

Evaluation of
Mothers Home Care/Early Intervention Outreach Program for Handicapped Children
within the
Society for the Care of Handicapped Children

by

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Executive Summary

This evaluation examines the Mothers Home Care/Early Intervention Outreach Program for Handicapped Children. The purposes of the Program include the development and implementation of a cost effective innovative strategy for providing early childhood special educational services to preschool handicapped children and their families in the Gaza Strip. Eight key features of the Program constitute the focus of this evaluation. The Program is intended (1) to serve handicapped children ages 0-9 and their families living in the Gaza Strip, (2) to be home based, (3) yet minimally disrupts family life, and (4) to prepare nonprofessional women in the community as teachers. The education program is intended (5) to offer a developmentally sequenced and culturally appropriate curriculum, (6) that utilizes individualized prescriptive teaching approaches as well as (7) an evaluation program that measures progress and enhances program modification. Issues pertaining (8) to cost-effectiveness also are addressed.

The results of this evaluation indicate the primary goals of the Program have been or are being met. That is, the Program provides needed and effective educational services to handicapped children, ages 0-9, and their families through a home based program in which a developmentally sequenced and culturally appropriate curriculum that utilizes prescriptive teaching approaches and evaluation methods to enhance program success. Furthermore, the Program is cost-effective, enhances growth, and endeavors to minimize adverse effects while promoting positive effects on families. Recommendations are provided to further enhance the Program.

BASIC PROJECT IDENTIFICATION DATA

1. COUNTRY: Gaza Strip
2. PROJECT TITLE: Mothers Home Care/Early Intervention Program
3. PROJECT NUMBER: 389-0159.11
4. PROJECT DATES:
 - (a) First Project Agreement - June 1984
 - (b) Final Obligation Date - FY May 31, 1991
5. PROJECT FUNDING:

(a) AID Grant.....	\$137,854
(b) Other Major Donors.....	0
(c) Host Country Counterpart Funds.....	0
	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/> \$137,854
6. MODE OF IMPLEMENTATION: Project is administered by the Society for the Care of Handicapped Children (SCHC), the only Palestinian Agency authorized to receive funds directly from AID.
7. PROJECT DESIGNERS: Society for the Care of Handicapped Children (SCHC)
8. RESPONSIBLE MISSION OFFICIALS:
9. PREVIOUS EVALUATION (Independent of AID):
 - Mr. Aldred Newfeldt (Canada) 1985
 - Dr. David Mitchell (New Zealand) and Ms. Kawthar Abu Ghazaleh (Gaza) 1987
 - Mr. David Shearer (U.S.)
 - Dr. Larry Afifi, July, 1988
 - Dr. Thomas Oakland, March, 1989

Purposes of the Project and Study Questions of the Evaluation

This report summarizes a review and evaluation of the Mothers Home Care/Early Intervention Outreach Program for Handicapped Children. The review and evaluation occurred at the request of the Society for the Care of Handicapped Children and with the concurrence of the Agency for International Development (AID).

Purposes of the Project This evaluation is directed toward better understanding the extent to which the general purposes of the Program have been achieved. These purposes include the development and implementation of a cost effective innovative strategy for providing educational services to preschool handicapped children and their families in the Gaza Strip. The specific features of the Program include the following. The Program is intended (1) to serve handicapped children (ages 0 to 9) and their families living in the Gaza Strip, (2) to be home based, yet (3) minimally disruptive to a family's daily life, (4) to train nonprofessional women in the community as teachers, and (5) to offer a developmentally sequenced and culturally appropriate curriculum. The Program is to be promoted (6) through a methodology that utilizes individualized prescriptive teaching methods as well as (7) evaluation methods that measure progress and enhance program modification in (8) an effective and cost-efficient manner. Thus, these eight features of the Program constitute the focus of our evaluation.

Study Questions of the Evaluation The principal questions that guide this evaluation are an outgrowth of the purposes of this project. Simply put, this evaluation attempted to determine the degree to which each of the specific objectives has been accomplished.

An evaluation also should be conscious of some broad issues that go beyond those directly relevant to the target program yet pertain to general and important missions consistent with those of the program and funding agencies. Some of these issues include the following: enhancing the values associated with educating children and youth by parents given their as childrens' primary and continuous teachers; improving the parenting skills of mothers, fathers, as well as other family members; promoting the readiness of children for regular education as well as other mainstream activities of life; better utilizing professional resources by families; promoting cooperative planning between teachers and primary caregivers (i.e., parents); providing a lifeline to family members often isolated by cultural, economic, and political conditions; and recognizing the value of five important developmental qualities: motor skills, socialization, self help development, language, and cognition as well as issues important to health, nutrition, and hygiene.

Moreover, during these troubled times in the Gaza Strip, one cannot overlook the importance of the Program in providing hope to families who often face unbearable odds while meeting their daily responsibilities. Parents typically face many significant problems while attempting to promote the development of their normal children; they typically face insurmountable odds while attempting to promote the development of their handicapped children. These important issues also are an extension from the Program and constitute broad, important, and often unwritten missions consistent with the Program. These broader missions are more difficult to evaluate; we have not attempted to evaluate them formally. Nevertheless, they are germane to the broader evaluation of the Program's effectiveness.

Economic, Political, and Social Context

As noted in previous evaluation reports, the Gaza Strip is approximately 40 kilometers long and 10 kilometers wide. The area is bordered by Egypt on the west, by the Mediterranean Sea on the north, and by Israel on the south and east. An estimated 650,000 Palestinians live in this area, approximately half in the city of Gaza. Although the Strip originally was rural, it now is 85% urban. Approximately 75% of the population are refugees. Significant numbers of its residents live in the eight refugee camps created and supervised by the United Nations since 1948.

The Gaza Strip has a subsistence economy which largely is dependent upon income from small shop owners and other entrepreneurs, small farmers and others involved in agriculture. Many residents previously traveled to Israel daily for work. Increased restrictions on travel and work have significantly decreased the number allowed to find employment in Israel. Prior to the Gulf War earlier this year, many families in Gaza were dependent on financial support from family members working in the Gulf States. Few families currently are receiving this support. Moreover, many family members previously contributing financially to their families by working outside of Gaza now have been forced to return, creating additional burdens on their families. Thus, the level of unemployment and underemployment is extremely high. Those fortunate to be employed often earn a subsistence wage. Others less fortunate to find work must rely upon families, friends, or benevolent societies for assistance.

The political conditions within the Gaza Strip are in turmoil. During the last 42 months, during this period of Intifada (the popular uprising

against Israeli occupation), significant numbers of residents have demonstrated their disapproval of being forced to live under occupation by the Israelis for more than 20 years. The World Health Organization reported on 5/17/90 at least 780 Palestinians have been killed by Israeli forces since the Intifada began. This figure includes more than 130 children killed, typically without provocation.

Moreover, various political factions exist among the Palestinians. Within Gaza, the sources of power are not coalesced. Thus, leadership seemingly arises from within the general population rather than within any one formal organization.

Since the Intifada, the Project mothers overwhelmingly report their family's security is worse (97%), their family's economic conditions are worse (88%), their family's happiness is worse (86%), and conditions in their marriage are worse (67%). Moreover, compared to mothers of nonhandicapped children, those with handicapped children report significantly higher levels of stress.

These economic and political conditions exist within a social context that is traditionally Arabic. Its cultural and religious traditions are actively practiced or are tacitly supported by the majority of the population.

The background of this Program also must be understood within a broader institutional context, one that focuses on the Society for the Care of Handicapped Children (SCHC). The Society was initiated in 1975 by Dr. Hatem Abu Ghazaleh (M.D.) in response to the need for educational services for the handicapped. Educational facilities as well as other care for the handicapped were unavailable at that time. Since its beginning in 1975, SCHC has

developed activities in the following areas. Its Sun Day Care Center provides day care, education, and training to handicapped children between the ages of 7 and 18. The Gaza Beach Camp School, established in 1986, provides similar services to children and youth in its Beach Camp location. The SCHC's vocational training and habilitation programs provide vocational preparation services for handicapped persons over the age of 18. Its postgraduate diploma and undergraduate degree programs to train rehabilitation personnel were initiated in 1984 through a cooperative arrangement with the University of Calgary and Mount Royal College, Calgary, Canada. The Center also offers services to non-handicapped children through its Mothers' Home Care/Early Intervention Outreach Program for Non-Handicapped At-Risk Children and Their Families; this program was initiated in September, 1988.

In addition to these professional programs, the Society has its own physical facilities which include classrooms,, a kitchen and dining room, administrative offices, a gymnasium, a hostel in which visiting personnel can reside, a computer room, and other administrative and instructional resource facilities typically found among educational institutions in more advanced countries. Moreover, its administrative and professional staff tend to be well trained, dedicated, and operate at a level that compares favorably with their counterparts in Western countries.

Thus, the Society for the Care of Handicapped Children has a well established infrastructure that enables its programs to be administered in effective and efficient ways.

Evaluation Team Composition

Dr. Thomas D. Oakland is the Director of the Learning Abilities Center and Professor of Educational Psychology at The University of Texas at Austin. The Learning Abilities Center is a multidisciplinary agency committed to research and professional preparation programs that advance our understanding of conditions associated with children's development, in particular their cognitive and academic development, as well as the delivery of quality services that enhance the growth and development of children and youth. As a Professor of Educational Psychology during the last 24 years, Dr. Oakland's principal efforts have been directed towards developing a nationally acclaimed school psychology program, teaching courses in the area of assessment and intervention activities with children and youth, as well as establishing research programs dealing with issues in children's educational development. His research efforts have been particularly focused on the educational development of minority children.

Marian H. Jarrett holds a Master's degree in Speech Pathology from Northwestern University and a Doctorate in Special Education from the George Washington University. She has 24 years experience working with children and adults with special needs. Dr. Jarrett currently is an infant development specialist with Newborn Services, GWU Hospital and Assistant Clinical Professor with the Department of Pediatrics, GWU School of Medicine and Health Services and with the GWU Department of Teacher Preparation and Special Education.

Carole W. Brown, Ed.D. is Assistant Professor in the Department of Teacher Preparation and Special Education at the George Washington University

and teaches graduate students in early childhood special education policy courses. She is an expert in policy and program planning for young children with disabilities and their families. She formerly served as a Project Officer for the Early Childhood Branch of the Office of Special Education Programs (OSEP) in the U.S. Department of Education evaluating state plans to implement early intervention services and monitoring experimental research in early childhood.

Heather Bennett McCabe, Ph.D. is the Executive Director, Rehabilitation and Education for Adults and Children, Inc. in Atlanta, Georgia. She is an expert in special education administration, family support services, early intervention services, and personnel training. She is the former Georgia state coordinator for early intervention services for children from birth to age three. She completed her dissertation research on competencies to train infant specialists.

Evaluation Methods and Procedures We visited and resided at the Sun Day Care Center in the Gaza Strip from the evening of May 14 to the morning of May 29. This was Dr. Oakland's fifth visit to the Society, the first one occurring in June, 1982. Thus, he was personally familiar with many features of the program and the history of the Society. This was the first visit to Gaza and the Middle East by Drs. Brown, Jarrett, and McCabe.

We read a number of publications and prior evaluations of the program in preparation for this evaluation. These include the following: Guidelines for Data Collection, Monitoring, and Evaluation Plans for A.I.D./Assisted Projects (April, 1987), A.I.D. Evaluation Handbook (April, 1987), Asia Near East Bureau, Procedural Guidelines for Evaluation (February, 1986), Evaluation of Mothers' Home Care/Early Intervention Program, Society for the Care of Handicapped Children: Gaza Strip by Dr. David Mitchell (November, 1987), the

Program, Progress Report and Evaluation by David E. Shearer (November, 1988), Evaluation of the Home Based Rehabilitation Programs for Disabled Children in the West Bank and the Gaza Strip prepared by Larry Anna Afifi, (July, 1988), a response from Dr. Hatem Abu Ghazaleh to Ms. Kris Loken (January, 1989), and an evaluation of the Mothers Care/Early Intervention Outreach Program prepared by Dr. Oakland in May, 1989. As can be expected, the current evaluation reviews many of the same issues addressed in previous reports. It concurs with many of their conclusions and differs with others.

We also conferred with or obtained information in other ways from the following persons associated with the Society as well as those directly associated with the Program: Dr. Hatem Abu Ghazaleh (Chairman of the Society), Aida Abu Ghazaleh (Director of Outreach Programs), Naila Shawwa (the Director of the Mothers' Home Care/Early Intervention Outreach Program for Handicapped Children), program supervisors and its teachers, and Nasser N. El Draimili (Acting Director-General for the Society). We also conferred with four co-directors of the Mothers' Home Care/Early Intervention Outreach Program for Non-Handicapped At-Risk Children.

We made a number of home visits to observe the practices of the supervisors and teachers as well as the conditions under which the Program is implemented. We also designed two questionnaires: one for parents and the other for teachers and supervisors (see Appendix). The parent questionnaire was administered to approximately 233 mothers in the project. The teacher/supervisor questionnaire was administered to all teachers and supervisors. The questionnaires allowed us to acquire information that was timely, relevant, and potentially useful to the evaluation of this project.

Evidence and Findings

Introduction and History The Mothers' Home Program for Handicapped Children was initiated following the successful implementation of the Sun Day Care Center, a tertiary prevention program that provides day school programs. The Society realized its effectiveness to enhance the growth and development of handicapped children could never be fully met by relying upon day school programs. Moreover, in recognition that the parents of children are their most effective teachers, strategies for providing services through families to the handicapped were formally initiated through this Program.

The Program relies principally on the Portage Program to help promote the social, self-help, language, physical, and cognitive abilities of children. The Program is highly respected internationally, offers a curriculum thought to be appropriate with the developmental needs of handicapped children in Gaza and is intended to be implemented by persons with the level of training and preparation consistent with those in this region (i.e., those at the paraprofessional level). The Program's implementation has been particularly resilient to problems posed by the political and economic turmoil that characterizes this region during the period of its occupation as well as the Intifada.

Thus, the Society has developed various strategies for providing services to the handicapped. During the last 16 years, five major programs for the handicapped have been developed. Moreover, infrastructures within the Society provide excellent resources to help ensure the development and maintenance of its programs.

Does the Program Serve Handicapped Children (Ages 0 to 9) and Their Families Living in the Gaza Strip?

The Mothers' Home Program provides educational services to 620 handicapped children. All live in the Gaza Strip and are between ages 0 to 9. Three children are between 0 and 1, 11 are between 1 and 2, 36 are between 2 and 3, 85 are between 3 and 4, 98 are between 4 and 5, 82 are between 5 and 6, 121 are between 6 and 7, 101 are between 7 and 8, and 81 are between 8 and 9. Among them, 7 are classified as having learning delays, 40 as mentally retarded, 43 as physically impaired, 47 as Down syndrome, 82 as deaf, 102 as speech delayed, and 298 as having two or more disabilities.

Among the families whom the Program serves, 93 have 2 handicapped children, 36 have 3 handicapped children, 14 have 4 handicapped children, 3 have 5 handicapped children, 1 has 6 handicapped children, and 16 have more than 6 handicapped children.

One hundred twenty nine children have been enrolled in the Program less than 6 months, 79 between 7 and 12 months, 86 between 13 and 18 months, 125 between 19 and 24 months, 58 between 25 and 30 months, 35 between 31 and 36 months, 21 between 37 and 42 months, 16 between 43 and 48 months, 24 between 49 and 54 months, 17 between 55 and 60 months, 21 between 61 and 66 months, and 6 between 67 and 72 months.

Previous evaluations of this Program have cited the fact that few children apparently enter the program at young ages. As a result, the Program's effects might be dissipated somewhat by working with older children. Thus, prior reports recommended that younger children be included within the Program.

Current data indicate about 20% are younger than 4. Many children currently between ages 4 to 9 are likely to have entered the program when they were 2 or 3. Thus, while median age of the children is between 5 and 6, the program tends to begin its work with children at much younger ages.

Is the Program Home-Based?

One essential feature of the Portage Program is its emphasis on working with handicapped children and their mothers at home. The teachers made 15,840 home visits last year. Each visit typically is for 75 minutes.

The number of home visits was curtailed due to political problems in the region. During the previous year, teachers were unable to meet personally with children and mothers for 100 days: 50 days were due to curfews imposed by the occupying forces, 30 days due to war-related events, and 20 days due to strikes imposed by the Intifada.

In anticipation of these conditions, teachers are proactively preparing mothers for these disruptions by training them to develop their own activities, by providing to mothers multiple lessons, and by making other provisions that enable mothers to continue with the programs despite political turmoil.

Does the Program Minimally Disrupt Family Life?

The provision of any intervention program targeted toward a handicapped child has the potential of having both deleterious and beneficial consequences within families. For example, the increased attention directed toward a handicapped child may further overwhelm a mother's ability to handle other domestic responsibilities and deprive other more normal children of the family's resources. On the other hand, the provision of educational programs

for the handicapped child may have residual beneficial effects on the family (e.g., allowing the mother to lead a more normalized life and fostering greater trust and faith in professionals by the family). In that a goal of this Program is to disrupt family life minimally and to positively effect families (and might we add especially mothers), these issues need to be examined.

Few families withdraw their children from the Program. This clearly indicates their perceptions that the Program is effective and its acceptance within the community. Since its beginning, 1416 children have been enrolled within the Program. Less than 3% of the families have withdrawn their children from the Program during the time the child remained eligible for its services and the families resided in the region. This figure is exceptionally low and provides some indication as to the Program's acceptance by and effects on families. Sixty-seven percent of the teachers surveyed believe the Program does not disrupt a family's life while 23% believe the Program is somewhat disruptive. Eighty-eight percent of the mothers report the program is not disruptive.

The Program exists within a culture that traditionally has relied, at best, on providing love and pity rather than education as a response to the handicapped. Palestinian families often attempt to hide the fact that one or more of their children are handicapped in order to protect the prestige and integrity of the family. Thus, one would expect considerable community pressure against enrolling children within the Program or to withdraw their children prematurely from it. Despite these cultural expectations, the numbers of families who enroll and maintain their children in the Program is

very remarkable. Given the policies of the occupying forces, severe restrictions exist on public advertising in Gaza. Information about the Program is spread throughout the community largely through word of mouth. Thus, the public's evaluation and acceptance of the Program significantly impact the numbers of parents who make application to it. Ninety-three percent of the mothers report they are generally or very satisfied with the Program. All mothers indicated they would recommend the Program to others. If the Program were perceived to have a deleterious impact, this information would be communicated within the community and few would choose to enroll their children within it. The large number of people who voluntarily seek assistance through the Program despite cultural traditions disfavoring the admission of handicapping conditions attests to the positive perceptions the community has regarding the Program. There presently are more than 300 families on the waiting list for Program services.

A number of factors that contribute to enhancing the quality of lives for mothers of handicapped children have been identified. Many mothers become more hopeful and encouraged that important changes can occur in their handicapped children. Along with this increased hope and encouragement come greater self-confidence and self-reliance. Associated with these qualities, cooperative relationships typically develop between the teachers and parents in which both share information and participate in tailoring interventions designed to enhance the growth and development of the handicapped child.

Teachers reported positive effects on other children within the home. Problems exhibited in the eating, dressing, and toileting behaviors of siblings often were improved as a result of transferring some of the

techniques directed toward the handicapped child to nonhandicapped children. In general, a dispersion effect occurs in which the techniques directed toward the handicapped child are directed as well toward their peers, particularly those who are younger. Finally, a number of teachers reported that their attention to the handicapped child provided greater status to that child and she or he acquired greater value within the family. Because a teacher, a respected outsider, valued the handicapped child, other family members were inclined to do so as well.

As expected, a number of potential problems can emerge. These include scheduling, a stigma associated with receiving help for the handicapped child, and feeling overwhelmed with other responsibilities. The teachers apparently are sensitive to these and other problems and attempt to make suitable adjustments within the Program. For example, appointment days frequently are changed so as to avoid conflicts that interfere between the home visit and other duties the mother may have. This flexible scheduling process is used for the benefit of the mother.

Relative to the possible stigma associated with the arrival of vehicles displaying the Society's insignia and transporting the home teachers, the teachers are willing to walk some distance to the houses if the mothers prefer that the bus or car not be stationed outside of their doorways. However, the need for markings on the vehicles is related to present conditions where the passage of cars is hampered by occupying authorities. Moreover, vehicles occasionally are stoned by children who do not recognize them as belonging to the Society. If mothers feel overwhelmed by their responsibilities, discussions are held as to the number of activities they are expected to teach

as well as scheduling modifications. For example, for some mothers, the number of lessons may be reduced for some period of time. Within other families, other family members are brought in as instructors for the handicapped child. The commitment to help ensure progress occurs in a steady but realistic fashion is strong. The Program pace generally is not be too quick or superficial and instead establishes success as its standard.

Many mothers and teachers also report that fathers are instrumentally involved in the progress of their handicapped children. Some transport the families from remote to more convenient locations for the teachers' visits. Other fathers directly help in teaching their children. Still others inquire as to why a teacher may have had to miss an appointment (e.g., due to a strike or civil unrest). Still others assist them in writing out the lesson and in supervising the work.

Prior to the Program, many fathers had been reluctant to take their children for medical care, telling their wives that such care was not helpful and too expensive. After their children's involvement within this Program, the fathers frequently become more aware of the importance of professional assistance and that important changes in their child can occur. Thus, they frequently request consultation from teachers or the director about other problems they observe in their handicapped children or in other children and become much more responsive to suggestions to seek the care of physicians and other specialists.

Does the Program Train Nonprofessional Women in the Community as Teachers?

The Program employs 31 home teachers each of whom serves 20 children and families. The ages of the teachers range between 19 and 50 years with a mean

age of approximately 25. The educational background of the teachers varies considerably. Some attended a teacher training institute in Ramallah which provides a two year general course of study, others attended a similar institute in Gaza, a few have some university training, while others have high school degrees. Two of the teachers had previous teaching experience. Few have previous work experience. This lack of prior work experience is common in Gaza. Its traditions and economy favor women working only within the home. Many believe the few jobs available within the Gaza Strip should go to men rather than women. Thus, opportunities for work are meager for women living in the area.

Seventeen teachers live in towns or villages while 14 live in the refugee camps. The teachers average four home visits per day. Their work week consists of five days of teaching, one day of inservice work, and one day of rest. However, during periods of strikes and curfews, many teachers continue to work on their holy holiday so as to compensate for any home visits missed during the previous week. An average of over 124 children and their families receive direct services each day through this program.

The teachers providing services in the cities, villages, and refugee camps also live in these locations. During this period of Intifada, the Program is able to continue providing high quality services despite the occurrence of strikes and other disruptions. By residing in the same areas in which services are provided, teachers often are able to find circuitous paths to the homes of those whom they serve. Moreover, the teachers have an empathic understanding of the many difficulties under which people live and parental services are offered to their children. This enhances their

credibility within the eyes of recipients of services (i.e., the parents and children) and allows the teachers to make modifications within their programs so as to make them culturally appropriate and to facilitate their utilization. This Program may be one of the few within the world that has continued to offer high quality professional services in the midst of prolonged civil, economic, and political upheaval.

We must not overlook the significant commitment by teachers to the Program. Despite strikes and curfews, the presence of guns, tear gas, and other threats to their safety, the teachers continue to strive to provide daily services to their assigned families. These home teachers are to be commended for their professional dedication. This behavior indicates their strong commitment to the Program and their belief in the Program's positive effects on the children, their families, and their community.

Ongoing professional preparation preservice and inservice programs have been established. Women applicants accepted into the preservice training program are prepared during a three month training program to provide services consistent with the program goals. Oral and written exams follow the completion of lectures directed toward advancing Program knowledge and implementation, assessment, recording and reporting of data, and ways to establish partnerships with parents. These features of the Programs help ensure the students have obtained adequate knowledge pursuant their later duties. Preservice instruction also involves their observing teachers providing services as well as their serving a brief internship.

The inservice education program is built upon the preservice program. Within the inservice program, the home teachers meet one day each week to

discuss common problems and work in other ways to enhance their ongoing professional development. Typical topics discussed during the weekly four hour supervisory sessions with the home teachers include curriculum planning for various handicapping conditions, increasing parent involvement in planning and implementing the curriculum, developing alternative learning strategies, and addressing the needs of the entire community. Lectures and case presentations utilize a problem solving approach.

Inservice activities for supervisors include the supervising of the home teachers, managing of records and reports, increasing parental involvement in planning and implementing of the curriculum, and addressing the needs of the family and the community.

A teacher observation form is used to assist in the teacher evaluations. The performance of teachers is observed regularly by their supervisors and rated as to their general performance, their rapport with the family and child, the appropriateness of the activities for the child, and parent participation. The use of this teacher observation form serves as one provision within the training program for these nonprofessionals. This information is shared with them individually in order to enhance the teacher's abilities to provide high quality and appropriate services.

There presently are six full time supervisors within the program, one of whom also serves as the Program psychologist. These supervisors have extensive experience with the Mothers' Program together with other programs offered through the Society. All supervisors have home teaching experience with the Program. The psychologist has a four year degree in psychology. Three supervisors have been with the Program for four years while two have

been with the Program for three years. Five supervisors are responsible for six home teachers; the psychologist is responsible for supervising one. Thus, each of the five is responsible for monitoring services provided to 120 children and families. The psychologist monitors 20 children and families.

The need for additional inservice education in consultation, management, supervision, and teaching techniques for the supervisory staff is continuous. Curricula emphasizing nutrition, hygiene, and health care also are needed.

Is the Curriculum Developmentally Sequenced and Culturally Appropriate?

The Portage Program attempts to facilitate child development in five broad areas. These include cognitive, language, self help, socialization, and motor development. The lessons within each of these five areas are arranged in increasing order of difficulty and are developmentally sequenced so as to build upon successive developments within each of the five areas. The lessons within the Portage Program parallel behaviors assessed by the Alpern Boll Developmental Profile and the Denver Development Screening Test; both have been translated into Arabic.

The extent to which cultural differences may exist between the qualities inherent in the Portage Program and those in the Gaza Strip were investigated. Prior to its implementation, the staff closely scrutinized the Program, alert to possible cultural differences. Some modifications were made in the Program content and methods, often involving relatively minor adaptations (e.g., eating with spoons in that forks rarely are used). Teachers were asked to comment on various issues important to their work through a detailed questionnaire (see appendix). The results are summarized below:

- 83% believe the curriculum is generally or very suitably arranged along a development sequence;
- 83% believe the curriculum generally or very suitably enables them to individualize instruction; and
- 83% change the child's individual education plan two to four times yearly.

The provision of early intervention services often involves more than the provision of education. Early intervention services can include health related development activities and the provision of social support to families so as to further enhance their children's development.

Although the Program is well established and the teachers are competent in delivering the educational services, the evaluators' observations together with parent questionnaire responses provide data that indicate currently unmet needs related to nutrition, health, and service coordination.

Various approaches can be developed to address these needs. For example, a parallel program of health services could be initiated with specific linkages to promote coordination. Another example involves staff specialists in nursing to work within in the program to provide inservice training to teachers and to monitor certain children. This specialist or another staff member also could provide service coordination or referrals.

Staff and members of the evaluation team recognize the need to provide secondary and supportive services to children and youth, many of whom have multiple handicaps. Provided the Society and its programs receive the necessary financial and professional support, we believe the Program director and others associated with the Society would support the need for the

provision of related services. Services should be directed toward general nutrition, health, and hygiene needs as well as those more specific to the needs of children with severe physical, auditory, visual, and speech problems.

However, the provision of these related services should not take away from the provision of needed educational services to the target children. Education clearly must remain the primary focus for this Program. This Program within this one Society cannot be expected to provide all possible professional services needed by handicapped children and youth.

We recommend provision of additional training to program teachers. However, because of the teachers' limited educational and professional backgrounds, they cannot be expected to acquire the skills necessary to become experts in health, nutrition, hygiene, physical therapy, speech and language, visual and auditory impairments, and early detection techniques, usually associated with graduate level training in special education.

We strongly support improved linkages between programs for handicapped children and all professions dedicated to enhancing the growth and development of children within the Gaza Strip. Pediatricians, psychologists, physical therapists, speech and language pathologists, child developmentalists, together with specialists in community medicine, organizational development, teaching, audiology, visual impairments, and other specialized fields impacting child growth and development are needed in this region to work coordinately with Program staff in providing needed service to these and other handicapped children. Through coordinated efforts, services provided by these and other professions can occur concurrently with those of the Program under review.

Does the Program Effectively Utilize Prescriptive Teaching Methods?

Prescriptive teaching is used to promote development in five primary areas: motor, social, language, cognition, and self-help. Consultation also is offered on issues involving nutrition, personal hygiene, and health.

When mothers were asked to indicate the degree of progress their project child made through the Program, 40% indicated their child made great progress while an addition 36% reported some progress. Lower levels of progress were attributed to their being in the program a short time or to the severity of their child's problems. Mothers perceive the greatest progress in their children's motor and social development and least progress in language, health, and nutrition. The mothers are realistic in saying the Program meets some (41%) or many (39%) of their children's needs; less than 5% report the program meets all their needs. Fifty-four percent of the mothers report the Program was very helpful and 42% report the Program somewhat helpful.

The success of the Program also can be judged from information describing the status of children who have exited from the Program. Among the 796 children who have exited, about one-third exited due to their advanced age, remain at home, and are not receiving services from other programs; about one-fourth are enrolled in normal schools; about one-tenth moved outside of the Gaza Strip, are enrolled in the Society's School Program, or are at home because they were withdrawn from the Program by the mothers due to the children's advanced ages; some have moved to unknown locations or are deceased.

Two of the above figures deserved to be underscored. The fact that about one-fourth of the children who exited the Program are enrolled in normal

schools strongly indicates the Program's quality. Without the Program, these children would be unlikely candidates for normal school programs. This figure suggests the Mothers' Home Program is successful. The fact that about one-fourth of the exited children remain at home with no program is disconcerting and underscores the need for other follow through programs to be developed within this region. This apparent lack of services for older handicapped children in no way negates the need for the continued support of programs for children between the ages of 0 through 8. One can assume that, as a result of their involvement in the Program, these homebased children are able to lead a more rewarding and functional life, albeit one lacking educational opportunities normally afforded to more able children.

Public schools and even those funded by the United Nations do not provide special services for the handicapped. Moreover, there seems to be an unwritten policy within these public schools to exclude handicapped pupils unless they can keep up with their peers despite receiving no special assistance.

We find the lack of services for handicapped children in UNWRA schools particularly perplexing in light of the espoused dedication of the United Nations, as expressed through its resolutions, to the importance of serving all children in public schools. We believe the UNWRA schools have a special obligation to provide leadership worldwide with respect to the education of handicapped children and youth. This leadership clearly is not being manifested within the Gaza Strip.

Following the March, 1989 evaluation, Dr. Oakland together with Dr. Abu Ghazaleh and Kawthar Abu Ghazaleh conducted a detailed evaluation of the

Program's impacts over a two year period on 195 children (paper submitted for review by the Journal of Special Education). The results of this research reveal the Program's impact to be most beneficial for children with moderate to severe levels of delay, in particular on their motor and self-help development. In contrast, children with mild delays exhibited either no change or decrements in their developmental rates; children with very severe delays exhibited no change in their developmental rates.

This research is the most detailed conducted to date on the effects of the Portage Program. Given its widespread use internationally, particularly in underdeveloped nations, the need for other research was unwarranted. Thus, the Society recently initiated a three year research program, with the assistance of AID, to further investigate the Portage Program's effects on children's development.

Does the Program Utilize an Evaluation System that Measures Progress?

Ongoing records are kept of the success of each activity made during the home visit by the teachers. These records include the specific activity to be learned, the date that the activity was initiated, the core developmental area with which the activity is associated, and the date the child achieved the objective. These records are monitored closely by the supervisors to determine how well the teacher is planning the individualized instruction, how well the parents are teaching, and the degree of progress the children are exhibiting. In addition to these weekly recordings, the 147 item Portage Guide to Early Education is administered yearly and the relevant portions of the 580 item Portage Checklist are administered three to four times yearly.

All measures are criterion-referenced to the curriculum. Thus, the program utilizes an evaluation system that measures progress.

When teachers were asked to comment on the suitability of the measures,

- 60% expressed the belief the tests generally or very suitably measure the characteristics of children in Gaza and
- 66% expressed the belief the tests generally or very suitably enable teachers to make instructional decisions.

When asked to indicate the adequacy of tests to measure specific content areas, the following percentages thought the tests generally or very suitably measured them:

- 60% personal hygiene,
- 26% health, and
- 1% nutrition.

As expected, those areas not specifically addressed by the Portage Program (e.g., health and nutrition) are not well assessed.

Suitable criterion-referenced measures are utilized by the Program. However, the employment of additional measures is needed so as to enable professionals to evaluate the Program's possible impact on broader and more generalized behaviors.

To What Degree is the Program Cost Efficient?

Expenditures for this Program during a seven month period from November 1, 1990 to May 31, 1991 are \$137,854. This figure includes \$71,044 for salaries, \$50,441 for overhead, \$8,596 for O.D.C., \$5,065 for travel, and \$2,708 for equipment and furniture.

The average cost of serving each child is \$222. During the previous 12 month period, 15,840 home visits were made. Weekly home visits average 75 minutes. Thus, during the 12 month period, an estimated 19,800 direct instructional hours were provided to mothers. When this figure is prorated for an 11 month year and over the period of this contract (i.e., $19,800/11 \times 7$), an estimated 12,600 direct instructional hours were provided during this contract period. Thus, an hour of direct instruction to mothers averaged \$10.94. Mothers work with their child an average of 45 to 60 minutes daily. By utilizing the lower figure of 45 minutes over a six day week, we obtain an estimated 4.5 hours of instruction. By dividing the weekly costs associated with teaching mothers (\$10.94) by the number of hours their children are taught (4.5), we obtain an estimated \$2.43 for each hour of instruction. Comparable costs per hour of instruction for handicapped students in the United States is estimated to be at least four times higher.

Thus, the costs associated with delivering needed services to the targeted handicapped children are very cost-efficient.

Moreover, if we were to examine the dispersion effects of this program (i.e., the beneficial impacts of the Program on mothers and their other children), the cost-efficiency would be considerably improved.

Conclusions

The primary objectives of the Program have been or are being accomplished. That is, the Program

- serves handicapped children ages 0 to 9 and their families living in the Gaza Strip,

- provides a home based program that minimally disrupts a family's life,
- trains nonprofessional women in the community to serve as teachers,
- offers a developmentally sequenced culturally appropriate curriculum,
- utilizes individualized prescriptive teaching methods,
- utilizes an evaluation program that measures progress and enhances program modification, and
- is cost-effective.

Recommendations

1. Continued external support for the Program is needed to help ensure its stability during this period of economic and political turbulence.
2. The curriculum is being carried out well, perhaps exemplary. Moreover, evidence suggests it is particularly suitable with children demonstrating moderate levels of delays. However, further efforts are needed to locate, field test, and implement other programs that may be more suitable for children with mild or severe and profound disabilities. Suitable curricular resources and assessment instruments should be included with or developed for such programs. The Carolina Curriculum for Infants and Toddlers is one suggested resource that may provide additional activities for both more severely handicapped as well as for moderately handicapped children. Training with new curricular resources also may be helpful.
3. Continued efforts should be made to locate and use noncriterion referenced measures when evaluating this Program.

4. The development of audio-visual educational programs on issues regarding child development is critically needed throughout the Arab countries. The needed programs would assist in the preservice and inservice preparation of educators and other specialists, in the development of parenting skills, and more generally in the communication of knowledge and skills relevant to child development through television and other mass media.
5. The Program should be expanded to include additional services that address current child-centered problems including nutrition, health, and speech and language delays. One possible model would involve employing specialists to serve part-time as consultants to the Society for the Care of Handicapped Children or the Program staff. In addition to providing inservice and consultation work with the entire staff, the consultants could work intensively with a few staff; their relationship could be continued through correspondence and subsequent short-term visits.
6. The levels and quality of services for children and youth differ widely throughout the Gaza Strip. Compared to the levels and quality of services available in Israel and the United States, professional standards in Gaza generally can be described as low. Efforts are needed to improve their quality of service and their availability. The generally impoverished nature of social, psychological, and educational services for children throughout the Gaza Strip attenuates the ability of this Program to meet its goals.

7. Additional consultation services are needed from school psychologists. Professional knowledge available from suitably prepared school psychologists could significantly impact efforts to diagnose the nature of children's disorders and plan developmental programs, to promote suitable social and emotional behaviors and reduce behavior problems, to enhance cognitive and linguistic development and utilization, to assist in teacher preparation and development, and to work in other ways that enhance program goals and institutional resources.
8. No suitable programs exist throughout the Middle East (outside of Israel) for the preparation of school psychologists. Given the demonstrated ability of the Society to develop and offer needed and high quality professional preparation programs in other areas, we would encourage the Society together with A.I.D. to seek ways to establish a program that would suitably prepare students from throughout the Middle East as school psychologists and who, upon the completion of their program, would return to their respective cities to provide services.
9. Many of the impediments to efforts designed to enhance child growth and development in Gaza are likely to be found in other areas of the Middle East. A regional conference on the education and development of young children in the Middle East is needed to identify and alleviate some of these impediments. The purposes of such a conference include the identification of existing and suitable programmatic resources (including efforts directed toward primary,

secondary, and tertiary prevention), professional preparation programs, and research activities. Professionals working together could develop an agenda to help ensure higher quality services for young children by the 21st century.