Rights of the Child (1975), the Declaration on Social Progress and Development (1969), the Fourth Geneva Convention Relative to the Protection of Civilians in Times of War and under Occupation (1949) and other resolutions adopted by the United Nations and its Specialized Agencies, all of which assert the rights of all members of the human community to enjoy the fundamentals of human dignity and the opportunity to participate in shaping up their lives, whether healthy or disabled;

Seeking to realize the objectives of the Charter of the League of Arab States and reaffirming the provisions of the Declaration of Social Action for the Arab States (1971) and the Strategy of Social Action in the Arab Homeland (1979), both adopted by the Conference of Arab Ministers of Social Affairs, as well as the Strategy for the Development of Arab Education (1976) adopted by the Conference of Arab Ministers of Education and other instruments and resolutions adopted by various Arab regional organizations, all of

which stress the importance of attending to the welfare of disabled persons and their rehabilitation and integration into the mainstream of Arab social life;

Recognizing the seriousness of the problem of disabled persons and its worldwide dimensions, affecting as it does an estimated number of 450 million persons who are physically, mentally, or psychologically disabled, namely, 10 per cent of the inhabitants of this planet, 80 percent of whom are in the developing countries;

Realizing that the number of disabled persons in the Arab homeland exceeds 15 millions, and that this number is likely to increase owing to rapid urbanization, the prolongation of the lives of disabled persons brought about by modern medicine, the escalation in the number of traffic accidents, industrial injuries, and the victims of wars, the spread of poverty - stricken areas and other manifestations of backwardness which perpetuate the vicious circle of poverty, disability, and impairment;

Being aware of the magnitude of the Israeli aggression upon the Arab territories and of its consequences, including the usurpation of the Palestinian homeland, the occupation of parts of the Arab soil, the dispersion of the Palestinian people and their subjection to various forms of persecution, torture and disablement in Israeli prisons, and the hardships of their daily life, and in an effort to cope with the consequences of this continued aggression and the social and human tragedies resulting therefrom;

Determined to cope in a comprehensive manner with the problems of disablement and to assist disabled persons fully to participate in and contribute to the life of their communities *pari passu* with other citizens;

Adopts and proclaims the Arab Declaration of Action concerning the Disabled.

Principles :

The Conference hereby decides to base action in favour of disabled persons on the following principles :

1. The Arab individual is the maker of progress on his own soil and a participant in the efforts of human civilization; hence he should be the target of overall development in the context of its various forms.
2. Disabled persons are capable of participating in development efforts and are entitled to enjoy the fruits thereof, given the opportunities and the means to enable them to participate in and benefit from such efforts.

3. Disabled persons are human potential that should be safeguarded, as well as an integral part of human resources to be taken into consideration in the planning for and promotion of development resources in the society.
4. Fostering normal growth, to the maximum possible, toward the pursuit of a normal life is the keynote to coping with the problems of the disabled.
5. Disabled persons, regardless of the nature of their disability, have the aptitude, ability and motivation for learning and growth and for integration into the normal life of the community; and this necessitates concentration on the development of their potentials and abilities and emphasis on what they can learn and contribute rather on what they cannot do.
6. Care for the disabled and their rehabilitation and integration into society should be regarded as human investment which yields socio-economic returns, rather than an action merely based on humanitarian grounds invoked by sympathy towards disablement or infirmity.
7. Prevention, together with the adoption of such measures as are required to protect the citizen against the causes of disability, is the cornerstone of social and human development policies.
8. Action for the disabled persons constitutes a series of interrelated and integrated efforts and programmes aimed at promoting their care, education, rehabilitation, social integration and employment; and attention to one aspect, although necessary, is insufficient by itself within the overall concept of dealing with the problems of disabled persons at the individual or social level.
9. Dealing with the problems of disablement and disabled persons is a responsibility to be borne by the State, the community and the family, each with a specific role, function and duty; and the effectiveness and value of action towards that end are contingent upon the extent of cooperation among the parties concerned in integrating their roles and responsibilities.
10. All disabled persons should be assured of their right to care, education, rehabilitation and employment without discrimination based on sex, origin, social position, or political allegiance.
11. Disabled persons should be assured the right, in accordance with their potential, to lead a dignified life, to enjoy equality with other citizens, to have access to employment opportunities and appropriate working conditions, to have their voice heard, and to participate in making

decisions on those matters related to their lives and the life of their community.

12. Overall development, including the required development of socio-economic infrastructure, is fundamental in eliminating the causes of disablement in all its forms or, at least in minimizing its manifestations; and re-structuring the disabled community is the long-term strategic goal.
13. The political will at the highest level is the main source to be relied upon for providing the programmes required for the care of the disabled as an overall national effort; and such will is the driving force behind social efforts at all levels.
14. Scientific and technical knowledge and technological know-how are of fundamental importance in confronting disablement and the care for disabled persons.

Objectives :

The Plan of Action for Disabled Persons aims at :

1. Providing the necessary opportunities and facilities for treatment, including medical, nutritional, psychological and social care, whether through the family, specialized institutions, or the various social services.
2. Making suitable opportunities for education and acquisition of knowledge accessible to all categories of disabled persons at all stages of the formal or informal educational system, whether within the context of the institutes of special education or adult literacy programmes, as well as diversifying educational services and methods to enable disabled persons to develop their intellectual, manual, and artistic abilities to the maximum extent possible.
3. Expanding and developing the training and vocational rehabilitation services available to disabled persons in accordance with their abilities, the needs of development, and the demand in the labour market for occupations, skills, and levels of expertise.
4. Making employment opportunities available to disabled persons in the various sectors of the socio-economic activity, whether through government agencies, public and private schemes or special working arrangements at home.
5. Helping disabled persons to integrate into the community, to achieve

self-confidence and gain the confidence of the community, and to expand their social interaction with various organizations and groups in society, thereby breaking down the barriers of isolation and segregation which they encounter.

6. Providing suitable and adequate means and facilities for cultural and recreational development and satisfaction, and organizing suitable activities through the organs responsible for sports, culture, information, and the arts.
7. Formulating such policies as would ensure for disabled persons equality in civil and political rights with other citizens.
8. Providing preventive services, immunization, and treatment for infectious and endemic diseases to every individual, especially mothers and children, with priority to be given to public health and environmental health services.
9. Ensuring the protection of citizens against disability, old age, unemployment, and sickness that may give rise to physical, mental or social impairment.
10. Facilitating the increased satisfaction of the basic material and non-material needs of citizens as a basis for healthy growth, fruitful social interaction, and effective participation in life, especially with respect to the inhabitants of rural areas or underprivileged urban quarters and other social segments vulnerable to the causes of impairment and disability.

Mode of Action :

The Conference believes that ensuring the preceding principles and attaining the objectives can be best served by a systematic mobilization of all resources, with special emphasis on the following methods and means :

1. The integrated concept of dealing with the problem of disablement rests on creating models for national development with priorities aimed at the upgrading of the quality of life, the constant improvement of the standards of living, equality in the distribution of the fruits of development, the elimination of poverty, hunger, and malnutrition, the provision of all the essentials for personal hygiene and public health, equal access to opportunities for education, training and employment, and social security for the individual at present and in the future, as well as other socio-economic conditions which foster the healthy development of man's potentials and prevent disability or at least minimize its effects.

2. The plans and programmes necessary for disabled persons shall be drawn up as an integral part of the strategy for the development of human resources within the context of national planning, with due consideration to the fact that the care, education, rehabilitation, and employment of disabled persons be deemed one of the objectives of overall development and a criterion for evaluating its achievements.
3. Attention shall be paid to the collection of statistics on disabled persons and their classification according to accurate criteria for use as the basis for planning proper programmes. Moreover, detailed particulars about disabilities shall be introduced in population censuses and field surveys, and sample studies shall be conducted on the various categories of disabled persons.
4. Children, young people, and mothers shall, in the planning and implementation of programmes, be accorded due priority, so as to guarantee for these categories protection from the causative factors of disability and the early treatment of cases, if any. This objective can be achieved by the expansion of child and mother care centres and of school health education programmes, by making vaccinations and inoculations available to all, by the adoption of a registration system for children born with a disability or who are likely to develop one, and by the administration of the necessary treatment.
5. A socio-psychological health system shall be instituted for the early diagnosis of cases of impairment, infirmity, and disability, especially in children, so that such conditions will not interfere with the process of normal growth or otherwise affect, through their accompanying complications, subsequent developmental stages, with grave consequences for the potential of disabled persons to participate in normal life.
6. Special education shall be integrated within the policy of basic compulsory education, with provisions to that effect incorporated in the laws governing education. In addition, all aids and equipment necessary for the education of disabled persons shall be made available whether at special institutes or in regular classrooms.
7. The State shall be responsible for undertaking a leading role in the provision of care, rehabilitation and employment to disabled persons. Consequently, the State shall draw up the necessary policies to that end, and shall specify the standard of services required at all institutes for the disabled to guarantee the effectiveness of private and governmental services.

8. Revised social legislation governing the employment, conditions of work, wages, industrial safety, and other labour and employment questions relating to the special circumstances of disabled persons, shall be promulgated.
9. Policies shall be adopted to ensure the integration of the health, educational and rehabilitation services rendered to disabled persons, as well as effective coordination between governmental and private services. This measure requires that national committees set up during the IYDP should continue to undertake these responsibilities, or that standing national committees be constituted for that purpose.
10. Professional organizations, private societies, popular bodies and local communities shall be encouraged to assume an active role in therapeutic and prophylactic areas related to the services required by disabled persons. Technical and financial support shall be extended to such bodies with the object of maximizing community involvement in these services.
11. Emphasis shall be placed on the protection and solidarity of the family as a fundamental institution for the education and care of the younger generation, on making the family aware of disability causes and how to cope with them, on the therapeutic services available for all kinds of disabilities, and on helping the family understand and shoulder its obligations, should any of its disabled members require to be institutionalized.
12. The promotion of community awareness shall be adopted as an effective instrument for helping the community acquire a scientific understanding of the problems and causes of disablement, thereby eliminating negative concepts which stand in the way of the development of an objective attitude toward disablement. This requires the preparation of the necessary educational materials and means.
13. The mass media with all their various organs and programmes shall be used for the propagation of objective information and understanding of the problems of disablement and disabled persons among the public, disabled persons themselves and their families; for arousing interest in questions related to disablement in their full magnitude; and for emphasizing the close relationship between the problem of disabled persons and the development of human resources as both a means and an end toward overall development.
14. A system of professional specialization shall be adopted at all levels during the preparation and training of all cadres involved in dealing with

the disabled persons, as a step towards guaranteeing the effectiveness of the services available to the disabled, the quantitative and qualitative improvement of such services, and the provision of the necessary inputs to meet their needs in the whole range of services, including care, education, rehabilitation, and integration.

15. Social, economic, and psychological studies and researches shall be conducted to identify those factors and social environments which make individuals vulnerable to disability and infirmity, and to examine the influence of the social values and behavioural practices of such environments in dealing with cases of disablement. The findings of such studies shall be published for use as guidelines in the planning of programmes and the creation of public awareness in the field of disablement.
16. The necessary measures shall be taken to enable disabled persons to participate in determining their fate or future, so that programmes for their care and measures to be adopted for the enjoyment of their rights will be planned and implemented according to their wishes. This can be achieved by helping disabled persons to organize themselves in societies, associations and federations, as well as by helping them fully to participate in official and private conferences and seminars whether within or outside their own country.

Cooperation at the Arab Level :

The Conference affirms the importance of Arab cooperation and of joint national action in the field of disabled persons as instruments for strengthening plans and programmes of action at the national level in every country. The most important aspects of this cooperation are :

1. Cooperation in the unification of terminology and in the standardization of statistical systems and classifications and services in all areas related to disabled persons.
2. The establishment of regional Arab centres for the training of cadres and key personnel in the various programmes required for treatment, rehabilitation, education, and training.
3. Cooperation in studies, research, and exchange of information and expertise.
4. The exchange of expertise and studies on the evaluation of experiments and projects undertaken in some countries, with a view to helping other Arab countries benefit from them in the light of the similar social and cultural circumstances prevailing in the Arab homeland .

5. The strengthening and organization of inter-Arab social solidarity in cases of public disasters and crises, with a view to minimizing their consequential damage to individuals and communities, inasmuch as such happenings represent contingencies which bring about disability and disablement.
6. Supporting the Palestine Liberation Organization in carrying out its social programmes and operating its institutions for disabled persons whose numbers are increasing as a result of the continued Israeli aggression upon the Palestine people inside the occupied territories and in Palestinian camps in Lebanon; and providing opportunities for the training of specialized Palestinian cadres in the various areas related to disabled persons through scholarship grants and training at existing institutes in the Arab countries.
7. Establishing joint Arab enterprises for the manufacture of prosthetic devices and other aids which can be feasibly produced in the Arab world to serve disabled persons.

Cooperation at the International Level :

The Conference, believing that the Arab countries are an integral and active part of the international community in general and of the third world in particular; and affirming its desire for consolidating justice and peace in the world, for liberating man from the restrictions of disability and impairment, and for releasing man's potential for creativity and innovation all of which are the focus and ultimate objective of human civilization;

Resolves :

1. To commit itself continuously to observing the provisions of the United Nations Declaration and Programme of Action for Combating Racism and Racial Discrimination (1978), and to combating such racism in its various forms as a source of the ugliest forms of physical, social, and psychological disablement and as a violation of human rights.
2. To support the liberation movements struggling for self-determination, independence, and national freedom from foreign domination, and to extend assistance and support to such movements in coping with the physical or social disablement to which their members are vulnerable.
3. To contribute positively towards the establishment of a new world economic order; and to pursue the call for a continued North-South dialogue as a basic step towards the creation of the aspired new order,

towards the adoption of all measures associated therewith, including the resumption of relations and exchanges in the field of international cooperation and the establishment of justice, peace, and stability worldwide, and towards enabling third world countries to concentrate on the task of planning for the overall development of their communities and their human resources, thereby minimizing the sources of disablement and impairment.

4. To affirm the importance attached to the Euro-Arab dialogue in its various aspects, whether political, social, or economic, as well as to give the same an impetus so as to serve as an effective factor in the creation of the new economic world order and in providing the fundamentals for Arab development based on self-reliance.
5. To benefit from the scientific, technological and organizational know-how available in the advanced industrialized countries in the fields of the disabled and disablement to the extent compatible with conditions in the Arab World; and to seek the assistance of those countries in establishing industries connected with the services to the disabled.
6. To extend support to the United Nations and its Specialized Agencies and to the preventive, therapeutic, and rehabilitative programmes and schemes undertaken by them in favour of disabled persons throughout the world.