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"Evaluating The Effectiveness of Community Based Rehabilitation Services Provided to Clients With Cerebral Palsy in Gaza Governorates"

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Dedications

To the soul of martyrs, who sacrificed their lives for Palestine. To the soul of martyr Dr. Nabil Abu Selmya, who started the thesis with me but he sacrificed his life before achieving my study.

To my Mother for her endless patience and unwavering support that she has shown to me during this long, arduous process. She has been my largest source of inspiration, empower my career of education and wait my success.

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Abstract:

In the study , the researcher evaluated the effectiveness of Community Based Rehabilitation(CBR) services, provided to cerebral palsy's individuals in Gaza governorates in the year 2006. The researcher tried to judge whether the provided services made effective results in activities of daily living to Cerebral palsy's individuals, by using a tool constructed to measure the progress in the daily living functions .

The researcher gather the information from client's file, and program workers.

Using descriptive ,retrospective study design, the study included all the population , (100) cerebral palsy's individuals. The population encompasses all Cerebral Palsy 's individuals who received CBR services in Gaza governorates in the year 2006. Data was collected using information in the client's profile, through CBR program workers, in the period from 15/3/2008 to 15/4/2008. After words the Collected data was entered and analyzed using Statistical Package for the Social Sciences (SPSS). The results revealed that approximately half of the subjects were females, and there was no difference for eating and drinking for cerebral palsy's individuals before and after work , but there was a difference in the items of grooming, (Washes his/ her hands, Washes his/her face, Combs his/her hair, Cleans his/her nose-mouth, Bathe him/her self, Control Bladder, Controls Bowel, and Uses toilet) before and after work, and there was also a difference in the items of transfer and locomotion for cerebral palsy's individuals before and after work**.**

The study concluded that there was a difference in the effect of CBR program on the items of daily living activities(eating, drinking, grooming, transferring and locomotion) of Cerebral Palsy's Individuals in Gaza governorates before and after work . Recommendations were drawn to increase coordination and cooperation between related professionals, in addition to make more research for other types of disabilities. The researcher also recommended to promote the CBR workers abilities regarding the activity of daily living. SO that workshops should be held in order to discuss strengths and weaknesses to support strong points and eliminate weaknesses.

ملخص الدراسة

تقييم فعالية خدمات برامج التأهيل المجتمعي المقدمة لمصابي الشلل الدماغي في محافظات غزة

قام الباحث في هذه الدراسة بتقييم فعالية خدمات برامج التأهيل المجتمعي المقدمة لمصابي الشلل الدماغي في محافظات غزة للعام 2006. كما حاول أن يصدر حكمه بخصوص فعالية نتائج خدمات التأهيل على أنشطة الحياة اليومية وذلك من خلال تصميم أداة لقياس التقدم الحاصل في تلك الأنشطة .

وقد استخدم الباحث في هذه الدراسة المنهج الوصفي الذي شمل كل مجتمع الدراسة البالغ مائة مصاب بالشلل الدماغي ممن تلقوا خدمات تأهيل مجتمعي في عام 2006م.

تم جمع المعلومات من ملفات الأشخاص المصابين بالشلل الدماغي بالتعاون مع عاملي التأهل الذين قدموا لهم الخدمة . وقد جمعت البيانات في الفترة من 2008/3/15 إلى 2008/4/15 تم إدخال و تحليل البيانات باستخدام الحزمة الاحصائيه للعلوم الاجتماعية (spss) و أظهرت النتائج أن ما يقرب من نصف المصابين هم من الإناث، وأنه ليس هناك أي فروق ذات دلالة إحصائية في خدمات التأهيل المجتمعي المقدمة لمصابي الشلل الدماغي في نشاط الطعام والشراب ، بينما هناك فروق ذات دلالة إحصائية في خدمات التأهيل المجتمعي المقدمة لمصابي الشلل الدماغي في نشاط النظافة الشخصية (غسل الوجه و اليدين و العناية بالأسنان و تمشيط الشعر ، الاستحمام، خلع و ارتداء الملابس التحكم بالتبول و التبرز و الوصول للحمام) . كما أن هناك فروق ذات دلالة إحصائية في خدمات التأهيل المجتمعي المقدمة لمصابي الشلل الدماغي في نشاط الحركة والتنقل .

الخلاصة : قد خلصت الدراسة إلى وجود فروق ذات دلالة إحصائية في خدمات التأهيل المجتمعي المقدمة لمصابي الشلل الدماغي في مجالات : (الطعام والشراب والنظافة الشخصية و الحركة والتنقل) في محافظات غزة . وأوصت الدراسة بضرورة زيادة التعاون والتنسيق بين عاملي التأهيل المجتمعي و المهنيين الآخرين ذات العلاقة بمصابي الشلل الدماغي . بالإضافة إلى أهمية إجراء العديد من الدراسات لمختلف أنواع الإعاقة ، ، كما أوصى الباحث بضرورة تعزيز قدرات عاملي التأهيل فيما يخص نشاطات الحياة اليومية من خلال عقد ورش عمل متخصصة لتعزيز عناصر القوة ومعالجة نقاط الضعف.

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Abbreviations:

AIFO… … … Italian Friends of Raoul Follereau

CBR… … … .Community-Based Rehabilitation

DAR… … … .Disability and Rehabilitation Team

DPO…. … … Disabled People's Organization

EFA… … … ..Education for All

HFA… … … ..Health for All

GEA… … … ..Global Employment Agenda

ILO… …. … . .International Labour Organization

INGO… … ... International Non-Governmental Organization

MDG… … ... Millennium Development Goals

NEPAD… … New Partnership for Africa's Development

NGO… … … Non-Governmental Organization

PHC… … … . Primary Health Care

PRSP… … … Poverty Reduction Strategy Paper

UN… …. … . .United Nations

UNESCO… .United Nations Education, Scientific and Cultural Organization

WHO… … ... World Health Organization

YEN… … … Youth Employment Network

ADL…… Activity of Daily Living

PNA …… Palestinian National Authority

PCBS…… Palestinian Central Bureau of Statistics

CRWs**……** Community Based Rehabilitation Workers**.**

Chapter 1

Introduction

Chapter 1

1.1. Introduction:

People with disabilities are estimated to form 7-10% of the population in any country, and around 2% would need some form of rehabilitation services. Yet only 0.01% to 0.02% of the population in developing countries actually get such services. There are presently about 200 million moderately and severely disabled people in developing countries, where disabilities are mostly poverty related. The incidence of disability has always been on the increasing trend, and about 60% of disabilities could have been prevented (WHO Expert Committee, 1981).

In 1994 the International Labour Organization, United Nations Educational Scientific and Cultural Organization, and World Health Organization (WHO) produced a "Joint Position Paper on CBR" in order to promote a common approach to the development of CBR programs. Despite the progress made since then, many people with disabilities still do not receive basic rehabilitation services and are not enabled to participate equally in education, training, work, recreation or other activities in their community or in wider society. Those with the least access include women with disabilities, people with severe and multiple disabilities, persons with disabilities who are poor, and their families. Following on from the CBR Strategy, efforts must continue to ensure that all individuals with disabilities irrespective of age, sex, type of disabilities and socio-economic status, exercise the same rights and opportunities as other citizens in society - "A society for all".(WHO etal, 2004)

Leadership skills and organizational competencies in a community organization mirror business principles that place value on integrity, commitment and competence. Facilitating organizations can nurture the development of these principles through long term relationships that encourage mutual learning and trust. (Wiens, 2006)

People with disabilities, their families, and their communities have benefited from CBR, these programs are practiced in countries in spite of the vast differences in race, culture, language, socio-economic-political development, and religious belief, which has provided a collection of diversified and rich experiences. "The CBR strategy is an effort to design a system for change-for improving service delivery in order to reach all in need, for providing more equal opportunities and for promoting and protecting the human rights of disabled people" (Helander, 1993).

In 1992, a discussion forum was hosted by the United Nations Development Program in Geneva. Helander presented his latest definition of CBR at the Geneva forum. "CBR is a strategy for improving service delivery, for providing more equitable opportunities and for promoting and protecting the human rights of disabled people". (UNDP, 1993). It calls for the full and co-coordinated involvement of all levels of society.

In September 1995, a seminar on (Operations Monitoring and Analysis of Results) was held in Wuhan, China. It provided a good opportunity for the researchers to get access to updated knowledge. A useful exchange of ideas on evaluation of CBR was carried with Ture Jonsson, Senior Program Officer, UNDP Inter-Regional Program for Disabled People (Jonsson, 1994).

Since the early days of CBR experimentation, the Asia and Pacific Region has been at the forefront in the field of community rehabilitation, and made significant contributions to the world. The Asia and Pacific Region with over 50 countries and territories, is the home of 57% of the world's population. Most people with disabilities live in the region's developing countries. Not surprisingly, this approach has been looked upon as a solution to achieving practical and efficient rehabilitation services `.

WHO collaborated with 12 eastern Mediterranean Member States in the area of rehabilitation through various sources of funds in planning and implementing national programs on rehabilitation.. Some countries in the Region such as Egypt, the Islamic Republic of Iran and Lebanon have initiated CBR projects with proper referral systems. Others, such as Jordan and Pakistan are developing services with similar objectives. The Syrian Arab Republic has initiated action to establish a CBR Program in Damascus as a demonstration Program. Nongovernmental organizations in several other countries are promoting activities aimed at the prevention of disability and social integration of people with disabilities.

Status of Disability in Palestine

Rehabilitation and disability-related services and programs in Palestine date back to the 1940s. They have primarily been carried out by local and international NGOs. Until the 1970s, disability programs were limited mostly to blindness and deafness. In the 1980s and during the Intifada, many NGOs started special programs for disabilities and (CBR). When the Palestinian National Authority (PNA) took full responsibility for the health sector, rehabilitation and disabilities were given special support, especially in terms of institutional capacity building and staff development.

The data show that approximately 46,063 people with disabilities live in Palestine, constituting 1.8% of the total population.. In the Gaza Strip, the highest rate of disabilities was reported in the Gaza governorate at 1.7% followed by North Gaza at 1.6%.

Since the beginning of the current conflict in September 2000, about 52,927 Palestinians have been injured. The Palestinian Ministry of Health (MOH) estimated that 10% of the injured people had at least one permanent disability, which means that an additional 5,000 Palestinians should be added to the number of people with disabilities.

Gender Distribution clarified that, The prevalence of disability among men and boys is higher than in women and girls. Palestinian males are at higher risk for injury due to higher rates of male youth participation in the Palestinian Intifada.. (Palestinian Central Bureau of Statistics, 1997).

Distribution of type of disability among people with disabilities in Palestine, 1997

Percentage	Type of Disability
29.7	**Movement**
19.6	**Vision**
16.6	**Other**
14.1	**Psychological**
10.7	**Speech**
9.3	**Hearing**
100.0	**Total**

• Physical Disabilities The main causes of physical disabilities are cerebral palsy (24%) and poliomyelitis (21%)

• Hearing Disabilities, where the main causes of hearing disabilities are otitis media and fever due to meningitis.

• Psychological Disabilities, where the main psychological disorders in Palestine are stress related disorders (28.7%), post traumatic stress disorders (19.5%), depression

(17.5%), anxiety (13.2%), co-morbid psychiatric disorders (15.7%) and somato-form disorders (5.3%).

• Speech Disabilities, Where The percentage of people with speech disabilities in Palestine is about 10.7% of total disabilities

Services for the disabled population in the West Bank and Gaza are provided through governmental organizations, NGOs, and United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). The Ministry of Health (MOH) provides physical and mental health services in hospital and primary care facilities and through community and home-based care. Through the Ministry of Education (MOED), 400 school counselors provide counseling, early intervention, and referral services for students in its educational system. Ministry of Social Affairs (MOSA) refers individuals designated as social welfare cases within the disability category for rehabilitation services to the MOH. (Palestinian Central Bureau of Statistics, 1997)

On the other hand, the CBR in Palestine started out with several pilot rehabilitation programs beginning in 1990. Gaza was the pioneer starting in 1990, followed by south of west bank – Jenin- in 1992 and the Central Region of west bank in 1993. The CBR Program in the South Region and in Nablus was established in 1995. The Regional

Committees, comprising representatives of partner NGOs, are in charge of development of CBR in the respective Regions, while technical and financial support to the CBR Program is provided by the Norwegian Association of the Disabled, NAD/Diakonia Field Office in Jerusalem.

(Eide, 2005) said that, SINTEF Health Research visited Palestine in December 2000 in order to consider the viability of conducting an impact assessment of the CBR Program in Palestine. Included in the consideration were both methodological issues and problems related to conducting such a study in a conflict area. Preparations for the study, data collections, analyses and report writing have been carried out in the period from February to June 2001. During this period, SINTEF visited Palestine three times, spending a total of four weeks working together with staff at the Diakonia office in Jerusalem, Project Managers, Supervisors, and CBR Workers in the West Bank, and in Gaza. The assessment has been carried out by multiple methods, and include a quantitative Baseline follow-up study, a Record Audit, Focus Groups, and interviews with families with disabled members, service providers, organizations of people with disabilities, and Project Managers in the CBR All information gathered, and analyzed indicate clearly that the Program has had substantial impact on individuals with disabilities, their families, and their local communities.

Adding to all of that, the very bad economic situation in Gaza due to the closure and siege which led to marked increase in unemployment and poverty numbers. In which that the poverty average between children under 18 year is 88.2% in the year 2003. (Palestinian Central Bureau of Statistics, 2007).

This situation surely affects the disabled as it is well known that they are the weakest group in the Palestinian community, although they are usually exposed to such crises.

In order to further promote the development of (CBR) in coordination with the social and economic development, there is a need to develop a set of comprehensive guidelines for CBR evaluation. Such guidelines should be scientific, practical, easy to use, and should cover various aspects and stages of the practice. Evaluating the service provided to Cerebral Palsy' individuals refers to different aspects of a person's life: independence, productivity, community integration, and social inclusion. In fact evaluation is one of the most important kinds of research in social change programs.

This research project has been launched to meet a specific need of CBR development, and has practical significance. Due to the support received from my colleges and other professional working in various sectors. The researcher wish that the research would be a useful reference for CBR.

1.2. Statement of the problem:

It is intended to examine the progress in daily living activities of the CP' persons, after specific period of time of applying the CBR services . the researcher expects that, after the CBR worker finished & closed the file of CP' client , major changes essentially on daily living activities has occurred .

1.3. Research question :

To which extent did the CBR services provide to Cerebral palsy clients improve their daily living activities ?.

1.Did the CBR services increase independency in eating and drinking activities ?.

2. Did the CBR services increase independency in grooming ?.

3.Did the CBR services increase independency in .transfer and locomotion ?

1.4. Aim of the study:

The aim of the study is to evaluate the effect of CBR program on the daily living activities of Cerebral Palsy's Client in Gaza governorates.

Objectives of the study :

In this study the researcher attended to achieve the following objectives :

1- Evaluate the change in daily living activities , (eating-drinking-grooming-

dressing- toileting –locomotion –transferring) in the life of C.P individuals.

2- Specify the main daily living activities items that need to be promoted.

3- Identify the strength and weakness of the CBR services.

1.5. Significance of the problem :

The Significance of the study is derived from the following:

It is the first study in Gaza that will weigh up the community based rehabilitation services provided to Cerebral Palsy Persons, according to the researcher knowledge. In addition, to high-light the strength and weakness of the community based rehabilitation services provided to Cerebral Palsy' individuals. Also the study will induce the performance of further studies for other disabled categories. And the study may draw researchers attention toward the nature of services applied to Cerebral Palsy's Persons in Gaza governorate.

1.6. Limitations of the study:

The study is applied in accordance with these limitations:

1-The study assessed the change in the daily living functions of CP' persons who only received CBR services in the year 2006 in Gaza Governorates

2-The study evaluated ADL functions of the CP' persons whom age is above five years old .

3-The study took place through review the CP' clients files in the societies that provide the CBR services .

1.7. Definitions:

Community-Based Rehabilitation: " is an effort to design a system of change-for improving service delivery in order to reach all in need, for providing more equal opportunities and for promoting and protecting the human rights of disabled people" (Helander, 1993,).

Evaluation: evaluation is a systematic way of learning from experience and using the lessons learnt to improve current activities and promote better planning by careful selection of alternatives for future action. (WHO, 1981) .

Cerebral palsy : Cerebral palsy (CP) is a childhood condition in which there is a motor disability (palsy) caused by a static, non-progressive lesion in the brain (cerebral). The causative event has to occur in early childhood, usually defined less than 2 years of age. **(Pellegrino. 2002).**

Spastic Cerebral Palsy :A form of cerebral palsy caused by defect in cerebral cortex, that causes tightness in the muscles. Because of this tightness, spastic cerebral palsy patients have a difficult time controlling their movement. Their motions may be abrupt and jerky. Spastic cerebral palsy is seen (to some degree) in 80 percent of cerebral palsy cases.

Spastic Diplegia - A form of spastic cerebral palsy that affects muscle control in both of the arms or legs. Spastic Hemiplegia - A form of spastic cerebral palsy that affects muscle control on one side of the body. The right arm and leg or left arm and leg will be affected. Spastic Monoplegia - A form of spastic cerebral palsy that affects only one limb. This form of spastic cerebral palsy is rare. Spastic Quadriplegia - A form of spastic cerebral palsy that affects both the arms and the legs of a patient. Spastic Triplegia - A form of spastic cerebral palsy that affects three of the limbs. This form of spastic cerebral palsy, like spastic monoplegia, is quite rare.

Ataxic Cerebral Palsy - Ataxic cerebral palsy caused by defect in cerebellum characterized by a weakness in the muscles and wobbly, shaky movements. People who

have ataxic cerebral palsy will often have a difficult time balancing and will exhibit poor depth perception.

Athetoid Cerebral Palsy - A form of cerebral palsy caused by defect in basal ganglion which the patient has difficulty controlling movement. Athetoid cerebral palsy patients may move involuntarily and will often squirm and twist when they feel emotional distress. Mixed Cerebral Palsy - About 20 percent of those with cerebral palsy show some mix between spastic, ataxic, and athetoid cerebral palsy. http://www.personalinjuryfyi.com/cerebral-palsy/cp-glossary.html.

Effectiveness

does the CBR Program achieve its objectives both in terms of quality and quantity, and does it make satisfactory result in service coverage and the rehabilitation efficacy of people with disabilities. Mannan (2007).

Producing a strong impression or response; striking: gave an effective performance. Operative; in effect , Prepared for use or action, especially in warfare.Dictionary of the English Language,(2003).

Activities of Daily Living (ADL): The things we normally do in daily living including any daily activity we perform for self-care (such as feeding ourselves, bathing, dressing, grooming), work, homemaking, and leisure. The ability or inability to perform ADLs can be used as a very practical measure of ability/disability in many disorders. (MedicineNet.com Medical Dictionary)

1.8. Context of study:

The study was conducted in Gaza - Palestine , therefore the researcher presents some background information about the geographical context, Palestinian population, disability population, In addition to some of information about the 2 societies that provide CBR services in Gaza Governorates, (National society for rehabilitation and Palestinian medical relief society).

1.8.1. Geographical context:

Palestine is located in the western area on the eastern coast of the Mediterranean Sea. Its bordered by Lebanon in north, in the east by Syria and Jordan, in the south by the Gulf of Aqaba and in the west Egypt and the Mediterranean Sea.

"Palestine rectangle shape, measuring from north to south some 430 km. Its width varies from 51 to 70 km in the north and from 72 to 95km in the middle. In the south however, it becomes wider, extending to some 117km. It then narrows again into a triangular shape, the tip of which touches the Red Sea"(MOH,2003).

The Palestinian areas account for about 28.00 square miles of the total territory of historic Palestine. Palestine had suffered from several occupations as result of

strategic location like the British Mandate period since1917 until 1948, there after The Gaza Strip was under the Egyptian administration, and the West Bank under the Jordanians rule, and in 1967 Palestine was occupied by the Israelis.

In September 1993, the Palestine Liberation Organization signed a peace Oslo agreement with Israel promised gradual withdrawal of Israel from the West Bank and the Gaza Strip and this region is called the Palestinian National Authority (PNA) territories and this event occurred after 27 years of occupation.

On may 17, 1994, Palestinians were hopeful that this process would end in state for them. However, following breakdown of the final status negotiations on the summer of 2000, and on September 2000, Al-Aqsa Intifada began and Israeli violence had continued since then. Israel has reoccupied the nearly all territories, it had ceded to the Palestinians in the West Bank during the Oslo peace process, and continues to build settlements on the Palestinian land.

PNA comprises two regions separated geographically the West Bank and Gaza Strip. West Bank lies between an area of 5,800/km west of the Jordanian river.

It has been under the Israeli Military Occupation, together with East of Jerusalem since 1967.West Bank is divided into four geographical regions. The north area is consisting of districts of Nablus, Jenin, and Tulkarem.. the center is consisting of Ramallah and Jerusalem districts, where the south area includes Bethlehem, Al-Khalil districts and the sparely populated Jordan Valley including Jericho. More than 60% of the population lives in approximately 400 villages and 19 refugee camps, and the reminder in Urban refugee camps and cities of which Nablus and most populous are in Jerusalem and Al-Khaliel.(pcbs 2007).(Annex 10).

The Gaza Strip is a narrow area and situated on the coast of the Mediterranean Sea . Its location on the crossroads from Africa to Asia made it a target for occupiers and conquerors over the centuries. The last of these was Israeli who occupied the Gaza Strip from the Egyptians in 1967. Gaza Strip is a very crowded area with the size of 360km, the concentration of population in cities, small villages and 8 refugee camps that contain two thirds of population, Gaza Strip is divided into five governorates as follows: Gaza city, North Gaza, Midzone, Khanyounis, and Rafah (MOH,2007).

1.8.2. The Palestinian Population:

In the end of 2007, the Palestinian Bureau of Statistics (PCBS) estimated the number of Palestinian population as 3,761,646 million, The distribution of Palestinian population was as follows: 2,345,107 (62.3%) in the West Bank and 1,416,539(37.7%) in the Gaza Strip. The highest rate of population at (14.7%)of the total population in the Hebron governorate followed by the Gaza governorate (13.2%) the third area with (10.9%) is ALQuds governorate, Khanyounis governorate (6.7%), Rafah governorate is (4.1%) finally the lowest rate (1.2%) is Jericho.

The estimated number of males in Palestine at the end of 2007 is 1,908,432 compared to I,853,214 females. In the west Bank the number of males is 1,189,724

compared to 1,155,383 females. And in Gaza Strip the males are 718,708 and the females are 697,831. (Palestinian central of bureau of statistics 2007).

1.8.3. Persons with disabilities in Palestine:

The estimated number of persons with disabilities all over the Palestinian territories is 2.5% of the total population. In the West Bank is estimated 2.7% and 2.1% in Gaza Strip. The moving disability is estimated 1.2% all over the Palestinian territories, In the West Bank is estimated 1.3% and 1.1% in Gaza Strip. (Palestinian central of bureau of statistics, 2007).

1.8.4. Socioeconomic status:

The Palestinian economy refers to the economy of the Palestinian territory; including Gaza Strip, West Bank and East Jerusalem. Current political events have severely damaged the Palestinian economy due to halting the international aid.

MOH, 2004 reported that the Gaza Strip is considered one of the lowest incomes in the Middle East area. The majority of the income comes from salary of the employees and security persons, while the agriculture products share by reasonable portion in the economy. The economy nowadays mainly depends on international donors that are suspended. International aids were funding some projects and paid the salaries. The economic situation especially after Al-Aqsa Intifada because of frequent closure and restriction of trade, the deteriorating economic situation, limited income and lack of work opportunities lead to low standard of living and inadequate health.

Despite poverty the Palestinians are eager to learn, adult literacy ratio among those aged 15 years and more is 91% (MOH, 2004) which is considered among the high percentage literacy rates of Arab countries.

1.9. The Place of Study:

1.9.1. National Society For Rehabilitation :

The Society is established as a charitable NGO in 1990 as a nucleus to the National Committee For Rehabilitation in Gaza Strip.

The Committee started its activities by setting up the first pilot community based

rehabilitation project in Bureij and in Shati refugee camps.

After the success, the idea spread and developed to reach 13 geographic sites in the

Gaza. Covering 835 thousand people (70% of Gaza strip population). Nearly all

CBR projects in deferent areas of west Bank made use of this experience.

The program active areas are: Gaza governorate - Middle area governorate- Khan-Younis governorate- Rafah governorate http://gnsr.org/temp/english/content.asp?id=1

1.9.2. Palestinian Medical Relief Society:

Palestinian Medical Relief Society (PMRS) is a grassroots; community-based Palestinian health organization. PMRS was founded in 1979 by a group of Palestinian doctors and health professionals seeking to supplement the decayed and inadequate health infrastructure caused by years of Israeli military occupation. It is non-profit, voluntary, seeks to improve the overall physical, mental, and social well being of all Palestinians, PMRS conduct comprehensive Primary Health Care programs including women‘s health, child health, community-based rehabilitation, school health, and specialty services. The working staff, physicians, community health workers focuses on health education, screening, awareness raising, and training as central components of quality health service provision. Ultimately, they seek to mobilize communities to take responsibility for their own development and empower individuals to take control over their own . http://www.pmrs.ps/last/etemplate.php?id=47&site=1.

Chapter 2

Conceptual Frame Work

Chapter 2

1. Introduction

This chapter includes two sections: The conceptual framework and the previous studies. Based on the two sections, the researcher came out with his modified vision for evaluating the effectiveness of CBR services to CP clients.

The first section is the conceptual framework that deals with necessary topics related to CBR . The researcher discusses the philosophy of CBR , models of rehabilitation, foundation of CBR, that encompasses (a) conceptualization, (b) components, and (c) principles. The theoretical framework section includes, program evaluation which consists of the following aspects, effectiveness, efficiency, relevance, impact, and sustainability. Also it reveals valued information about developing CBR in the world , and the challenges of disabilities, specially in developing countries, in addition to the limitations that restricted the CBR programs, and the findings of the evaluations are discussed thoroughly in this section . The section includes current models of health status, the perspectives of persons with disabilities, family-centered service delivery, and the application of dynamic systems theory to motor behavior.

The researcher reviewed a number of previous studies in the second section. The studies elaborated the evaluation of the effectiveness of CBR services in different countries in the word, the basic principles of CBR. The section is included other studies like , CBR in developed & developing countries, evaluation of CBR in Palestine , the future of CBR. The researcher shed light on several studies related to: Activities of daily living in children with cerebral palsy and finally the conclusion .

2. Section I Conceptual Framework

CBR was formulated in an attempt to meet the massive rehabilitation needs of disabilities in the world, and it develops side by side with the development of services delivery. Since 1976, there has been a wide variety of research projects on the evaluation of CBR through out the world, each one adapted to the local implementation of CBR. By continuously reviewing the evaluation of CBR, the Guidelines could become more systematic, relevant and practical.

2.1.Information dissemination in CBR:

CBR programs have been implemented in different countries in the Asia Pacific region using various strategies and methods. Each program has its own strengths and weaknesses. But they do not disseminate information about their strategies and methods to others. For example, though CBRDTC has been developing manuals in English for CBR training programs, many organizations are not aware of the resources available with CBRDTC because of inadequate communication channels, There is an urgent need for information dissemination so that all countries in the region can access information about developments in the CBR field. Every country will be required to make some effort to share its information. On the other hand, there is the wide availability of

sophisticated information technology tools such as the Internet. The challenge for CBR practitioners is to make full use of the technology in the fields of information and communication for the further development of CBR in the region. (Tjandrakusuma, H,1995).

Mannan et al (2007) in the article titled "A Review of CBR Evaluation" said : The World Health Organization (WHO) introduced the Community-Based Rehabilitation (CBR) strategy as part of its goal to accomplish health for all by the year 2000. The Alma-Ata Conference and Declaration on Primary Health Care (PHC) creates a new vision for providing promotive, preventive, curative and rehabilitative services for the main health problems in the community . The Declaration of Alma-Ata states that people have the right and duty to participate individually and collectively in planning ,implementation and evaluation of their health care. This concept led to development of the first CBR models.

2.1.1. Models of rehabilitation:

Institution-based rehabilitation and outpatient services are models recognizable to most health professionals and the ones that have historically influenced education provision. These services have been driven and developed by health care professionals. Health care reforms are seeing an increasing emphasis on service user involvement in shaping future models of health service delivery. (Stubbs 2002).

However, this remains a relatively new concept and one in development itself. In most countries institution-based rehabilitation is urban-based, making it relatively inaccessible and expensive to access, in poorer communities. How disability has been perceived has influenced health care service provision, including rehabilitation. The disability movement and the development of the social model of health have been influential in affecting change in recent years.

With a focus on community settings rather than institution-based centers, (CBR) is one Model of providing rehabilitation. A number of other programs of interventions which share some common goals, but have fundamental differences.

One such program is that referred to as "out-reach" . The programs are run by health care workers e.g. physical therapists, at a local level provide complex professional care which directly addresses patients' pathology, impairments, and / or disabilities. Such services are controlled from an institution and there may be a mismatch between what people need and what the institution can provide. CBR, as internationally defined, is very much client-centric as opposed to profession-centric. In trying to clarify what CBR is and to draw a distinction with any care that takes place in community environment there are a few key points.

CBR is not:

• An approach that only focuses on the physical or medical needs of a person

• delivering care to disabled people as passive recipients

• Only outreach from a centre

• Rehabilitation training in isolation

• An approach which is determined by the needs of an institution or groups of Professionals.

• Segregated and separate from services for other people. Conversely CBR involves:

• Partnerships with disabled people, both adults and children, their families and careers

• Capacity building of disabled people and their families, in the context of their community and culture.

• An holistic approach encompassing physical, social, employment, educational, economic and other needs.

• Promoting the social inclusion of disabled people in existing mainstream services

• A system based in the community, using district and national level services for referral. (Stubbs 2002).

CBR has been described on the basis of component features such as:

• provision of functional rehabilitation services

• creating a positive attitude towards people with disabilities

• the creation of micro and macro income-generation

• vocational training

• the prevention of the causes of disabilities (United Nations Economic and Social Commission for Asia and the Pacific, 1997).

2.1.2.CBR personnel:

It has been proposed that there are three levels of service personnel required for CBR who need to be overseen by a CBR manager to ensure coordination of services. These are:

• Level one: grass roots workers delivering services in a community - CBR workers

• Mid-level: workers who organize and support level one workers: Mid-level rehabilitation workers, therapy assistants or supervisors.

• Level three: professionals who refer users to the community or to whom referrals can be made from the community. (Helander, 2000).

2.2. Community based Rehabilitation foundation:

In 1950, the World Health Assembly (WHA) called for development of rehabilitation programs for people with disabilities. It was not until 1966 that the WHA adopted a resolution stressing the importance of rehabilitation, whereby it urged member states to develop their rehabilitation services as an integral part of the national health system. This review of CBR focuses on (a) conceptualization, (b) components, and (c) principles. (Korpela R. et al. 1993).

2.2.1. Conceptualization:

CBR is a strategy within general community development for rehabilitation, equalization of opportunities, and social inclusion of all children and adults with disabilities. The CBR concept is both simple and complex in nature. The simplicity has to do with its origins, i.e., delivery of rehabilitative services to people with disabilities in their communities. CBR's complexity is the result of the current concept of CBR programs as multi-disciplinary, i.e., visiting people with disabilities and their families in their homes; providing appropriate information, therapy and/or training; and facilitating rights and duties of people with disabilities, family, and community members .

2.2.2. Component:

The primary component of CBR as a concept and ideology is that community members are willing and able to mobilize local resources and provide appropriate services to people with disabilities. Other components of a multi-disciplinary CBR program include: (a) creating positive attitudes towards people with disabilities, (b) providing functional rehabilitation services (e.g., physical therapy, occupational therapy, orientation and mobility training, speech therapy, counseling, orthotics and prosthetics), (c) providing education and training opportunities (e.g., early childhood intervention and referral especially to medical rehabilitation services, special education in mainstream or special schools, sign language, Braille training, training in activities of daily living skills), (d) creating

micro and macro income generation, (e) providing care facilities (e.g., respite care), (f) preventing causes of disabilities,

and (g) managing, monitoring, and evaluation of CBR program .

2.2.3. Principles:

The five basic CBR principles include: (a) utilization of available resources in the community, (b) transfer of knowledge about disabilities and skills in rehabilitation to people with disabilities, families, and communities, (c) community involvement in planning, decision making, and evaluation, (d) utilization and strengthening of referral services at the district, provincial, and national levels that are able to perform skilled assessments with increasing sophistication, make rehabilitation plans, and participate in training and supervision, and (e) utilization of a coordinated approach among education, health, and social systems (6). Despite the identification of fundamental CBR principles, there are significant variations in implementation across countries. It should be acknowledged that since CBR inception two decades ago, complexities arising from these initiatives in diverse communities with their unique cultural, social, and economic conditions, make it difficult for CBR to meet all needs of people with disabilities.

2.3. Evaluation of CBR: PAST AND CURRENT

Along with the development of CBR, its evaluation has been explored to some extent. Over the past decade, a range of monitoring and evaluation approaches and methods has gradually been developed. These approaches and methods are useful to development workers, including those at community level.

CBR has been the focus of some form of evaluation since the first field-testing of the manual Training in the Community for People with Disabilities. Early reports state that only two of the 43 countries represented by the six regional zones in which the WHO operates mentioned any evaluation and research on CBR . Earlier country reports are limited to issues such as initial consultant visits, training workshops held, and number of stakeholders involved in training . Subsequent evaluation studies presented extensive sets of data on the number of people identified with disabilities, the number of people with disabilities who received assistance, and the type of assistance. The review highlights four features of evaluation, individual , program , process and impact evaluation.

2.3.1. Individual Evaluation:

Jonsson provides a framework for CBR evaluation consisting of individual and program evaluation. The individual evaluation involved (a) functional aspects with components such as daily living skills, communication skills, mobility, and behavior; (b) educational aspects with components such as school attendance, school involvement, and educational achievement; (c) vocational aspects with components such as vocational training, placement, and income generation; and (d) social aspects with components such as participation in family life and participation in community life.

2.3.2. Program Evaluation:

Consists of the overall aspects, with components such as effectiveness, efficiency, relevance, impact, and sustainability.

Relevance

Does the program meet the needs and offer comprehensive rehabilitation services for people with disabilities and their families, and does it relevant to the program goals.

Effectiveness

Does the CBR Program achieve its objectives both in terms of quality and quantity, and does it make satisfactory result in service coverage and the rehabilitation efficacy of people with disabilities.

Efficiency

Does the Program make the maximum outcome with the minimum income, and does it use the resource in the most efficient way.

Sustainability

Can the Program continue once the external assistance is withdrawn.

Impact

what effect has the Program had on its social settings, economic development, rehabilitation technique and institution, etc.

Process and Impact Evaluation:

Campfens D. (1998). identifies process and impact as two principal types of CBR evaluation. Process evaluation is an ongoing, systematic collection of information to keep pace with what is happening, ensuring that a program is in accordance with objectives, and assessing how activities are carried out and how inputs are used . Impact evaluation involves assessment of the program or a component of it at a point in time. Its purpose is to determine the extent to which the goals and objectives of the program have been achieved as a result of planned outcomes and to identify what changes (i.e., environmental and contextual) have occurred because of the program.

2.3.3. Summary of Evaluation Results:

Findings of the evaluations reviewed provide encouragement and hope to pursue CBR as a strategy within general community development for rehabilitation, equalization of opportunities, and social inclusion of people with disabilities. Most notable among the findings are:

1. CBR is highly effective and valuable for people with disabilities in the community .
2. CBR makes it easier to integrate people with disabilities through education program .
3. CBR makes it possible to train generic community workers in delivery of rehabilitation and prevention services to people with disabilities and their families.

Findings also revealed areas that needed to be strengthened for CBR to be an effective strategy for achieving objectives of WHO's health for all initiative. Most notable among them are:

1. CBR programs failed to teach activities of daily living skills to persons with disabilities in a successful manner (e.g., aids and appliances were provided without an impact on functional ability) .
2. CBR personnel acknowledge benefits of the program but point to several problems including lack of rehabilitation education for them .

An effective training curriculum for CBR workers should contain a multi-disability training approach.

Despite the incremental progress made in the past 25 years, even today, the vast majority of people with disabilities cannot access even basic rehabilitation services. The majority also cannot exercise their Human Rights which is the "…right to a standard of living adequate for the health and well-being of "…right to a standard of living

adequate for the health and well-being of individuals and their family, including food, clothing, housing and medical care and necessary social services…"

As an aftermath of the declaration of Alma-Ata in 1978, there was a realization about the need for, and benefit of a shift in emphasis from city-based institutions/hospitals to the (CBR), developed as a natural consequence of this initiative.

It was seen as an alternative or complimentary approach for reaching members of the community who would otherwise have no access to even basic services. It was also to build on existing resources of local communities to assist people with disabilities to become equal members of their communities. Rehabilitation does not mean only "cure or treatment" – it has a much deeper meaning "dignity, equal opportunities and equal rights". Naturally it is difficult for one UN organization or one department of the Government to meet the need.

It is more than twenty years since the concept of CBR was introduced. Accordingly, it is timely to review past experiences and evaluate the impact of the CBR approach in order to provide direction for the development of CBR in this new Millennium WHO (2003).

2.4. ESTIMATION OF THE PREVALENCE OF DISABILITY

(Helander E. 2000) in his estimation to the prevalence of disability as An initial task related to the new WHO policy was to try to 'count' the prevalence of disability in a situation where there was no internationally recognized definition of 'disability' or of 'disabled persons . It was clear that cultural and developmental factors influenced the concept of disability, thus to find a consensus was not easy. One example from the developing countries was malnutrition: in 1974 at least 500 million were at that time affected and according the 2005 estimates by the UNDP 800 million people go hungry every day. Their functional capacity at home, at school, and at work are clearly severely reduced, should they be included in the disability prevalence estimates? The author chose to include the people with the most severe forms of malnutrition.

Disability is not always a yes/no situation (such as a fracture or an amputation), it is a quantitative problem. The grey zone is large when an elderly person walks slowly at what point is this seen as a disability? How severe should mental disorders and pain be to count as disabling? When people have terminal diseases such as cancer, should they be included or not? If a disabling condition is cured (such as tuberculosis, leprosy or depression) will we then drop this person from the prevalence account? There are certainly guidelines about some disabilities: such as blindness and deafness, and there are workman's compensation systems for assessing impairments in percentage points, when related to work accidents and diseases.

Not until 2001, did WHO propose a system for disability classification . As the purpose of a WHO policy was to estimate the needs for rehabilitative health services, the proposal was that WHO should not try to do the impossible: making estimates of a health condition that will always be difficult to define, but rather make field studies to estimate the needs for services and actions (to promote their rights and quality of life, providing opportunities and inclusion) that could effectively reduce or eliminate the disabling consequences of a disease or trauma. While doing such studies one will

recognize that for many disabling conditions (such as mental and neurological disorders) there may not be sufficiently effective and culturally appropriate rehabilitation technology, thus WHO needed to work with organizations and universities to encourage research.

In 1974, there were few national studies from developed countries to form the basis for the provisional assessment of disability prevalence and of service needs; 18 of these were located.

All technical programs at the WHO head quarter provided the data they had access to the provisionally estimated prevalence was about 390 million, or close to 10% of the world population (4 billion in 1974).

The estimates of the largest groups causing disability were cautious: non-communicable somatic disease 100 million, malnutrition 100 million, hereditary disorders 80 million, accidents 75 million, communicable diseases 55 million, mental disorders 40 million, chronic alcoholism, and drug abuse 40 million. Later on, after years of observations of parental child maltreatment, the author would conclude that the disabling effects of childhood abuse and maltreatment – insufficiently known in 1974, and not included in the first prevalence estimates – were of major importance .

Evolution of CBR:

(WHO, 2003) Reported that , Many positive changes have taken place since the CBR approach was first introduced in the early eighties. Now CBR has been adopted as national strategy for reaching persons with disabilities in many countries.

Along with the quantitative growth in CBR services, there have been major changes in the way CBR has been conceptualized. There has been the influence of many factors including that of different national/international declarations such as the ILO announcement (Convention No. 159) which views disability as a condition of occupational disadvantage, and the UNESCO Salamanca Conference document which advocates for inclusive education. The UN Standard Rules on the Equalization of Opportunities for People with Disabilities has played a major role in influencing the conceptualization of CBR to be more effective as a development strategy. The evolution of the CBR concept could be summarized as follows:

- All communities are different because of socio-economic conditions, terrain, cultures and political systems. Therefore, there cannot be one model of CBR for the whole world. It may not be the same even within the same country. This is the uniqueness and at the same time, the challenge of CBR.

- The focus of CBR has expanded from medical rehabilitation towards more comprehensive multi-sector approaches such as access to total health care, access to education, vocational training, income generation programs and participation/inclusion.

- CBR is being viewed as an essential part of community development with the goal of empowerment of the whole community. This approach is important for ensuring successful and sustainable CBR programs.

- There has also been a shift in focus from service delivery to management issues

that influence the effectiveness and the quality of services.

- CBR has been increasingly seen as a means to realize the human rights and equal opportunities of people with disabilities as defined in the intentional legal instruments and particularly in the UN Standard Rules on the Equalization of Opportunities for People with Disabilities.

- The International Classification of Functioning Disability and Health (ICF), has refocused attention on the abilities of disabled persons.

The ICF conceptualization may provide a systematic framework with a greater focus on social inclusion.

Government is responsible for addressing the needs of all citizens of its country, including people with disabilities. There is evidence that people with disabilities are among the most marginalized groups in most societies, especially women and girls. Besides the common challenges of poverty, illiteracy, infectious and chronic illnesses, and poor living conditions there are also new problems such as HIV/AIDS, accidents, and the rapid increase of mental health conditions in a number of communities. To overcome this situation, all the stakeholders need to collaborate, discuss strategies and assume responsibility for priority strategic actions which would have a significant impact on improving the citizenship of disabled persons in the coming years.

2.5. International policy:

(Bury, 2003) said that ,Health promotion, prevention, rehabilitation and the social integration and equalization of opportunities for people with disabilities have been accepted policy for the United Nations(UN) and (WHO) for many years, with an increasing focus on primary health care and community services. Focusing on rehabilitation and primary health care, (CBR) is one model of service provision, which WHO has advocated for over a decade. The participation of people with disabilities, their careers and communities has Long been a guiding principle for health care policy development, planning, implementation, monitoring and evaluation, even if is not quite a reality worldwide. (International Labour Organization et al. 2002).

The Alma Ata Declaration on primary health care (WHO, and UNICEF1978) was enthusiastically received as a means by which "Health for All" by the year 2000 could be realized. However, it was also met with criticism that it was unrealistic and too idealistic (van der Geest et al. 1990), especially from those who perhaps wanted quick fixes and tangible early result .

Internationally there have been different interpretations of what primary health care is, often as a result of political intent, with a large number of varying programs being developed in the name of primary health care. The hope of primary health care was that it would address the economic reality of health care with an increasing shift to primary disease prevention and health promotion, promoting self-reliance. Community-based health care, by and for the community, encompassing traditional health care combined with basic health services, controlled and financed by the government or private

institutions, were seen as the integrated systems by which primary health care could be achieved (WHO and UNICEF,1978).

International groups such as the United Nations Children's Fund (UNICEF) and WHO, along with international politicians and health planners, have called for greater self-reliance at the community level with increased attention on prevention. However, this could be considered to impose a top-down expectation that may not be matched with local ownership of the concept of self-reliance. Some consider that self-reliance can appear to equate to people being left to fend for themselves rather than gaining ownership and a sense of control. In addition, the aspirations of many developing countries for a health care system similar to that of developed countries may risk undermining self-reliance given the criticisms of the medicalization of health care in western society (van der Geest et al. 1990). Disability incurs both economic and social costs for society which can be reduced by effective rehabilitation and support programs (Hammerman and Maikowski cited in World Health Organization 1981). Generally, up until now, primary health care efforts have focused on family planning, childhood immunizations, nutrition and AIDS, all of which are important in the prevention of population health problems and disability (van der Geest et al. 1990).

While for many communities primary health care initiatives that focus on preventative measures will pay dividends in the long–term, the priority needs of the people are more likely to be associated with treatment and rehabilitation where, if services were available, there is the potential for immediate effect. A balance therefore needs to be struck between prevention, health promotion, treatment and rehabilitation.

Rehabilitation has historically been seen as a low priority around the world due to a number of factors (Leavitt 1995):

- Cost-benefit ratio of providing services to those with disabilities
- Under-estimation of disabled peoples' potential to achieve
- Negative societal attitudes towards disability
- Discriminatory practices
- Absence of urgency – rehabilitation tends to focus on the chronic, non-communicable diseases or illnesses that do not pose a risk to others
- Interest of biomedical practitioners focuses on improvement and cure, which is not always feasible or realistic for rehabilitation or the 'Cure or Care' model
- Public policy is not influenced by those with disabilities as they represent a relatively small marginalized minority.

Access to appropriate rehabilitation remains problematical. Where services do exist Are frequently centered on urban institutions (WHO, 1981). In addition care is frequently driven by health care professionals rather than people with disabilities, their careers and communities, and therefore fails to address priorities and needs from their point of view.

There are many calls to increase the number of health care professionals available to provide services, including physical therapists, recognizing the significant shortfalls worldwide. However, there has been limited progress in maximizing the potential of that which is available for the benefit of the majority of people in need.

The international review of CBR that is currently progressing aims to contribute to the further development of the CBR concept and its implementation, by identifying the basic elements essential for effective CBR, through a review of current CBR practice and experience in a variety of settings (WHO, 2003).

The number of people with disabilities are increasing as a result of population growth; ageing; chronic conditions such as diabetes, cardiovascular disease, and cancer; injuries at home, work and on the roads; violence; birth defects; AIDS; environmental degradation; malnutrition; and other causes often related to poverty. These trends are creating an overwhelming demand for health and rehabilitation services for people with disabilities.

In many countries disability is excluded from the public health and other social policies which would ideally support and protect people with disabilities. Stigma and discrimination are among the underlying factors awkward the inclusion and full participation of people with disabilities in their societies.

(WHO, 2003) under the title : "Technical advances and rehabilitation" Following World War II, many countries had large numbers of disabled servicemen who had survived serious injury, and they were able to reintegrate into their communities due to advances in technical aids, appliances and assistive technology. A new specialty, rehabilitation, rapidly developed and in subsequent decades became the subject of substantial international research, development and technical assistance by governments and international non-governmental organizations. A United Nations Rehabilitation Unit was established in 1951 to facilitate the transfer of these new medical and technical advances to developing countries.

2.5.1. Early attempts to spread rehabilitation to developing countries:

The main aspects of this international assistance were the training of rehabilitation physicians and technicians, support for construction of large urban-based rehabilitation centers and the development of a professional team approach ranging from specialized physicians to nurses to psychologists to occupational and physical therapists to technicians who fitted appliances. By the end of the 1960s it was becoming apparent that this approach to developing countries was resulting in minimal rehabilitation services being established in capitol cities but was not reaching the vast numbers of disabled children and adults living in the millions of villages and slums. In response, meetings were held in 1969 by Rehabilitation International and in the early 1970s by the WHO, the International Labor Organization and other concerned groups to explore alternatives.

In 1978, the WHO, facing similar challenges in extending primary health care to poor countries, adopted the Alma Alta declaration, shifting support from city-based

hospitals and institutions to the community. According to WHO, "CBR evolved as a natural consequence of this initiative."

2.5.2. Developing CBR through pilot projects:

In the late 1970s and throughout the 1980s and 1990s numerous pilot projects were launched in developing countries in Africa, Asia and to a lesser extent in Latin America, under the aegis of CBR, some following the manuals developed by WHO, "Training in the community for people with disabilities," others supported by ILO, UNESCO or UNICEF, with still others initiated by NGOs already working with disabled people in technical assistance projects.

2.5.3. CBR Global Review 2003:

Twenty years after its introduction, a global consultation to review the state of CBR was called by WHO in collaboration with UN organizations, NGOs, Disabled People's Organizations, hosted by the Government of Finland. Held May 25-28, 2003 in Helsinki, it was attended by approximately 100 invited CBR practitioners and researchers from around the world. And the following recommendations was adopted.

Following the discussions on the four topics, participants formed groups according to their affiliations. The following groups prepared recommendations for actions:

- (DPOs) Working Group.

- Non-Governmental Organizations (NGOs) Working Group International and Local NGOs, Universities, and Professionals;

United Nations Agencies.

Recommendations to Disabled People's Organizations :

1. Take a leading role in awareness-raising and advocating for the importance of CBR.

2. Become part of CBR programs at all levels.

3. Raise awareness of the diversity of the different disability groups – of their specific needs and expectations.

4. Ensure that women and children are included in CBR programs.

5. Ensure that CBR is included in all community activities.

Recommendations to Governments:

1. Develop a national policy on disability in line with the UN Standard Rules.
2. Ensure an appropriate budget allocation by government and donors for CBR programs.
3. Mainstream the national disability programs with social and economic programs, such as poverty reduction and the efforts to achieve the Millennium Development Goals.
4. Take a leading role in co-coordinating different stakeholders to promote a multisectoral approach to CBR.
5. Provide capacity building and funding for local DPOs and other CBR implementers.
6.Support the process to develop a UN Convention on the Rights of People with Disabilities.

Recommendations to International, Local NGOs, Universities, and Professionals:

1. International non-governmental organizations (INGOs) to develop and disseminate advocacy materials;
2. Local NGOs to develop capacity of communities;
3. NGOs/Universities to work in partnership with communities for research on best practices and for dissemination of results to communities, policy makers and academic bodies;
4.INGOs/NGOs to involve community members in decision making policies.

Multi-Sector Collaboration:

1. NGOs/Universities to work with governments and UN agencies to analyze existing resource allocations across different sectors and lobby for increased allocation.
2. NGOs/INGOs to identify barriers to collaborations and identify mechanisms for more effective collaborations.
3. NGOs to collaborate with other NGOs involved in development activities.
4. NGOs/INGOs to collaborate with all government ministries, not only Social Welfare and Health.

Scaling Up of CBR:

1. Universities to collaborate with each other in Human Resource Development for different levels.

2. Universities/NGOs to work on evaluation and research on evidence-based practices, to help in decisions on scaling up.

3. NGOs/INGOs to emphasize better planning and management systems.

4. NGOs/INGOs to consider involvement in larger social movements.

2.6. THE CHALLENGE OF DISABILITY

(O'Toole B, McConkey R. 1998) said that : The UN 'Decade for the Disabled' has drawn to a close. Regrettably, much of it was spent in highlighting the inadequacies of the existing service models in the area of rehabilitation, rather than examining innovative alternatives. Parents of disabled children all over the world are not getting enough help with the care, education, and training of their children. In the poorer countries, where an estimated 75 per cent of the world's population live, they often receive no assistance at all. A major reason for the lack of progress has been the widespread adoption of inappropriate models of service delivery. Mendis, P. (1988) observed that we have been led astray by the mirage of modernization, which has fostered the illusion that western skills, knowledge, and attitudes should be diffused to people in developing countries.

In our blinkered efforts to imitate a Western model of service provision, we have lost sight of the true magnitude of the challenge. The justification for this focus has been the need to 'maintain standards'. However, to the 98 per cent of families who current receive no service, the debate about standards may seem irrelevant. While the problems can be easily stated, an effective response is considerably more difficult. We urgently need a major reappraisal of the concept of staffing, the model of training, and the nature of services offered in the area of rehabilitation. Central to a new approach to service provision is a thorough re-examination of the role of rehabilitation therapists as promoters of community development.

In fact, it is questionable whether a reliable surveys have been carried out in developing countries to measure the precise magnitude of the problem. But while the precise ,numbers are debatable, the unmet need is very clear. Disability often imposes considerable social, economic, and emotional costs on disabled people, their families, and the wider community. Without effective rehabilitation, disabled people may lead unhappy, dependent lives, and become burdens to themselves and to society. The challenge falls disproportionately on those in developing countries, where disabled people often live without dignity.

2.6.1 Institution –based Rehabilitation

The prevailing model of rehabilitation, based on institutional care, would absorb serious attempts were made to meet the needs of all disabled people within their more than the total health and educational budgets of most developing countries, if populations. Existing services may be meeting as few as two per cent of those in need of them, according to reports from both the South and the North, where the International League of Societies for People with Mental Handicap concludes that normal schooling has been widely denied to handicapped children (Arnold C. 1988).

Reports from all corners of the world suggest that, where rehabilitation services are available, they are concentrated predominantly in urban areas. The hope had been to establish comprehensive services centrally, staffed by highly competent personnel, with the aim of expanding as resources increased, until the whole target population was covered. The reality has been very different. In focusing on urban areas, services have generally become accessible only to a small and relatively privileged section of society.

In the light of the millions of people in need, the prevailing model has come under severe criticism. The undue concentration on an urban elite, the adoption of unnecessarily high standards of training, the narrowness of specializations, and the isolation from normal life are some of the criticisms leveled at this approach to rehabilitation. The situation is further complicated by the fact that those in most need of services are often the least likely to seek out help. Some way is required, in particular, to make the services relevant and accessible to poor people in rural areas.

To respond, governments need more economical approaches to meet the magnitude of the task. There is a growing realization of the need to revise our concepts of development. A top-down model of service delivery has become widely discredited, especially where it has been associated with. social-service programs planned and implemented by bureaucratic institutions, without consultation with or involvement of the intended consumers.

However, unless the intended beneficiaries of innovations do not themselves engage with the people and structures which are promoting development, change will be impossible. Active participation, at all phases of the development process, is essential. Seen in this light, one of the basic questions in rehabilitation work is how to help relatively disempowered individuals to take charge of their own affairs.

We have to move away from regarding rehabilitation as a product to be dispensed, to seeing it as a process in which people at the local level are intimately involved.

2.6.2. COMMUNITY-BASED REHABILITATION

The gap between need and provision cannot be closed simply by developing, or even expanding, conventional services. The call is for a new- approach to service provision - based on fewer experts, less advanced forms of training, and simplified methods of rehabilitation. The challenge is how to provide the most essential assistance to large numbers of people, using readily available resources.

The concept of Primary Health Care (PHC) entailed the acceptance of two important principles which had been vigorously resisted earlier. Firstly, that it is more important to bring about even small improvements to the health of a large number of people than to provide the highest standard of care to a privileged few. And secondly, that non-professionals, with limited training, can provide much-needed services. The (WHO) provided the stimulus for incorporating rehabilitation into PHC in its Manual, Training the Disabled in the Community (Helander et al. 1989). This is best done in the environment in which the disabled child lives, with the child's own carets as the primary training agents. The family needs to learn how best to help, and needs systematic support and encouragement to do this.

The goal of (CBR) is to demystify rehabilitation, and give responsibility back to the individual, the family, and the community. It draws on existing organizations and infrastructure for the provision of the services, by recruiting and training local supervisors from the community. These people could be health workers, teachers, social workers, or volunteers; their role is to suggest to a member of the disabled child's family how to develop a training program. Simple rehabilitation tasks are delegated to auxiliaries or volunteers, whose performance is monitored by a rehabilitation therapist. A simplified method of rehabilitation is thus promoted, as described in a series of WHO booklets. CBR attempts to involve the community in the planning, implementation, and evaluation of the programs. Links are established with higher referral services to cope with more specialized needs. The intention is that rehabilitation be perceived as an integral part of a community's own development efforts. Only when a community takes on responsibility- for the integration of its disabled people can the process truly be called CBR.

2.7. LIMITATIONS OF CBR

Despite the evident achievements, there are limitations in the CBR approach. Overwork, poverty, severe social tensions, and sheer exhaustion make parental involvement a challenging proposition, not only in developing countries (Thorburn1990; Miles 1990), but in any situation where, especially for low-income households, the progress of their handicapped child may be the least of the parents' worries It may sometimes be unrealistic and unreasonable to assume that all parents can adopt the role of teacher in relation to their child. In addition, a closer examination of much CBR work on the ground reveals that the 'community' often amounts only to the families directly affected; and, in place of 'parents', there is frequently a mother struggling alone to balance the needs of her disabled child along with her many other responsibilities. In more than one family in four with whom we have worked, the household is maintained by a woman, and there is no father figure at all. In many others, the father's role does not extend to

assisting the disabled child. The overriding conclusion of the International Labour Organization (ILO), in reviewing a decade of CBR experience, has been to acknowledge the enormous difficulties entailed in introducing effective CBR programs which can endure beyond the time of external inputs. The ILO further concludes that it has no experience of a CBR program which could demonstrate its ability to carry on solely with local resources once external support ends. Presenting CBR as a cheap alternative to addressing the needs of disabled people overlooks the considerable

demand for resources, supervision and follow-up all of which are essential to win the support of both the community and the disabled people. The emphasis of the ILO, therefore, is on respecting the difficulties inherent in introducing and sustaining CBR programs. So (Mishra S. 2003).said that the professionals must take in there consideration the following limitations of the CBR programs:

1- Different priorities in poor- Survival needs has more priorities than solving problems of disabled. CBR program

2- should therefore be focusing on essential needs.

3- Complex Organization

4- Low field activity- Educated workers rarely go to field and also find hard to communicate with low educated disabled people.

5- Low Social status to CBR worker- Frontline CBR is low profile job so less educated workers may influence quality of services provided

6- Lack of community ownership- Breakdown of traditional social structure that contribute to several problems

7- Expensive approach- as focus on quality .

So that it is essential to discuss for whom the CBR approach is meaningful: which children, which families, what types of disabilities, and what cadre of workers to use. So far, a number of questions remain unanswered. Can CBR expand beyond a relatively small-scale, home-based teaching model into a nationwide community-care program. What happens if the external support ceases or when the program is absorbed into the government system .

2.7.1. USING GOVERNMENT INFRASTRUCTURE

A review of experience to date reveals some fundamental differences in philosophy regarding CBR. In some cases, CBR has been conceived as an entirely no institutional service, while in others it has developed as an outreach of conventional services. In theory, the approach has been intended to be inter-disciplinary. In system. The difficulty of simply adding rehabilitation tasks to professional roles which are already clearly defined is increasingly apparent.

(ILO, UNESCO, WHO 1994). In the reviewing data from 51 countries, made it clear that the challenge within the education system is no less than the challenge addressed within the health structure. Just as the institutional response alone is inadequate in terms of health. care, so too it was appreciated that special schools alone could not meet the needs of disabled children. Thirty-four of the countries participating in the review acknowledged that they were providing for no more than one per cent of those indeed. While the intention in many parts of the world is to meet special educational needs in standard schools (Pijl and Meijer 1991), the reality is often very different, with a high proportion of children with special needs being excluded from mainstream education .

Just as there have been major changes within the health service in the movement towards PHC, so there needs to be a fundamental change in the concept of special education. A significant contribution is being made by the UNESCO project 'Special Needs in the Classroom', (Ainscow 1993), which responds to the growing interest in finding ways of accommodating diversity among pupils within ordinary schools.

Through this work, UNESCO aims to develop materials and approaches for use in teacher training. This has helped to conceptualize the special-needs task as a process of improving schools and developing the capacity of teachers. The UNESCO materials are supposed to facilitate the process of integrating children with special needs into ordinary, mainstream schools. As yet, there is little experience on which to draw in terms of CBR provision within the school system. The Kenyan (Arnold 1986) and Zimbabwean (Mariga 1986) experiences have been with special schools becoming involved in outreach work. Experience within the mainstream school system is far more limited. The component of the Guyana program involving nursery-school teachers was only moderately successful (O'Toole 1994). The challenge is how to incorporate CBR into an existing government infrastructure, in order to expand coverage at an economically viable rate.

2.7.2. THE NEED FOR ON-GOING TRAINING AND SUPPORT

The effective CBR programs reviewed earlier (Arnold 1986; Werner 1986; Thorburn 1990; Valdez 1991; O'Toole 1994) featured extensive and prolonged in-service training, even once the initial training was completed. Each participant was given a one-year follow-up; and visits were phased out only once it was demonstrated that more intensive support was no longer necessary. The Guyana program (O'Toole, 1994) illustrated the danger of thinking through the placement of a disabled child into an ordinary school was enough, demonstrating that this is only the beginning of a process, and that continued support from the teachers and the other children in the school is needed. These programs also cause us to reflect on what constitutes successful training. A significant aspect surely, entails influencing the attitudes and expectations of the parents; and nurturing the belief that the disabled child is capable of learning and worth helping: If attitude change is indeed a key variable, this significantly determines the type of training program suitable for the home visitors.

Adequate and appropriate training is a crucial first step. Support and supervision are equally essential. For integration of disabled children into mainstream classrooms to be a viable proposition, we must consider what additional support can be provided for the class teacher in terms of personnel, training, and special resources. These were crucial ingredients in the effective examples from Britain, Sweden, and Norway which were highlighted in the UNESCO report (UNESCO 1988). We need to see how the existing special schools can become resource centers for outreach programs, offering in-service training for mainstream school teachers and providing support for children with special needs in ordinary schools. We should consider how to prepare personnel to assume the role of support teachers or consultants. Experiences from Zimbabwe (Mariga, 1986) and from Gaza (Mashal, 1991) show how home-visitor services can be offered to several hundred families with mentally handicapped children, through mobile teams managed by professional staff from the special schools. A key to improved services depends on a more innovative approach to the deployment of human resources, their preparation and support.

2.7.3. USING EXISTING RESOURCES

More research is needed into the qualities needed to be effective as a home visitor. In the Guyana study (O'Toole, 1994), there was no significant correlation between the educational background, income, or occupation of the home visitors and their effectiveness. Both the Guyana and the Philippine programs illustrate that volunteers can be highly effective in the role of home visitors. More imagination is now called for in terms of the deployment and recruitment of community-based volunteers, within their time constraints, linked on a person-to-person basis. The self-confidence and self-worth of the volunteers develops as they realize that they can contribute something of value to others. Nevertheless, of all the resources available, the other children in the school offer the greatest potential for real change in the lives of disabled children. Activities

within the child-to-child framework have illustrated the value of simple and practical approaches for improving the lives of children. Careful thought should be given to how to develop this rich potential for peer tutoring. Integrating children with special needs into a mainstream school requires the commitment of the whole staff. It is vital to move beyond a dependence on the skill and initiative of individual teachers, so that the integration process is regarded as part of a broad-based program.

2.7.4. FAMILY MEMBERS IN PARTNERSHIP WITH PROFESSIONALS

Parents obviously have very different degrees of capability, time, and energy in dealing with their children; and there are some for whom greater involvement may be unrealistic - whether because of unemployment, poverty, or ingrained attitudes, or because of other circumstances. There may simply be no one through whom the home visitor could work. However, many parents and family members are eager to become involved, given the necessary support, guidance, and information. Satisfying the parents' emotional needs may be a vital first step. The challenge is to ensure that this is not just adding one more demand on an already overburdened household, but helping to improve the quality of the interaction between parents and children in the time which is available. There is no simple or universal prescription for appropriate involvement: it is a question of striking a balance between encouraging parents to take advantage of the opportunities provided, without putting them under pressure to conform to other people's expectations. Parents frequently mention the emotional and psychological assistance they receive from the home visitors in supporting, caring for, and befriending them. Indeed, the value of CBR may lie as much in the relationship between service agents and family members as in the specifics of the practical intervention which they propose. Parents can become more relaxed, less depressed, more confident, and more aware of the child's potential as a result of a CBR program. Their goals become more long-term and more realistic. Aspirations change from wanting the child to be 'normal', to seeking help in specific problem areas. Many of the social and emotional needs of parents may be met most effectively by participation in an informal or voluntary association with other parents. CBR programs could be supplemented by setting up a local network of families for mutual support and occasional advocacy or lobbying work.

Many of the regional CBR programs in Guyana have relied on volunteer support from the local community yet only about five per cent of these volunteers have been men. We are still a long way from overcoming the assumption that work with disabled children is the domain of women rather than men. In working with volunteers and

planning day-time training sessions, it is important to ensure that such cultural stereotypes are not unwittingly reinforced by arranging the training and practical work at a time when it may be difficult for men to participate.

2.7.5. JUDGING THE EFFECTIVENESS OF A CBR PROGRAMME

Does CBR work , If so, how , For whom is the approach most effective , How could CBR work better , What types of parents, with what types of children, benefit from which aspects of a CBR program . Such questions are not easy to answer, in part because of the lack of suitable methods for evaluating 'success'. In the evaluation of Project Projimo (Werner D. 1998)), 60 per cent of the disabled children had clearly benefited from the program, while many of the remaining 40 per cent had also progressed, but in more subtle ways. In evaluating CBR programs, there is a danger in focusing only on what can be readily measured, while intangible feelings of increased hope, improved human relationships, and self-worth are often overlooked. We still lack appropriate tools to assess social, affective, and interpersonal change.

We need to rethink the concept of 'success' and develop better methods for evaluating the quality of life of the disabled child and its family. It is the process of intervention we need to understand, not just the results. As observed, CBR is not one approach, but a philosophy of care which inevitably embraces a number of forms of service in the areas of health, education, and social welfare. Each service may play a different role at various times in a disabled person's life. Greatly improved communication is needed between the various partners in the rehabilitation process, if meaningful progress is to be achieved in the remaining years of this century. The independent evaluation of the

Zimcare program (Madzima *et al.* 1985) revealed that the home visitors spent a high proportion of their time on matters other than rehabilitation , such as counseling family members and giving economic support. it is increasingly clear that CBR workers need to be skilled in more than the clinical tasks of rehabilitation.

Vanneste.(1998) "CBR: An Introduction" said: Most (CBR) programs implemented thus far do not result from the creativity and hard work of the local people themselves. They are products of foreign policy and interest, with the input of foreign manpower and money.

At present CBR programs are largely financed by overseas agencies and plans are made to fit donors' requirements. This has led to a wide diversity of meanings currently attached to the term 'CBR'. Most people will however agree with the following 'definition':

2.7.6. CBR Programs

- improve, facilitate, stimulate and/or provide services
- are for people with disabilities, their families and careers

- are situated within the locations of these families and communities
- are implemented through local full or part time, paid or volunteer community rehabilitation workers (CRWs) .
- train, follow-up and manage their (CRWs)
- are provided within a certain organizational set up.

There are currently 3 main meanings attached to the notion 'CBR':

1. CBR: 'People Taking Care of Themselves':
   Services for people with disabilities (PWDs) in most regions in developing countries are still limited to what people can do for themselves. This is the 'real' CBR: all the activities that disabled people, their family members and other community members do in their own community for disabled persons, such as general care, accommodating each other's needs (i.e., family members adapting themselves to the situation of the disabled, and vice-versa), education and health, using whatever they know, whatever they have, in whatever daily circumstances that exist.
2. CBR: A Concept and an Ideology
   CBR as a concept and an ideology, promotes a de-centralized approach to rehabilitation service-delivery, whereby it is assumed that community members are willing and able to mobilize local resources and to provide appropriate services to disabled people. This concept has been tried out in many CBR programs in the developing world, by the use of government staff and facilities, but has in most cases proved to be unrealistic.
3. CBR: Programs, Recognizing the human and material limitations of disabled people, their family members and other community members, a CBR program tries to promote and to facilitate CBR, by visiting the disabled persons and their families in their homes, providing appropriate information, therapy and/or training, promoting and facilitating rights and duties of disabled persons, family and community members.

Unfortunately, such CBR programs often consider 'local culture' as an obstacle, rather than as a condition towards progress.

2.7.7. The Main Problems of CBR Programs

1. Poor families' priorities may be at the level of survival needs, rather than solving problems of a disabled member. Poor living conditions of most people with disabilities are also poor conditions for rehabilitation. The objectives of individual CBR programs, therefore, have to be very realistic, focusing on essential needs.
2. The organization and management of good CBR programs is complex and difficult in countries where people often have no tradition of formal management and handling funds.
3. Highly educated workers don't like to go into the field, and may find it hard to communicate well with disabled people who are often uneducated or under-educated. Front-line CBR is a low-profile job, which gives no social status to people who already have higher education. These factors influence the type, level and quality of the services which can be provided by a CBR program.
4. For several reasons, CBR programs might often be too much to communities to accommodate. It is precisely the 'lack of community', i.e., the breakdown of traditional social structures, that contributes to the man problems facing developing countries. Thus, it is unlikely that these weakly-constructed communities could organize appropriate services to PWDs.

Goel (2007) in an article "An Introduction to CBR Continuing Medical Education". Wrote about the Approaches to Rehabilitation the following :

Medical Model:

- Followed by Institutes i.e. Institutional Based Rehabilitation Usually from Centre/ Outreach/ Mobile/Camp
- Service providers only concentrate on medical problems -look at the eyes, hands or legs
- Prescribe, occasionally intervenes and consider medical rehabilitation is the only answer-relationship often "give and take".

Social Model :

- Community and persons with disabilities (PWD) are major **resource**
- More democratic- PWD are principal decision makers
- Reflects rights perspective rather than typical charity
- Rehabilitation takes place at the doorstep of PWD
- Social inclusion more important than medical rehabilitation
- Early intervention, regular follow up, total Rehabilitation .

2.8. Models of health status:

(Law et al 2007) addressed in study titled " Focus on Function" – a randomized controlled trial comparing two rehabilitation interventions for young children with cerebral palsy . The study tolled that Children with cerebral palsy receive a variety of long-term physical and occupational therapy interventions to facilitate development and to enhance functional independence in movement, self-care, play, school activities and leisure. Considerable human and financial resources are directed at the "intervention" of the problems of cerebral palsy, although the available evidence supporting current interventions is inconclusive.

A considerable degree of uncertainty remains about the appropriate therapeutic approaches to manage the habilitation of children with cerebral palsy. The primary objective of this project is to conduct a multi-site randomized clinical trial to evaluate the efficacy of a task/context-focused approach compared to a child-focused remediation approach in improving performance of functional tasks and mobility, increasing participation in everyday activities, and improving quality of life in children 12 months to 5 years of age who have cerebral palsy. A multi-centered randomized controlled trial research design will be used.

Children will be recruited from a representative sample of children attending publicly-funded regional children's rehabilitation centers serving children with disabilities in Ontario and Alberta in Canada. Target sample size is 220 children with cerebral palsy aged 12 months to 5 years at recruitment date. Therapists are randomly assigned to deliver either a context-focused approach or a child-focused approach. Children follow their therapist into their treatment arm. Outcomes will be evaluated at baseline, after 6 months of treatment and at a 3-month follow-up period.

Outcomes represent the components of the International Classification of Functioning, Disability and Health, including body function and structure (range of

motion), activities (performance of functional tasks, motor function), participation (involvement in formal and informal activities), and environment (parent perceptions of care, parental empowerment).

Cerebral palsy comprises a complex, multi-dimensional group of non-progressive movement disorders resulting from damage to the brain prenatally, perinatally, or early in childhood. Incidence of cerebral palsy has remained constant over the past two decades at 2.0 to 2.5 per 1000 live births. The long-term disability and costs to the health care system and society associated with cerebral palsy are significant.

From the viewpoint of the International Classification of Functioning, Disability and Health (ICF), cerebral palsy presents with "impairments" in body function and structure such as muscle tone, strength, reflexes and range of motion. Significant "activity" limitations can also be present (e.g., dressing, feeding, functional mobility) as well as restricted "participation" (e.g., playing, participating in school) in social and community roles for the child.

In North America, neurodevelopment treatment is the most commonly used treatment technique used by therapists in their care of children with a diagnosis of cerebral palsy. Although this approach acknowledges functional independence as an important goal of treatment , the means to obtain function focuses on remediation of the child in the International Classification of Functioning, Disability and Health (ICF) component of body function and structure. The therapist attempts to inhibit abnormal posture and movement and to improve the child's quality and efficiency of movement by encouraging typical patterns of movement. It is assumed that "typical" patterns of movement will lead to functional improvements and reduce activity limitations and participation restrictions.

Compensatory movements and environmental adaptations may be more efficient solutions to the motor challenges encountered by children with cerebral palsy. From this latter perspective, performing the functional task, rather than attainment of normal patterns of movement, is the important goal of treatment. An array of factors has influenced this philosophical shift including current models of health status, the perspectives of persons with disabilities, family-centered service delivery, and the application of dynamic systems theory to motor behavior. Each concept is discussed briefly here.

Models of health status:

Therapists are now using models of health status, such as the ICF, as frameworks to identify primary goals, and to evaluate treatment effects. These models have provided a framework by which to discuss and question the assumption of a cause and effect relationship between impairments and functional restrictions . Functional performance is the result of the dynamic interaction of a myriad of factors, not just those at the level of impairment within the child. The new component of contextual factors in the ICF model encourages therapists to consider the influence of personal and environmental attributes on function simultaneously with the physical abilities of the

person. The concept that many factors both internal and external to the child influence functional motor success has caused a re-evaluation of current treatment

approaches based on a hierarchical neuromaturational model focused primarily on changing the child's abilities.

2.8.1. Influence of persons with disabilities

Changing societal attitudes towards disability complement the health status frameworks used in this study. Traditionally, disability was viewed as a problem within the person and the goal was to fix, heal or prevent the problem Persons with disabilities advocated for a change in this perspective, suggesting that disability is a political rather than a medical issue. The social construction model of disability put forward that society's values and beliefs artificially partition persons into 'disabled' and 'able-bodied' roles in society, and prevent the full participation of persons with disabilities in the community .

2.8.2. Family-centered principles

The development of the family-centered philosophy in rehabilitation practice has also influenced attitude changes in the management of children with motor dysfunction. Family-centered service principles clearly articulate that parents know their children best. Family-centered service acknowledges that families are different and unique, and that optimal child functioning occurs within a supportive family and community context. Within this framework, the therapist is viewed as a collaborator,

not an expert. Goals of treatment are identified collaboratively with input from the family, child and therapist. This change in service delivery has created an environment conducive to the identification of functional goals at the level of activity and participation rather than exclusively at the level of impairment. There is a need to explore all treatment strategies, including changes to the task and environment, in order to facilitate the achievement of these goals.

2.8.3. Dynamic Systems Theory

Dynamic Systems Theory (DST) is a recent framework to explain motor development. DST suggests that the most efficient motor behavior results from the spontaneous self-organization and interaction of many subsystems to achieve a functional goal. These subsystems derive from three sources: the child, the task and the environment Within the child, subsystems include not only the central nervous system, but also factors such as biomechanics, anthropometric measures (e.g., head size), temperament, and cognition. Examples of subsystems within the task (what the child is trying to do) which affect motor behavior, are the shape of an object being grasped, or the height of a table that the child uses to pull to stand.

In the environment, diverse factors such as the surface on which the child is moving, the effect of gravity and the child's interaction with caregivers or therapists may contribute to the motor behavior that emerges. The concept that spontaneous self-organization results in the best movement solution challenges therapists to reconsider the traditional therapeutic rejection of "abnormal" movement patterns such as "bunny-hopping" and "W-sitting" that many children with cerebral palsy spontaneously discover, and use effectively. Historically, therapists have discouraged these "abnormal"

movement patterns because of concern that they would prevent the emergence of more typical ways to move and sit and might result in decreased range of motion. Should these movement solutions be discouraged or accepted as innovative solutions, DST theory challenges traditional treatment perspective that "typical" patterns of movements are the optimal solution for all children.

New treatment models are emerging that consider functional success the goal of treatment with less concern about the "normality" of the movement strategy. From a DST perspective, adaptation of the environment and/or task is acceptable as a solution to a motor problem rather than immediately focusing on changing the abilities of the child. Burton and Davis' ecological task assessment is based on matching the task and environment with the abilities of the child in order for the child to achieve success, instead of trying to change the child to conform to an existing environment. For example, rather than viewing walking as the optimal mobility method, some therapists now advocate an array of movement options for children with cerebral palsy that represent the best fit with specific environments.

2.8.4. Integrating these themes – the Task/Context-Focused

The following principles define the key components task/context-focused approach. 1. Promote Functional Performance The goal of treatment is for the child successfully to achieve a specific functional goal that has been identified collaboratively by the family, child and therapist. Emphasis is placed on success with the task rather than the attainment of "normal" patterns of movement. The underlying principle is that there is no one right way to perform a task. Different solutions may be used in different environments. For example, if the goal is for the child to move independently in the home, the child may creep on his or her abdomen on the smooth surface of the kitchen floor but change to rolling on the carpet in the living room. This principle is derived from the DST tenet that movement is always goal-oriented and context specific.

2. Identify Periods of Change (Transition)

Treatment will be most successful if it is introduced at a time when the child is trying to do a new task or attempting to do an established task in a different way. This premise fits with the concept of a developmental, global readiness for performing a new motor task or changing the way an established task is accomplished. Parents (and child) will play an integral role in deciding when the child is ready to attempt a new skill. Transition is a concept of DST that is defined cinematically as the period when a child's movement patterns are more easily perturbed and take longer to return to a stable state. Clinically, the concept of transition is intriguing because it implies a "window of opportunity" when a child is most ready to achieve new functional goals. A study by Trahan & Malouin provides evidence that short term intensive therapy at this "right time" may be as effective as longer term, regular therapy. In a multiple baseline design, five children with cerebral palsy who received short periods of intensive therapy (4 times/week for 4 weeks) followed by no therapy for 8 weeks maintained gains in their motor skills. Using transition as an indicator of readiness, treatment will be time-limited and aimed specifically at success on an identified functional goal.

3. Identify and Change the Primary Constraints

Constraints or rate-limiting factors that prevent achievement of a functional goal are identified. Treatment strategies will be based on the identification of both constraints and enablers of a specific goal by the parents, child and therapist. These constraints and enablers may be identified in the child, the task (goal) or the environment. For each constraint, the therapist must consider if the specific constraint can be changed or whether an adaptation is needed. Examples within the environment are the effects of gravity, space to move, floor surface etc. Examples of how the task may be changed are changing the size of the spoon for a feeding goal and modifying a walker for mobility goal. Examples of constraints within the childcare muscle strength, range of motion, motivation. Constraints/enablers associated with the task and/or the environment will be the first focus of treatment before attempts to change constraints within the child. If a specific changeable constraint is identified within the child,

intervention may include changing this constraint through time-limited intervention but only at the level of activity and/or participation. This approach is different from a child-focused approach that centers on remediation of the abilities of the child, usually at the level of body structure and function. The aim of the task/context focused treatment is to achieve success at the functional goal as soon as possible rather than emphasize the quality of a child's movement.

4. Provide Opportunities for Practice

Children will have opportunities to practice a new skill in the most appropriate environment. Sometimes skills will emerge spontaneously when an appropriate constraint has been changed, but typically in childhood, developmental skills require practice for refinement and to become more automatic. If necessary, practice will be incorporated into the treatment. Again, the emphasis will be on achievement of the functional goal in a natural setting. Practice focuses on the functional goal in the most appropriate environment .

2.8.5. The Child-Focused Approach

A review of the literature in children's rehabilitation in preparation for this project yielded 77 papers reporting research that involved children with cerebral palsy. A wide variety of treatment approaches are being used with this population including surgical treatments such as tendon transfers .Treatment approaches utilized by physical and occupational therapists focus primarily on remediation of body function and structure in children with cerebral palsy. These treatments include: maintaining range of motion The therapy literature describing treatment approaches continues to emphasize

neurodevelopment approaches, primarily aimed at changing body function and structure in the child. Treatment now embraces tenets of motor learning and systems theories applied to movement. For example, identification of functional goals and the importance of the child taking control of movements are now both incorporated as important components. Improvements in functional performance are frequently cited as the desired outcome; however, the methods for achieving this outcome are primarily through changes in body function and structure within the child .

Term "activities of daily living," or ADLs, refers to the basic tasks of everyday life, such as eating, bathing, dressing, toileting, and transferring. When people are unable to perform these activities, they need help in order to cope, either from other human beings or mechanical devices or both. Although persons of all ages may have problems performing the ADLs, prevalence rates are much higher for the elderly than for the non-elderly. Within the elderly population, ADL prevalence rates rise steeply with advancing age, and are especially high for persons aged 85 and over (Rivlin and Wiener, 1988).

Estimates of the number and characteristics of people with problems performing ADLs are important because of the increasing number of private long-term care insurance policies and proposed public long-term care insurance programs that rely on ADL measures to determine whether an individual qualifies for benefits(Van Gelder and Johnson, 1989). Obviously, the amount of long-term care benefits paid out by such private and public plans will largely depend on the number of persons who meet the various ADL eligibility criteria.

In the context of health: Body Functions are the physiological functions of body systems (including psychological functions). Body Structures are anatomical parts of the body such as organs, limbs and their components. Impairments are problems in body function or structure such as a significant deviation or loss. Activity is the execution of a task or action by an individual. Participation is involvement in a life situation. Activity limitations are difficulties an individual may have in executing activities. Participation Restrictions are problems an individual may experience in involvement in life situations. Environmental Factors make up the physical, social and attitudinal environment in which people live and conduct their lives. International Classification of Functioning, Disability and Health – ICF, (World Health Organization. 2001b).

2.8.6. Islam's Perspective on Disability

In Islam, a person's worth is based not on any physical or material characteristics but on piety. Piety includes both faith in the tenets of Islam and a genuine attempt to adhere to Islam's obligations to the best of one's ability. The Prophet Mohammad, the messenger of Islam, took special care to ensure that people with disabilities were able to come to prayers (Bazna &Hatab, 2005).

Disability is not widely discussed among Muslims as a community agenda; often, the misconceptions associated with disability cause this silence. (Bazna and Hatab 2005) evaluated the position of the Qur'an and hadith on disability and concluded that

disability is considered morally neutral; it is neither a punishment from God nor a blessing, and it does not reflect any spiritual deformity. A human's worth in the sight of God depends on spiritual development rather than any physical or material attributes. One saying of Prophet Muhammad recorded in the hadith is "Verily Allah (God) does not look to your bodies nor to your faces but He looks to your hearts" (Sahih Muslim, n.d., 32:6220). Although the Qur'an removes any stigma for people with disabilities and theoretically should remove all barriers to their inclusion, full inclusion for many Muslims with disabilities remains an unfulfilled reality.

A Muslim's effort to continue ritualistic practice despite a disability reflects his own personal sense of the faith's requirements as well as ability to act on beliefs. Muslims with disabilities and chronic health conditions are given dispensation from those requirements they cannot meet, but they are expected to adhere to all others. Muslims who acquire a disability later in life and who have absorbed their religious responsibilities as an integral part of their routines and self-image often go to great lengths to develop adjustments that will allow them to continue accustomed religious practices.

Exceptions are made from Islamic regulations, such as ritual purity, when circumstances make adherence too difficult. For example, religious scholars say it is acceptable for those with incontinence to make an ablution once just before each prayer and to disregard any leakage of urine. The various prayer positions can also prove difficult for certain persons with disabilities. Prayer involves a variety of muscle groups and requires a significant range of motion from certain joints as well as the balance to maintain standing and bending postures. Dispensation is available here as well. Muslims who cannot carry out the usual postures can pray while sitting or even lying down. Such persons should still be helped to fulfill the other requirements of prayer, including ablution, covering, and positioning toward Mecca.

Section II

Previous Studies

1. Introduction:

About 600 million people in the world experience disabilities of various types and degrees. If families of people with disabilities are taken into account, then the number of persons experiencing disability is estimated to represent up to 25% of the world population. An estimated 80% of the world's disabled people live in low income countries and the majority of them are poor. Basic survival is one of the greatest challenges of many people with disabilities, particularly those with severe and multiple disabilities, in low-income countries (WHO, 2003).

(Sharma, 2007) said in the article titled " Evaluation in Community Based Program: A Strengths, Weaknesses, Opportunities, & Threats analyses " Where The purpose of his article was to analyze the extent to which CBR programs have been evaluated over the past thirty years. A framework of strengths, weaknesses, opportunities and threats analysis was used in conducting his analysis. Using an extensive search of MEDLINE, 22 articles were located that described and evaluated one or more dimensions of CBR. Three studies each from Australia, India, Zimbabwe and two studies each from England, Philippines, Vietnam, and one from Finland, Guyana, Jamaica, Japan, Pakistan, Papua New Guinea, Thailand, and United States were included in the analysis. A variety of methods used, most evaluations conducted in community settings, focus on mobility related evaluations by most programs, and development of new instruments were the strengths of CBR evaluations. Some of the weaknesses were lack of consistency in outcome measures, lack of cost benefit and cost effectiveness studies, small sample size of many studies, and lack of focus on other than mobility related disabilities by most projects. The opportunities for CBR evaluations be relevant to training assessments, use of mixed models, using indicators from a standard taxonomy, and focusing on medical rehabilitation. The threats to CBR evaluations are a need to prioritize from multifarious activities and having limited resources for evaluation.

On the other hand (Sharma, 2007) wrote about the basic principles of CBR strategy which mainly include the following :

1-Utilization of available resources in the community.

2-Transfer of knowledge about disabilities and skills in rehabilitation to people with disabilities, families and communities.

3-Community involvement in planning, decision making, and evaluation.

4-Utilization and strengthening of referral services at district, provincial, and national levels that are able to perform skilled assessments with increasing sophistication, make rehabilitation plans, participate in training.
5 -Utilization coordinated, multisectorial approach.

On the other hand (Helander, 1993) reviewed the evaluation and experience applied to CBR programs in his book entitled "Prejudice and Dignity-An Introduction to Community-Based Rehabilitation". He dealt with the principles of evaluation, with a review of some representative case studies which reported the outcome of CBR. He

pointed out five factors to consider in the evaluation of CBR, namely: relevance, effectiveness, efficiency, sustainability and impact.

(Zhang 2007), in a study titled "A Survey of the needs of services for persons with physical disability in China ". The study surveyed the needs of people with disabilities and the services available for them, in order to identify factors that influence the realization and fulfillment of their needs; and to make suggestions to relevant departments of government for improvement of the situation of people with disabilities. Both qualitative and quantitative methods were used in this study. 109 persons with physical disability were involved, 50 from a rural area, 59 from an urban area. Data were collected through a questionnaire. persons with disabilities were involved in a semi-structured interview. Two focus group discussions were conducted. It was found that there was a big difference in the needs of the services for male and female persons with disabilities between rural and urban areas on various aspects, such as medical rehabilitation, education, rehabilitation knowledge, employment, free-barrier environment reconstruction and other variables. The study recommends that community-based rehabilitation (CBR) programs should be facilitated further in order to promote more participation of people with disabilities in social activities.

VanLeit etal (2007) in his study "children with disabilities in rural Cambodia: An-examination of functional status and implications for service delivery " The study was conducted to obtain a clearer understanding of the functional status of children with disabilities in rural Cambodia, and to learn how families perceived and used relevant services for their children. Using existing databases, a survey was conducted targeting caregivers of 500 identified children with different types of disabilities. Some needed services and equipment are available but not always used by families, and other needed resources are currently unavailable.

The study discussed children's body function and structure impairments, activity limitations and participation restrictions. In order to obtain a better understanding of how the children were currently functioning in everyday life and to participate more fully in daily life activities.

Other study conducted by (WHO,2002) on how persons with disabilities experience CBR, has been undertaken through the collaboration between the Swedish Organizations of Disabled Persons International Aid Association and the WHO.

Although there have been many previous evaluations of CBR carried out to a very high quality, this study is the first of its kind that is based on the experiences of the users of CBR themselves. The study could also be used as an important background document for the International Consultation on Reviewing CBR in 2003.

Community-based rehabilitation has been advocated internationally for more than 20 years as the core strategy for improvement of the quality of life of persons with disabilities. Despite emphasizing that disabled persons should be active partners in the planning and Implementation of all measures affecting their civil, political, economic, social and cultural rights, persons with disabilities have not yet become sufficiently involved in evaluations and impact assessments.

WHO have concluded that it is timely to study the impact of the CBR strategy, after its 20 years of existence, from the perspective of persons with disabilities.

Looking at the different CBR programs it can be concluded that the initiatives perceived as the most useful by persons with disabilities (in order of priority) were :

- social counseling
- training in mobility and daily living skills
- providing or facilitating access to loans
- community awareness-raising
- providing or facilitating vocational training/apprenticeships
- facilitating formation of local self-help groups, parents' groups and DPOs
- facilitating contacts with different authorities
- facilitating school enrolment (school fees and contacts with teachers)

It was noted that CBR programs largely continue to regard persons with disabilities as beneficiaries and not as participants with a voice and a choice. The number of persons with disabilities engaged at different levels in CBR programs is still negligible even after 20 years of these programs being realized.

(Helander,2007) pointed that in the 1990s several developed countries started to introduce CBR strategies, among them the Scandinavian countries and in many in Central and Eastern Europe. Institutional services were changed into family support, using day-centers and inclusive education. The management is carried out by a community committee which receives local financing. A successful program has been set up through community-based initiatives in Portugal.

Parents of disabled children initiated support services, such as day-centers. Over the last 25 years the system has expanded to cover the entire country. Through local boards hundreds of community members are directly managing the local services; they have many active volunteers, among them groups of high school children. Eventually they succeeded in receiving about 80% financial support from the Government. CBR is not just a program for the poor developing countries, its principles can be adapted to even the most developed ones: engaging the community will help to change psychological atmosphere, break the isolation for the excluded, increasing opportunities and making their human rights a reality; in short for persons with disabilities recognition of their dignity replacing the customary prejudice.

Mannan (2007) In a study done in Posio, Finland . Using an experimental design, it was found that self-perceived health of the elderly and disabled persons improved for the experimental group. No changes were found for functional capacity, independence in household tasks, social participation, and leisure activities. The primary costs of rehabilitation were lower for the experimental group, but the secondary costs were the same. The author of the study recommended better training of CBR functionaries in evaluation, involvement of outside experts, planning for evaluation at the beginning, and having an interdisciplinary supervisory team.

Another study was done in four areas of Zimbabwe . Using a post-test only design, it was found that a large number of persons with disability (41%) were undiagnosed. Based upon the coordinator's rating of a client's progress, it was noted that 16% demonstrated outstanding progress, 79% steady progress, and 5% showed little, or no progress. Except for one, all the 136 participants found the program to be helpful. Three aspects were found to be important in program success: partnerships with agencies, training in mental handicap, and culturally relevant resource materials.

The following study was done in Guyana . The study used a multiple baseline design where three data points were taken over a two month period in the baseline and data was collected using the Portage checklist and Griffiths test of development. The study also collected qualitative data on emotional disturbance of mothers, attitude of mothers, parental rating of the child with most other children, and sentence completion to gauge initial responses. The study contacted 815 homes with 4,644 persons and found 33 children as disabled (1.85% of the sample of children). A repeated t-test Griffiths test revealed statistical significance ($p<0.01$) and so also significance was found on Portage test. Parents also rated significant improvement in their children. Overall, the CBR approach was found to be successful.

A study was done in a slum area near Lahore in Pakistan . The questionnaire from the WHO manual in a house-to-house survey was used to gauge the prevalence of disability and identifying persons in need of intervention. Eighty two persons were trained and revaluated after 1-2 years using the WHO questionnaire and it was found that (80%) had made improvement in one or more areas of the program such as looking after self, moving around the house, attending school.

An evaluation study was done in Philippines and Zimbabwe in 1992. The study used a pre-test post-test design and found that ability scores after CBR training increased by 78% in Philippines and 93% in Zimbabwe. Likewise, 26% children with disability in Philippines and 69% in Zimbabwe started school and 61% persons with disabilities were employed in Philippines and 50% in Zimbabwe. that ability scores after CBR training increased by 78% in Philippines and 93% in Zimbabwe. Likewise, 26% children with disability in Philippines and 69% in Zimbabwe started school and 61% persons with disabilities were employed in Philippines and 50% in Zimbabwe.

a study has been done in Jamaica. The study utilized a post-test only design and found that knowledge, attitudes and practices improved in approximately two third of the persons with disability.

The following study was done in Zimbabwe, and interviewed CBR beneficiaries on six variables: (1) traditional beliefs about children with disabilities, (2) impact of a child with disability on the caregiver, (3) community involvement, (4) caregiver's perceived ability to teach the child, (5) attitude toward various health services, and (6) expectations for the future of a disabled child. A significant correlation between appreciation of CBR and attitude toward various health services was found. Also, it was found that perceived ability to teach and expectations for the future of the child had significant correlation.

Other study done in Thailand aimed at examining effectiveness, and cost of the CBR program in a slum after a period of three years. Using a pre-test post-test design, effectiveness of the program was assessed by measuring walking velocity, pain levels, and reasons for discontinuing the use of the CBR program. Statistically significant changes in walking velocity and pain levels were found. Only nine out of 178 patients stopped using CBR because their condition did not improve. The cost per patient per day, was found to be cheaper than institution based rehabilitation.

The coming study was done in Philippines after seven years of operation and used qualitative approach of audit where records were reviewed, in-depth personal interviews were conducted with key informants and focus groups. It was found that CBR program

was perceived as important and accessible. The referral systems were functioning well but there was scope for improvement. The clients and their families were satisfied with the services and they were willing to help in the continuation of the program. The WHO Training Manual was rated as useful. However, there was scope for improvement in training methods, duration, follow-up, and translation into the local language.

Other study was done in Australia, and it utilized participatory rural appraisal in its planning and conducted qualitative SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis around 15 identified characteristics. It was found that network partnerships, balance of product and process, problem solving, human, intellectual and social investments, community focus, social cohesion and relationship of trust were strengths of the CBR program. Financial and resource infrastructure and partnership with government and policy infrastructure, were identified weaknesses. There were greater opportunities for knowledge transfer, widespread participation, community building skills, leadership, and community control over decision making. The threats pertained to financial, resource infrastructure and communication system.

And another study was an evaluation done in 2001, in Vietnam. A participatory SWOT analysis method was utilized for evaluation. The data were examined against the WHO model. Strengths of the program were found in three out of five areas, namely, utilization of available resources, transfer of knowledge about disabilities, and utilization, strengthening of referral systems. The weaknesses were in the areas of community involvement in planning and decision making and coordinated multi-sectorial approach.

(Van Zelst, et al 2006). Conducted a study about ADL in hemiplegic's CP's persons where they used cross-sectional evaluation, using the Assessment of Motor and Process Skills. Upper limb impairment can affect the ability to perform and participate in activities of daily living. The level of activity and participation limitation in the home environment for children with hemiplegic's cerebral palsy (CP) is poorly understood. A greater understanding of these limitations could be used to provide targeted and appropriate intervention program. Level of activity and participation limitation were investigated, with the use of the Assessment of Motor and Process Skills (AMPS) in a representative sample of 54 South Australian children (31 males, 23 females) with hemiplegic's CP, aged 3 to 12 year. Two AMPS tasks that were familiar to the child were performed in the home under the supervision of a trained occupational therapist. Findings suggested that younger children (3–8y) performed significantly better than older children (9–12y) for motor skill ability. Motor performance in activities of daily living as detected by the AMPS seemed to worsen with age in children with hemiplegic's CP. Further investigation into what can influence this outcome is required.

(Steenbergen, 2006).said in an article titled "Activity limitation in hemiplegic's cerebral palsy: evidence for disorders in motor planning" . Reviewing of the definition of cerebral palsy has focused on disorders of movement and posture development that cause activity limitations. Recent research provides new insights into CP, showing that activity limitation in individuals with hemiplegic's CP is not exclusively caused by disorders related to movement execution, but is also related to the planning of movements. In this review article, converging evidence is presented suggesting that, in addition to movement execution impairments, impairments in movement planning may also limit the performance of activities of daily living.

(Jahnsen et al 2006). The present study investigated the reliability of self-reported rating of Gross Motor Function Classification System (GMFCS) levels compared with professional rating, and changes in gross motor function over time, in adults with cerebral palsy. Twenty-nine females and 33 males aged between 18 years 5 months and 62 years 11 months participated in the study. Participants rated their current gross motor function using the GMFCS and reported their judgment of their gross motor function at age 10 to 12 years. More than half the participants experienced a stable gross motor function from the age of 10 to 12 years to the present. Those at the age of 10 to 12 years (according to the professional rating) had significant change for the worse in gross motor function over time. Interview data on circumstances regarding changes in gross motor function since childhood are also reported. Changes in GMFCS level were mostly associated with physical or social environmental factors.

Andren E.; Grimby G.(2000) in his study "Dependence and perceived difficulty in activities of daily living in adults with cerebral palsy and spina bifida "

The purpose of this study was to identify differences between two groups of subjects: one with cerebral palsy, the other with spina bifida in their dependence and their perceived difficulty in performing daily activities according to the Functional Independence Measure (FIM) and the Instrumental Activity Measure (IAM), and to compare these findings with the reported use of assistance. 53 persons with cerebral palsy and 20 with spina bifida, participated in semi structured interviews in their homes, where rating was performed using items from FIM and IAM. Differences were found for the reported use of assistance and the dependence rated according to FIM and IAM. Significant differences for dependence were found between the CP and SB subjects concerning Eating, Bladder and Bowel items and for perceived difficulty concerning toileting, bladder and bowel. There was close overall agreement between dependence and perceived difficulty, except for the item walk/wheelchair. Subjects in both groups needed help in basic and instrumental ADL. The ability of spina bifida subjects was more influenced in toileting, bladder, bowel than the cerebral palsy subjects and tended also to be so in mobility instrumental tasks. FIM and IAM do not cover all aspects of significance in community-living adults. Further items have to be developed, covering personal care and occupational as well as leisure domains.

Turk M. Geremski C , Rosenbaum P. Weber R.(2007) In other study about "The health status of women with cerebral palsy" tried to determine preliminary associations between collected health status variables of women with cerebral palsy (CP) residing in the community. Using cross-sectional study for sixty-three women ranged in age from 20 to 74 years residing in the community. The results of the study mentioned that women with CP residing in community living arrangements perceived themselves as healthy. The majority of women did not smoke (98%), had not consumed alcohol in the previous month (95%), and ate a balanced diet (52%). Participants also reported engaging in common physical activities (83%) and stretching and doing range-of-motion exercises in the previous week. Sixty-eight percent of the women walked, and more than 50% of the women did not require assistance with activities of daily living. The ability to walk and the use of a wheelchair were associated with participation in the common physical activities. Additionally, the women in the sample reported the occurrence of several secondary conditions common among individuals with CP, including pain (84%), hip and back deformities (59%), bowel problems (56%), bladder problems (49%), poor dental health (43%), and gastroesphageal reflux (28%). Poor dental health was associated with a history of seizures, and associations were also found

between pain and mental retardation, and between gastro esophageal reflux and mental retardation.

Erkin G, et al .(2005) "The assessment of functional status in Turkish children with cerebral palsy" .Assessment of the functional limitations is important to determine the severity of the disability in CP and to evaluate the benefit of the rehabilitation program. The aims of this study were to evaluate the functional disability of Turkish children with CP by using WeeFIM, and to compare the results with those of healthy counterparts. However, the results of the measurements show variations according to different sociocultural characteristics. The (WeeFIM) had not been studied in Turkish children previously. A total of 86 children aged 24 months to 120 months were included in the study. Forty-five children with CP and 41 healthy children representing the controls were evaluated with WeeFIM. Both children with CP and healthy controls were categorized into four groups according to their chronological age. The variations in the WeeFIM subsets scores (self-care, sphincter control, transfers and locomotion, communication and social cognition) and total WeeFIM scores in children with CP and healthy controls were analyzed. The main results were that the children with CP had lower WeeFIM scores than healthy controls. The sphincter control subset scores of children with CP increased as they grew up. There was no statistically significant difference in WeeFIM subset scores and the total WeeFIM scores among the four age groups of children with CP.

Wong V. (2004) The study discussed the risk factors affecting the functional status of cerebral palsy. A cross-sectional study of 73 children with cerebral palsy was conducted with the Functional Independence Measure for Children (WeeFIM), which assessed functional skills in the domains of self-care, mobility, and cognition. The mean total Functional Independence Measure for Children quotient was 67.5%. The mean sub quotients for self-care, mobility, and cognition were 68.3%, 62.7%, and 69.4%, respectively. The risk factors related to the degree of functional dependency were (1) mental retardation ($P = .030$), (2) epilepsy ($P = .005$), (3) type of cerebral palsy ($P < .001$), and (4) severity of cerebral palsy using the Gross Motor Function Classification System ($P < .001$) (using univariate analysis). However, when using multivariate analysis, only epilepsy ($P = .02$) and severity status according to the Gross Motor Function Classification System ($P < .001$) were significantly related. When the etiology was analyzed, only prematurely was significantly associated with better Functional Independence Measure for Children scores using both univariate ($P = .022$) and multivariate ($P = .007$) analyses. The functional status of children with cerebral palsy depends on the severity and the presence of epilepsy. Despite impairment, we found that most children with cerebral palsy could achieve functional independence.

Damiano D. (2006)The goal was to compare children with hemiplegia with those with diplegia within Gross Motor Functional Classification System (GMFCS) levels using multiple validated outcome tools. Specifically, we proposed that children with hemiplegia would have better gait and gross motor function within levels while upper extremity function would be poorer. Data were collected on 422 ambulatory children with cerebral palsy: 261 with diplegia and 161 with hemiplegia, across seven centers. Those with hemiplegia in each level performed significantly and consistently better on gait or lower extremity function and poorer on upper extremity and school function than those with diplegia. the group with hemiplegia walked faster ($p = 0.017$), scored 6.6 points higher on Dimension E of the Gross Motor Function Measure ($p = 0.017$), 6.7 points lower on Upper Extremity subscale of the Pediatric Outcomes Data Collection

Instrument, and 9.1 points lower on WeeFIM self-care (p = 0.002). Basing motor prognosis on GMFCS level alone may underestimate lower extremity skills of children with hemiplegia, and overestimate those of children with diplegia .

While there are many examples of evaluations of CBR around the world, there are few examples in the literature of attempts at measuring its impact on the social integration of individuals with disabilities and their families. On the other hand, there is an abundance of literature from all over the world describing the situation for people with disabilities as suppressed and disadvantaged in all respects, and characterized by poverty as well as exclusion from social participation.

Eide A. (2005), said that: The impact assessment of CBR in Palestine has clearly demonstrated that the efforts by the CRWs, and their supervisors have a direct impact on the level of social integration and participation of individuals with disabilities and their households. The Program is based on a broad definition of disability and rehabilitation which includes the socio-political arena. Recognizing that the foundation of a state is based not only on structures, but on people, values and practices, it has been a deliberate strategy of the CBR Program to combine "traditional" rehabilitation with a process pursuing human rights and democratic ideas and practices. The social inclusion of people with disabilities and their families also implies that their potential as members of society may be fully utilized not only for their own benefit but also for benefit of the local communities. People with disabilities have a unique experience and thus a special competence that contributes and adds quality to society when given the right opportunities. The impact assessment has shown how working with CBR promotes important values in the community that are essential in strengthening the base for a future, democratic state. The CBR Program in Palestine made its contribution in this regard. Through the CBR program, many individuals, families and local communities are equipped not only with hope for a better future but also with knowledge, values and ability that will be of great importance for Palestine in years to come.

A comprehensive impact assessment of the CBR program was carried out, comprising multiple methods and data collection:

1. Baseline Follow Up – A baseline follow up study was conducted. It comprised of a sample of 1075 or 5.5% of 19840 registered people with disabilities. Community Rehabilitation Workers (CRWs) completed questionnaires about the impact of the CBR Program for each of the people they serve.

2. Record Audit – Structured inter-views with CRWs about 57 individuals were sampled across regions and according to specific criteria to ensure a broad representation (gender, age, type of disability, level of impact).
3. Semi-structured Interviews and Focus Groups - Nineteen semi-structured interviews (individuals and groups) and two focus group discussions were carried out in two regions. Interviewees included service providers, individuals with disabilities and other household members (most often the mother), representatives from different disability groups, a medical relief committee, and a local committee.

The baseline study revealed that community integration was described as the main input for 92% of the individuals in the sample. This comprises a number of activities which aim to improve the social integration of the person with disabilities and his/her household into the local community. In many instances this implies changing the

situation from relative isolation to active social participation equal to that of other house-holds and individuals. Of the total number of individuals in the sample, 531 of the 1,075 total individuals showed changes in their situation from isolation towards social participation. This suggests that there is a social integration of the most vulnerable into society has tangible effects on the quality of social relations in general."

4. CONCLUSIONS

CBR was based on a thorough study of the living conditions and of the abilities and needs among persons with disabilities in the developing countries. After over 30 years the strategy remains in the focus.

On the other hand the previous studies examined CBR evaluations, to develop a list of strengths weaknesses, opportunities, and threats from these studies for future evaluators. The strengths included variety of methods used, most evaluations having been conducted in community settings, focus on mobility-related evaluations by most programs, and development of new instruments. Some of the weaknesses of CBR evaluations were lack of consistency in outcome measures, lack of cost-benefit and cost-effectiveness studies, small sample size used in many studies, and lack of focus on other than mobility-related disabilities by most projects. The opportunities for CBR evaluations pertained to systematization of training assessments, use of mixed models, using indicators from a standard taxonomy, and focusing on medical rehabilitation. The threats to CBR evaluations were the need to prioritize from multifarious activities and having limited resources for evaluation.

Some CBR programs have had quite good results, by building on the most widespread positive resources, ideas and skills for CBR, which are those already existing in the hearts and minds of mothers and fathers, grandparents, neighbors and disabled persons themselves. If CBR is to have an impact on hundreds of thousands, rather than on merely hundreds, then programs must study, value and encourage these vital existing community resources. No plan should be approved unless some ‘multiplication factors’ are built in, whereby a small input of knowledge and skills can bring into play a much larger amount of application and energy.

Participatory approaches to working with families will need to be emphasized again and again. Better data collection in developing countries to identify and describe children with disabilities is important, if relevant services are to be provided.

In spite of limitations, CBR has demonstrated what can be achieved, at low cost, to create not only better opportunities for disabled children, but also a sense of hope on the part of parents that they can play a significant role in the development process. Communities have become more aware of disabled people in their midst and, at times, have played a major role in planning ways of meeting their needs. CBR can offer a creative approach to rehabilitation for policy makers, professionals, planners, and community leaders and for disabled people themselves.

Progress in CBR has been slow and uneven; but, significantly, some of the most creative examples of parental-professional collaboration have come from some of the poorest nations.

The evaluation of training effects for disabled individual can not only reflect the progress of the disabled persons after a period of rehabilitation training, but also the quality and quantity of implementation, management, resource utilization, technical application, in CBR Program. The rehabilitation effect of disabled person is influenced by many factors, such as the type and degree of disabilities, time and measure of training, etc. The functional assessment methods used in rehabilitation center (institution) are too sophisticated and specialized to be mastered by community staff. Therefore it should be considered to establish a kind of method which is simple, practical and easy to be used.

In evaluation of CBR, we try to take the "ability", i.e. daily living self-care ability, moving ability, work ability (learning ability) and social communication ability as the basis for the evaluation of training effect, in combination with the general income, employment, schooling, education level, participation in social life, in order to demonstrate what changes have happened since CBR services has provided

The researcher took advantage of these previous studies and used it to perform questionnaire, select study design, write the conceptual framework, definition of terminologies and explanation of issues and recommendations. The present study is applied on cerebral palsy disabled who received CBR services within the year 2006 in the societies that provide CBR services in Gaza.

However, CBR is still in its adolescent stage, and it would be too early to conclude the frontiers of CBR have been fully covered. Indeed, much more work has yet to be done in establishing criteria and methods for evaluating CBR experiences and Program.

CHAPTER 3

Methodology

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Methodology

3. Introduction

The purpose of the present descriptive analytic study is to examine the effectiveness of CBR services on daily living activities of cerebral palsy's life the year 2006. As they are very important for engaging CP individuals into life and to be active members into their societies . This chapter describes how the research is conducted, the instrumentation used, how the data are collected, recorded and analyzed and how validity and reliability of the data are assured. It has four major sections: Research design, instrumentation, data collection, and data analysis. The researcher clarified the validity and reliability of the content analysis card and the analysis process and how it is conducted. The chapter describes the adopted methodology to accomplish this study used the following techniques: review of literature related to the effect of CBR program on the daily living activities of Cerebral Palsy Individuals in Gaza governorates, the information about the research design, population, sample size, location, questionnaire design, statistical data analysis, content validity and pilot study.

3.1. Research plan

The first phase of the research thesis proposal included identifying and defining the problems and establishment objective of the study and development research plan. The second phase of the research included a summary of the comprehensive literature review. The third phase of the research included a field survey which was conducted with to the effect of CBR program on the daily living activities of Cerebral Palsy Individuals in Gaza governorates. The fourth phase of the research focused on the modification of the questionnaire design, through distributing the questionnaire to pilot study. The purpose of the pilot study was to test and prove that the questionnaire questions are clear to be answered in a way that help to achieve the target of the study. The questionnaire was modified based on the results of the pilot study.

The fifth phase of the research focused on distributing questionnaire. This questionnaire was used to collect the required data in order to achieve the research objective. One hundred questionnaires were distributed to the research population but eighty ninth questionnaires (89%) were received. The sixth phase of the research was data analysis and discussion. Statistical Package for the Social Sciences, (SPSS) was used to perform the required analysis. The final phase includes the conclusions and recommendations. Figure (1) shows the methodology flowchart, which leads to achieve the research objective.

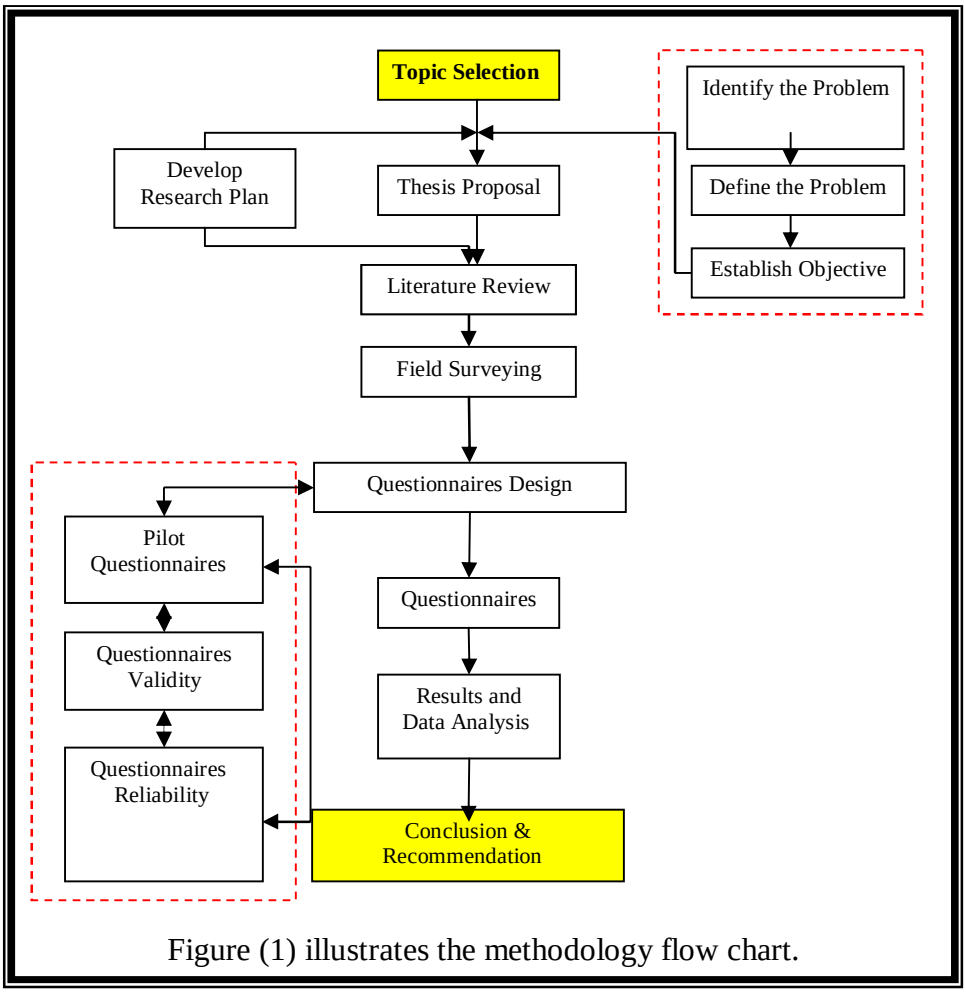

Figure (1) illustrates the methodology flow chart.

3.2. Research Design

A descriptive design was used to carry out the study., The researcher used this method due to its relevance and suitability for investigating which will answer the study question about the effectiveness of CBR services on cerebral palsy's life . This helps in dealing with the different aspects of collecting and describing data on the correspondence with the daily livings activity of CPs, with the designed content analysis card. It also serves the process of analyzing these data in accordance with the numeric data. Researcher will sent an official letter to all CBR programs directors in Gaza governorates, to facilitate data collection process, for those individuals who received CBR services within the year 2006. they will read an informed letter about the purpose and the objectives of the questionnaire , the clients name will be anonymous and confidential.

3.3. Research Population

The study encompasses all cerebral palsy's clients, whom their age is above 5 years old, who received CBR Services in Gaza governorates, within the year 2006.

3.4. Sample Size

We can define the sampling as the process of selecting representative units of a population for the study in research investigation. The objective of the sampling is to provide a practical means of enabling the data collection and processing the components of the research to be carried out with ensuring that the sample provide a good representation of the population. The calculated sample size was all the target population. The targeted population are 89 CP's clients.

To ensure good representation of each stratum, the Percent of valid respondents to No. of distributed questionnaires shown in Table No.(1)

Table No.(1)

Classification of sample size

Number of (population)	Number of sample	Number of distributed questionnaires	Number of respondents	Number of valid respondents	Percent of valid respondents to No. of distributed questionnaires
100	100	100	89	89	0.89

Eligibility criteria

3.5. Inclusion criteria:

All cerebral palsy's clients, (5) five years , and above , who received CBR Services in Gaza governorates within the year 2006.

3.6. Exclusion criteria:

Any cerebral palsy's clients who did not receive CBR services or/and refuse to participate in the study or his age is under (5) years old.

3.7. setting of the study:

The researcher gathered information through visiting the Associations providing CBR programs in Gaza governorates :

1. Palestinian medical relief society
2. National society for rehabilitation

To review the needs assessment, and progress achieved to Cerebral Palsy individuals, through their Profiles revision, then making home visits to 20% from the total sample to measure the progress, by using the Functional Independent measure work sheet.

3.8. Research period

The study started on September 2007 when the initial proposal was approved. The literature review was completed on 1st April 2008. The validity testing, piloting and questionnaire distribution and collection took one month and completed on the beginning of May 2008. The study was carried out in Palestinian medical relief society in Jabalia & National society for rehabilitation in Gaza. The analysis, discussion, conclusion and recommendation was completed on the mid of June 2008.

3.9. Instrument : The researcher believes that the most suitable tool for achieving the purposes of the study is conducting a content analysis card for collecting, describing and analyzing data for examining , the effectiveness of CBR services on daily living activities of cerebral palsy's. It is explained that a modified content analysis card instrument developed by the researcher and refereed by a panel of experts for use to carry out the study (see appendix IV). The researcher modified his model benefiting from the previous studies, literature review, theoretical framework and the international standard models for examining the functional independent measures. Three meetings were held to determine the appropriate and suitable daily living functions for CP. To gain consensus from the panel of experts (working in the field).

3.10. Ethical consideration : an official approval letter from Helsinki committee in Gaza was obtained to allow the researcher to carry out the study .

3.11. Pilot Study

It is customary practice that the survey instrument should be piloted to measure its validity and reliability and test the collected data. The pilot study was conducted by distributing the prepared questionnaire to panels of experts having experience in the same field of the research to have their remarks on the questionnaire.

Ten expert representing two panels were contacted to assess the questionnaire validity. The first panel, which consisted of eight experts (related to the subjects), was asked to verify the validity of the questionnaire topics and its relevance to the research objective. The second panel, which consisted of two experts in statistics, was asked to identify that the instrument used was valid statistically and that the questionnaire was designed well enough to provide relations and tests among variables.

Expert comments and suggestions were collected and evaluated carefully. All the suggested comments and modifications were discussed with the study's supervisor before taking them into consideration. Then the researcher selected 25 CP's file for the piloting, from both the National society for rehabilitation(12 files) and Palestinian medical relief society(13 files), where records were reviewed, in-depth, then I asked the help of the CBR workers, who had significant contact, and worked with the CP's clients in order to fill the questionnaires. At the end of this process, some minor changes, modifications and additions were introduced to the questions and the final questionnaire was constructed.

3.12. Questionnaire Design

According to the review of literature and after interviewing experts who were dealing with the subject at different levels, all the information that could help in achieving the study objectives were collected, reviewed and formalized to be suitable for the study survey and after many stages of brain storming, consulting, amending, and reviewing executed by the researcher with the supervisor, a questionnaire was developed with closed questions.

The questionnaire was designed in the Arabic language (Annex 1), as most members of the target population were unfamiliar with the English language and to be more understandable. An English version was attached in (Annex 1). Unnecessary personal data, complex and duplicated questions were avoided. The questionnaire was provided with a covering letter which explained the purpose of the study, the way of responding, the aim of the research and the security of the information in order to encourage high response.

The questionnaire design was composed of two sections to accomplish the aim of the research, as follows:

1. The first section contained General Information(Personal information about the samples) .
2. The second section contained the Qualification of the encompasses all cerebral palsy's individuals included third main subsections as follows:

- the first subsection (field) was about the eating and drinking and consist from 5 items
- the second subsection (field) was about the grooming and consist from 13 items
- the third subsection (field) was about the transfer and locomotion and consist from 6 items .

3.13. Validity of the Questionnaire

Validity refers to the degree to which an instrument measures what it is supposed to be measuring . Validity has a number of different aspects and assessment approaches. There are two ways to evaluate instrument validity: content validity and statistical validity, which include criterion-related validity and construct validity.

3.14. Content Validity

Content validity test was conducted by consulting two groups of experts. The first was requested to evaluate and identify whether the questions agreed with the scope of the items and the extent to which these items reflect the concept of the research problem. The other was requested to evaluate that the instrument used is valid statistically and that the questionnaire was designed well enough to provide relations and tests between variables. The two groups of experts did agree that the questionnaire was valid and suitable enough to measure the concept of interest with some amendments.

3.15. Internal consistency

To insure the validity of the questionnaire, two statistical tests were applied. The first test is Criterion-related validity test (Pearson test) which measure the correlation coefficient between each paragraph in one field and the whole field. The second test is structure validity test (Pearson test) that used to test the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one filed and all the fields of the questionnaire that have the same level of similar scale.

Criterion Related Validity:

Internal consistency of the questionnaire is measured by a scouting sample, which consisted of twenty five questionnaires, through measuring the correlation coefficients between each paragraph in one field and the whole filed. Tables No.(2-6) show the correlation coefficient and p-value for each field paragraph. As shown the p- Values are less than 0.05 or 0.01,so the correlation coefficients of this field are significant at α

= 0.01 or α = 0.05, so it can be said that the paragraphs of this field are consistent and valid to be measure what it was set for.

Table No.(2)

The correlation coefficients between each paragraph in field related to (Eating and drinking)and the whole filed:

No.	Expression	Correlation	p-value	Significant level
	Sets properly when eating.	0.973	0.000	**
	Uses hands properly when eating	0.996	0.000	**
	Puts a suitable amount of food in his mouth .	0.994	0.000	**
	Uses spoon for eating .	0.944	0.000	**
	Drinks from the cup using his hands .	0.988	0.000	**

* Correlation coefficient is significant at the α = 0.05

* * Correlation coefficient is significant at the α = 0.01

Table no.(3)

The correlation coefficients between each paragraph in field related to (grooming)and the whole filed

No.	Expression	Correlation	p-value	Significant level
6	Washes his/ her hands.	0.883	0.000	**
7	Washes his/her face .	0.883	0.000	**
8	Brush his/her teeth .	0.881	0.000	**
9	Takes off his /her clothes .	0.888	0.000	**
10	Wears his/ her clothes .	0.940	0.000	**
11	Wears his/her shoes .	0.813	0.000	**
12	Combs his/her hair .	0.792	0.000	**
13	Cleans his/her nose-mouth	0.792	0.000	**
14	Trims his/her fingers-toe nails .	0.792	0.000	**
15	Bathe him/her self .	0.883	0.000	**
16	Controls Balder(continent).	0.834	0.000	**
17	Controls Bowel(continent) .	0.852	0.000	**
18	Uses toilet .	0.781	0.000	**

* Correlation coefficient is significant at the $\alpha = 0.05$

* * Correlation coefficient is significant at the $\alpha = 0.01$

Table no.(4)

The correlation coefficients between each paragraph in field related to (transfer and locomotion)and the whole filed

No.	Expression	Correlation	p-value	Significant level
19	Sets up from lying down position.	0.462	0.020	**
20	Stands up from setting position	0.590	0.002	**
21	Walks more than 10 steps.	0.413	0.040	*
22	Mobilizes inside the house.	0.610	0.001	**
23	mobilizes outside the house.	0.478	0.016	*
24	Climbs up the stairs .	0.415	0.039	*

* Correlation coefficient is significant at the $\alpha = 0.05$

* * Correlation coefficient is significant at the $\alpha = 0.01$

Structure validity is the second statistical test that used to test the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one filed and all the fields of the questionnaire that have the same level of liker scale.

As shown in table No.(5) for all fields, the significance values are less than 0.05 or 0.01, so the correlation coefficients of all the fields are significant at $\alpha = 0.01$ or $\alpha = 0.05$, so it can be said that the fields are valid to be measured what it was set for to achieve the main aim of the study .

Table No.(5)

The correlation coefficients between each paragraph in field related to (the effect of CBR program on the daily living activities of Cerebral Palsy Individuals) and the average of all fields

	Section	Correlation	p-value	Significant level
1	**Eating and drinking**	0.947	0.000	**
2	**grooming**	0.940	0.000	**
3	**transfer and locomotion**	0.664	0.000	**

* Correlation coefficient is significant at the $\alpha = 0.05$

* * Correlation coefficient is significant at the $\alpha = 0.01$

3.16. Reliability of the Research

The reliability of an instrument is the degree of consistency which measures the attribute; it is supposed to be measuring . The less variation an instrument produces in repeated measurements of an attribute, the higher its reliability. Reliability can be equated with the stability, consistency, or dependability of a measuring tool. The test is repeated to the same sample of people on two occasions and then compares the scores obtained by computing a reliability coefficient

It is difficult to return the scouting sample of the questionnaire-that is used to measure the questionnaire validity to the same respondents due to the different work conditions to this samples. Therefore two tests can be applied to the scouting sample in order to measure the consistency of the questionnaire. The first test is the Half Split Method and the second is Cronbach's Coefficient Alpha.

3.17. Split Half Method

This method depends on finding Pearson correlation coefficient between the means of odd questions and even questions of each field of the questionnaire. Then, correcting the Pearson correlation coefficients can be done by using Spearman Brown correlation coefficient of correction. The corrected correlation coefficient (consistency coefficient) is computed according to the following equation :

Consistency coefficient = $2r/(r+1)$, where r is the Pearson correlation coefficient. The normal range of corrected correlation coefficient $(2r/ r+1)$ is between 0.0 and + 1.0 As shown in Table no.(6), all the corrected correlation coefficients values are between 0.0 and +1.0 and the significant (α) is less than 0.05 so all the corrected correlation

coefficients are significance at α = 0.05. It can be said that according to the Half Split method, the dispute causes group are reliable.

Table No.(6)

Half Split Method

No.	Section	Correlation	corrected correlation coefficient	p-value	Significant level
1	Eating and drinking	0.9640	0.9640	0.9817	0.000
2	grooming	0.8065	0.8065	0.8929	0.000
3	transfer and locomotion	0.8097	0.8097	0.8948	0.000
	All sections	0.9675	0.9675	0.9835	0.000

* Correlation coefficient is significant at the α = 0.05

* * Correlation coefficient is significant at the α = 0.01

3.18. Cronbach's Coefficient Alpha

This method is used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cronbach's coefficient alpha value between 0.0 and + 1.0, and the higher values reflects a higher degree of internal consistency. As shown in Table no. (7), the Cronbach's coefficient alpha was calculated for the first field of the causes of claims, the second field of common procedures and the third field of the Particular claims. The results were in the range from 0.8267 and 0.8857. This range is considered high; the result ensures the reliability of the questionnaire.

Table No.(7)

Cronbach's coefficient alpha

No.	Section	No. of Items	Cronbach's coefficient alpha
1	**Eating and drinking**	5	0.9890
2	**grooming**	13	0.9651
3	**transfer and locomotion**	6	0.9052
4	**All sections**	24	0.7688

Thereby, it can be said that the researcher proved that the questionnaire was valid, reliable, and ready for distribution for the population sample.

3.19. Data Measurement

In order to be able to select the appropriate method of analysis, the level of measurement must be understood. For each type of measurement, there is an appropriate methods that can be applied and not others. In this research, interval scales were used. Based on Likert scale table no.(8) , we have the following:

Table no.(8)

Likert scale

Importance degree	sca
Complete independence	5
Modified independence (using device)	4
Minimal independence	3
Total dependence.	2
Have not received any training.	1

The interviewers were asked to provides their opinions on viewpoint of structural designers by scores 1 to 5, where "1" represent has not received training and "5" represent complete independence .

3.20. Data Analysis

The questionnaire quantitative statistical analysis was done by using the Statistical Package for the Social Sciences (SPSS) and the following statistical analyses were used:

1. Frequencies and percentages
2. Pearson Correlation Coefficient for data
3. Spearman brown formula
4. Relative important formula
5. Paired samples t test

3.21. Response rat

The response rate was 89% because the CBR workers , evaluated CP's clients since the year 2003 , but the families took care of her child, without any intervention of CBR workers. So their files were closed in the year 2006. On the other hand there were misunderstanding in the files of other CP's client's.

CHAPTER 4

Findings

CHAPTER 4

Findings

The current study aims to evaluate the effectiveness of CBR services , on the daily living activities (eating & drinking, grooming, transferring & locomotion) of CP's individuals . To achieve the purpose, the study attempts to answer the question of the study ; to which extension did the CBR services provide to Cerebral palsy's individuals in Gaza improve their daily living activities. Through using a modified content analysis card developed by the researcher and refereed by a panel of experts. This chapter describes the results that have been obtained from 89 questionnaires. For this purpose the statistical package for social sciences SPSS was used. The information about the sample size, is presented

One-Sample Kolmogorov-Smirnov Test

Kolmogorove- Smirnov test will be used to identify if the data follow normal distribution or not, this test is considered necessary in case testing hypotheses as most parametric Test stipulate data to be normality distributed.

Results test as shown in table (9) , clarifies that the significant level calculated are greater than 0.05 (sig. > 0.05), this in turn denotes that data follows normal distribution, and so parametric Test must be used.l

Table (9)

1-Sample Kolmogorov-Smirnov Test

Section	Admission		Discharge	
	Kolmogorov-Smirnov Z	P-value	Kolmogorov-Smirnov Z	P-value
Eating and drinking	1.013	0.256	0.724	0.671
grooming	0.924	0.360	0.874	0.430
Transfer and locomotion	1.063	0.208	0.789	0.563
All sections	0.538	0.935	0.930	0.352

Descriptive analysis for the study variables

Gender:

Table No. (10) show that51.7 % from the sample from male, and 48.3 % from the sample from female.

Table No.(10)

Gender

Gender	Frequency	Percent
Male	46	51.7
Female	43	48.3
Total	89	100.0

Client's level of education:

Table No. (11) show that 11.2 % from the sample the Client's level of education are primary, 2.2 % from the sample the Client's level of education are preparatory, 3.4% from the sample the Client's level of education are secondary, and83.1 % from the sample the Client's level of education have no education

Table No.(11)

Client's level of education

Client's level of education	Frequency	Percent
primary	10	11.2
preparatory	2	2.2
secondary	3	3.4
without	74	83.1
Total	89	100.0

Type of Cerebral Palsy:

Table No. (12) show that 71.9% from the sample the type of cerebral palsy are spastic, 15.7% from the sample the type of cerebral palsy are ataxic ,15.7 % from the sample the type of cerebral palsy are Athitoed, 6.7 % from the sample the type of cerebral palsy are mixed ,and 5.6 % from the sample the type of cerebral palsy are undiagnosed.

Table No.(12)

Type of Cerebral Palsy

Type of Cerebral Palsy	Frequency	Percent
spastic	64	71.9
ataxic	14	15.7
Athetoid	6	6.7
mixed	5	5.6
Total	89	100.0

Site of body lesion:

Table No. (13) show that 52.8 % from the sample the Site of body lesion are Quadra pelagia, 2.2 % from the sample the Site of body lesion are triplegia, 42.7 % from the sample the Site of body lesion are diplegia,and 2.2% from the sample the Site of body lesion are monoplegia.

Table No.(13)

Site of body lesion

Site of body lesion	Frequency	Percent
Quadra pelagia	47	52.8
triplegia	2	2.2
diplegia	38	42.7
monoplegia	2	2.2
Total	89	100.0

Service delivery Period:

Table No. (14) show that 4.5 % from the sample the service delivery Period between 1 month to 3 months, 10.1% from the sample the service delivery Period between 4 months to 8 months, and 85.4 % from the sample the service delivery Period 9 months or more.

Table No.(14)

Service delivery Period

Service delivery Period	Frequency	Percent
1 month-3 months	4	4.5
4 months-8 months	9	10.1
9 months or more	76	85.4
Total	89	100.0

Number of family's members:

Table No. (15) show that 34.8 % from the sample the number of family's members less than 5 members, 51.7 % from the sample the number of family's members are between 5-10 members, and 13.5 % from the sample the number of family's members are ,ore than 10 members.

Table No.(15)

Number of family's members

Number of family's members	Frequency	Percent
Less than 5 members	31	34.8
5-10 members	46	51.7
More than 10 members	12	13.5
Total	89	100.0

Level of monthly income:

Table No. (16) show that 9.0% from the sample the Level of monthly income are good, 53.9% from the sample the Level of monthly income are moderate, and 37.1 % from the sample the Level of monthly income are bad.

Table No.(16)

Level of monthly income

Level of monthly income	Frequency	Percent
good	8	9.0
moderate	48	53.9
bad	33	37.1
Total	89	100.0

Level of education of father:

able No. (17) show that36.0 % from the sample the level of education of father are primary,19.1 % from the sample the level of education of father are preparatory, and 44,9 % from the sample the level of education of father are Secondary or more.

Table No.(17)

Level of education of father

Level of education of father	Frequency	Percent
primary	32	36.0
preparatory	17	19.1
Secondary or more	40	44.9
Total	89	100.0

Level of education of mother:

Table No. (18) show that 27.0.% from the sample the level of education of mother are primary, 23.6% from the sample the level of education of mother are preparatory , and49.4 % from the sample the level of education of mother are Secondary or more.

Table No.(18)

Level of education of mother

Level of education of mother:	Frequency	Percent
primary	24	27.0
preparatory	21	23.6
Secondary or more	44	49.4
Total	89	100.0

Father's work:

Table No. (19) show that 60.7 % from the samples of fathers are works , but 39.3 % are not works.

Table No.(19)

Father's work

Father's work	Frequency	Percent
Work	54	60.7
Not work	35	39.3
Total	89	100.0

Mother's work:

Table No. (20) show that 11.2 % from the samples of mothers are works , and 88.8 % from the sample are not works.

Table No.(20)

Mother's work

Mother's work	Frequency	Percent
Work	10	11.2
Not work	79	88.8
Total	89	100.0

Testing hypotheses:

Research question :

To which extent did the CBR services provide to Cerebral palsy clients improve their daily living activities ?.

1.Did the CBR services increase independency in eating and drinking activities ?.

2. Did the CBR services increase independency in grooming ?.

3.Did the CBR services increase independency in .transfer and locomotion ?

From the above mentioned research questions the researcher derived the following main hypothesis :

There is no difference in the respondent of the samples for the effect of CBR program on the daily living activities of Cerebral Palsy Individuals in Gaza governorates before and after works at significant level $\alpha = 0.05$

From this hypotheses we have the three branches sub-hypotheses as the following:

1. There is no difference in the respondent of the samples for Eating and drinking for cerebral palsy's individuals before and after works at significant level $\alpha = 0.05$

To test the hypothesis we use the paired sample t test which use for testing the difference between the means of the correspondent before and after work (admission and discharge for eating and drinking) and the result listed in table No.(21), which illustrate the following result:

The p-value for each item and the all items are greater than 0.05, and the absolute value of t test is small than the critical t value , so we fail to reject the hypothesis, that mean There is no difference in the respondent of the samples for Eating and drinking for cerebral palsy's individuals before and after works at significant level $\alpha = 0.05$

Table No.(21)

Paired samples t test for the difference of means between admission and discharge in Eating and drinking

No.	item	mean		difference	t-value	p-value
		Admission	Discharge			
1	Sits properly when eating.	3.40	3.53	-0.124	-1.330	0.187
2	Uses hands properly when eating .	3.34	3.46	-0.124	-1.258	0.212
3	Puts a suitable amount of food in his mouth .	3.35	3.46	-0.112	-1.149	0.254
4	Uses spoon for eating .	3.33	3.39	-0.067	-0.726	0.470
5	Drinks from the cup using his hands .	3.30	3.43	-0.124	-1.241	0.218
Total	Total	3.343	3.453	-0.110	-1.169	0.245

2.There is no difference in the respondent of the samples for grooming for cerebral palsy's individuals before and after works at significant level $\alpha = 0.05$

To test the hypothesis we use the paired sample t test which use for testing the difference between the means of the correspondent before and after work (admission and discharge for grooming) and the result listed in table No.(22), which illustrate the following result:

The p-value for the items (Brush his/her teeth , Takes off his /her clothes , Wears his/ her clothes , Wears his/her shoes , and Trims his/her fingers-toe nails) are greater than 0.05, and the absolute value of t test is small than the critical t value which is equal 1.99 , so there is no difference in the respondent of the samples for the items (Brush his/her teeth , Takes off his /her clothes , Wears his/ her clothes , Wears his/her shoes , and Trims his/her fingers-toe nails) before and after works at significant level $\alpha = 0.05$.

Table (22) show also that the p-value for the remainder items are less than 0.05, and the absolute value of t test is greater than the critical t value which is equal 1.99 , so there is a difference in the respondent of the samples for the items (Washes his/ her hands, Washes his/her face, Combs his/her hair, Cleans his/her nose-mouth, Bathe him/her self, Controls Balder(continent), Controls Bowel(continent), and Uses toilet) before and after works at significant level $\alpha = 0.05$

For general the p-value for all items are equal 0.011which is less than 0.05, and the absolute value of t test is equal 2.612 which is greater than the critical t value which is equal 1.99 so reject the hypothesis, that means There is a difference in the respondent of the samples for grooming for cerebral palsy's individuals before and after works at significant level $\alpha = 0.05$

Table No.(22)

paired samples t test for the difference of means between admission and discharge in grooming

No.	item	mean		difference	t-value	p-value
		Admission	Discharge			
6	Washes his/ her hands.	2.98	3.21	-0.236	-2.495	0.014
7	Washes his/her face	2.94	3.19	-0.247	-2.604	0.011
8	Brush his/her teeth .	2.91	3.02	-0.112	-1.684	0.096
9	Takes off his /her clothes .	2.97	3.07	-0.101	-1.348	0.181
10	Wears his/ her clothes .	2.93	3.02	-0.090	-1.133	0.260
11	Wears his/her shoes .	2.79	2.81	-0.022	-0.315	0.754
12	Combs his/her hair .	2.65	2.84	-0.191	-2.751	0.007
13	Cleans his/her nose-mouth	2.70	2.88	-0.180	-2.481	0.015
14	Trims his/her fingers-toe nails .	2.66	2.74	-0.079	-1.305	0.195
15	Bathe him/her self .	2.80	2.96	-0.157	-2.327	0.022
16	Controls Bladder(continent)	3.08	3.29	-0.213	-2.504	0.014
17	Controls Bowel(continent) .	3.12	3.30	-0.180	-2.225	0.029
18	Uses toilet .	3.04	3.26	-0.213	-2.344	0.021
Total(all items)		2.8902	3.0458	-0.156	-2.612	0.011

3.There is no difference in the respondent of the samples for transfer and locomotion for cerebral palsy's individuals before and after works at significant level $\alpha = 0.05$

To test the hypothesis we use the paired sample t test which use for testing the difference between the means of the correspondent before and after work (admission and discharge for transfer and locomotion) and the result listed in table No.(23), which illustrate the following result:

The p-value for each item(except the item " Stands up from setting position") and the all item are less than 0.05, and the absolute value of t test is small than the critical t value , so reject the hypothesis, that mean There is difference in the respondent of the samples for transfer and locomotion for cerebral palsy's individuals before and after works at significant level $\alpha = 0.05$.

Table no.(23)

paired samples t test for the difference of means between admission and discharge in transfer and locomotion.

No.	item	mean		difference	t-value	p-value
		Admission	Discharge			
19	Sets up from lying down position.	3.53	3.78	-0.247	-2.408	0.018
20	Stands up from setting position .	3.22	3.40	-0.180	-1.582	0.117
21	Walks more than 10 steps.	3.08	3.38	-0.303	-2.849	0.005
22	Mobilizes inside the house.	3.29	3.63	-0.337	-3.146	0.002
23	mobilizes outside the house.	3.13	3.52	-0.382	-3.364	0.001
24	Climbs up the stairs .	3.19	3.38	-0.191	-1.825	0.071
Total (all items)		3.2416	3.5150	-0.273	-2.923	0.004

There is no difference in the respondent of the samples for the effect of CBR program on the daily living activities of Cerebral Palsy Individuals in Gaza governorates before and after works at significant level $\alpha = 0.05$.

To test the hypothesis we use the paired sample t test which use for testing the difference between the means of the correspondent before and after work (admission and discharge for transfer and locomotion) and the result listed in table No.(24), which illustrate the following result:

The p-value for each item(except the section " Eating and drinking ") and the all item are less than 0.05, and the absolute value of t test is small than the critical t value , so we reject the hypothesis, that means There is difference in the respondent of the samples for the effect of CBR program on the daily living activities of Cerebral Palsy Individuals in Gaza governorates before and after works at significant level $\alpha = 0.05$

Table No.(24)

Paired samples t test for the difference of means between admission and discharge in all items

No.	item	Mean		difference	t-value	p-value
		Admission	Discharge			
1	**Eating and drinking**	3.3438	3.4539	-0.110	-1.169	0.245
2	**grooming**	2.8902	3.0458	-0.156	-2.612	0.011
3	**transfer and locomotion**	3.2416	3.5150	-0.273	-2.923	0.004
	All sections	3.0726	3.2481	-0.176	-2.669	0.009

Chapter 5

Discussion, Conclusion and Recommendations

Chapter 5

Discussion, conclusion and recommendations:

In this chapter the researcher will point out the main results of the study and will discuss its implications then display the suggested recommendations.

It is worth reminding the reader that the presented information based on 89 participants from the CP individuals who received community based rehabilitation services from Palestinian medical relief society or National society for rehabilitation in Gaza .

5.1. Findings of the study revealed that there is no difference in the respondent of the samples for eating and drinking for cerebral palsy's individuals before and after works at significant level $\alpha = 0.05$, where The p-value for each item and the all items are greater than 0.05 .

The result listed in table No.(21), illustrate that , the p-value of the item :

Sits properly when eating is (0.187), Uses hands properly when eating is (0.212), Puts a suitable amount of food in his mouth is (0.254), Uses spoon for eating is (0.470), Drinks from the cup using his hands is (0.218) , and the total items (0.245) are greater than 0.05, and the absolute value of t test is small than the critical t value , which means that CBR programs failed to teach activities of daily living skills to persons with CP disabilities in a successful manner , Also CBR personnel acknowledge benefits of the program , but the result here point to some problems including lack in the ability of training skills of the CBR workers and /or they spend a high proportion of their time on matters other than rehabilitation such as counseling family members and giving other rehabilitation support.

It is thought that the impairments in movement of the CP as most of the sample (71.9) are spastic CP which may affect the performance of activities of (eating & drinking) . on the other hand the method of training skill needed to down syndrome's person is completely deferent from that needed to train spina –bifida person, or that CP's or any mentally retarded person. So the CBR workers my be effective trainer in one but not in another .

Some times CBR worker & the family members forget that the children learn the skill by imitation , or learning by doing . Parents obviously have very different degrees of capability, time, and energy in dealing with their children; and there are some for whom greater involvement may be unrealistic ,whether because of unemployment, poverty, or ingrained attitudes, or because of other circumstances. There may simply be

no one through whom the CBR worker could work. However, many parents and family members are eager to become involved, given the necessary support, guidance, and information.

5.2. Finding of the study revealed that for general, the p-value for all items are equal 0.011 which is less than 0.05, and the absolute value of t test is equal 2.612 which is greater than the critical t value which is equal 1.99 so reject the hypothesis, that means There is a difference in the respondent of the samples in grooming for cerebral palsy's individuals before and after works at significant level $\alpha = 0.05$

Where the result shows the following : Washes his/ her hands 0.014 , Washes his/her face 0.011 , Combs his/her hair 0.007, Cleans his/her nose-mouth 0.015, Bathe him/her self 0.022, Controls Bladder(continent). 0.014, Controls Bowel(continent) 0.029, Uses toilet 0.021, but the result of other grooming items like , Brush his/her teeth 0.096 , Takes off his /her clothes 0.181, Wears his/ her clothes 0.754 , Wears his/her shoes 0.754, Trims his/her fingers-toe nails 0.195 . while the p-value for the items are greeter than 0.05 . Although Table No. (11) show that 83.1 % from the sample the Client's level of education have no education , Table No. (12) show that 71.9% from the sample the type of cerebral palsy are spastic, Table No. (13) show that 52.8 % from the sample the Site of body lesion are Quadra pelagic , but the p – value of grooming items is less than 0.05 , which means there is progress in this activity . I think that is return partially to the period of service delivery as the Table No. (14) show that 85.4 % from the sample received service for more than 9 months . on the other hand the level of education of mother is highly affects the training process of their CP , where the Table No. (18) show that 49.4 % from the sample the level of education of mother are Secondary or more .

On the other hand Table No. (20) show that 88.8 % from the sample of mothers are not works , that means by one way or another that the mother give attention to the training of her CP child.

5.3. Finding of the study revealed that in general, the p-value for all items are equal 0.004 which is less than 0.05, and the absolute value of t- test is equal 2.612 which is greater than the critical t value which is equal 1.99 so reject the hypothesis, that means , There is a difference in the respondent of the samples in transfer & locomotion for cerebral palsy's individuals before and after works at significant level $\alpha = 0.05$. Where the result shows the following : Sets up from lying down position. 0.018, Stands up from setting position . 0.117, Walks more than 10 steps. 0.005 , Mobilizes inside the house 0.002, mobilizes outside the house 0.001, Climbs up the stairs 0.071 , total items are equal 0.004 .

Table No. (12) show that 71.9% from the sample the type of cerebral palsy are spastic, , Table No. (13) show that 52.8 % from the sample the Site of body lesion are Quadra pelagia , Table No. (17) show that 44,9 % from the sample the level of education of father are Secondary or more , Table No. (18) show that 49.4 % from the sample the level of education of mother are Secondary or more .

That means the level of education & period of service delivery (9 month or more) , affects positively in the mind and heart of the parents awareness that lead them to provide training exercises , and any needed technical aids prescribe by professionals (wheel chair, walker , crèches) to their children, that can help in the transfer & locomotion of the cerebral palsy individuals in door and out door, or even surgical intervention in spite of the type and the site of body lesion (spastic & Quadra pelagic).

5.4. The main hypothesis:

To test the main hypothesis we use the paired sample t test which use for testing the difference between the means of the correspondent before and after work (admission and discharge for (eating and drinking ,grooming , transfer and locomotion) and the result listed in table No.(24), illustrate the following result:

The p-value for Eating and drinking, (0.245) , grooming , (0.011) , transfer and locomotion, (0.004) , All sections, (0.009).

The p-value for each section (except the section " Eating and drinking ") and the all item are less than 0.05, and the absolute value of t test is small than the critical t value so we reject the hypothesis, that means There is difference in the respondent of the samples for the effect of CBR program on the daily living activities of Cerebral Palsy Individuals in Gaza governorates before and after works at significant level $\alpha = 0.05$. my comments on the first section of daily livings (Eating and drinking), where there is no difference in the respondent of the samples for the effect of CBR program , means that, there was basically, no need to work on eating and drinking skills, because the respondents are trained by their parents to perform the items of eating & drinking skills, as all of the respondents age are above 5 years old

But the results of the second section of the daily living activity (grooming ,) where it shows, there is difference in the respondent of the samples for the effect of CBR program , means that any person whatever his disability , if he is not able to wash his hands , face ,bathe himself , control bowel & bladder, wear his clothes , these skills extremely affects both the CP's person & his family's life, by adding overload on whole their life rolls.

So the family and CP person find themselves in a challenge that lead to cooperate with the CBR workers , to release the stressors resulting from the un-ability to take care of himself .

The results of the third section of daily living activity (transfer& locomotion) where it shows , there is difference in the respondent of the samples for the effect of CBR program , means that if the CP's person is not able to transfer or locomotive in the environment where he is living , he will be completely dependant , on the family 's members that consumes most of their times , specially when we are speaking about permanent and developmental disability affects on the CP health state, social and psychological interactions.

So that, the CP's person & his family find that cooperation in the training process highly beneficiary , as it helps to save their time, prevents further complications , release the stressors, and facilitate the integration process in the large community.

Also I see that the researcher result is agree with (Hasheem Mannan et al 2007) When he mentioned that, the primary component of CBR as a concept and ideology is that community members are willing and able to mobilize local resources and provide appropriate services to people with disabilities. Other components of a multi-disciplinary CBR program include: (a) creating positive attitudes towards people with disabilities, (b) providing functional rehabilitation services (e.g., physical therapy, occupational therapy, orientation and mobility training, speech therapy, counseling, orthotics and prosthetics), (c) providing education and training opportunities (e.g., early childhood intervention and referral especially to medical rehabilitation services, special education in mainstream or special schools, sign language, Braille training, training in activities of daily living skills) .

The result of the researcher study emphasis the idea that CBR has been described on the basis of component features such as:

• provision of functional rehabilitation services
• creating a positive attitude towards people with disabilities
• the creation of micro and macro income-generation
• vocational training
• the prevention of the causes of disabilities (United Nations Economic and Social Commission for Asia and the Pacific 1997).

All of the mentioned component features cannot be applicable if there was not progress in the function of the person with disability.

The result of the researcher study agree with the basic CBR principle, which emphasize on the transfer of knowledge about disabilities and skills in rehabilitation to people with disabilities, and families (Hasheem Mannan* et al 2007) .

On the contrast to researcher study results , Van Zelst, et al (2006) Findings suggested that, Functional performance for the sample was below that of age-matched normative data. Motor performance in activities of daily living as detected seemed to worsen with age in children with hemiplegic's CP.

Also Steenbergen ,(2006). showed that activity limitation in individuals with hemiplegic's CP is not exclusively caused by disorders related to movement execution, but is also related to the planning of movements. In this article, converging evidence is presented suggesting that, in addition to movement execution impairments, impairments in movement planning may also limit the performance of activities of daily living.

Jahnsen et al (2006). results showed that Participants rated their current gross motor function using the gross motor function classification system (GMFCS) and reported their judgment of their gross motor function at age 10 to 12 years. More than half the participants experienced a stable gross motor function from the age of 10 to 12 years to the present. Those at the age of 10 to 12 years (according to the professional rating) had significant change for the worse in gross motor function over time.

Worth mentioned that , overwork, poverty, severe social tensions, and sheer exhaustion make parental involvement a challenging proposition, not only in developing countries (Thorburn1990; Miles 1990), but in any situation where, especially for low-income households, the progress of their handicapped child may be the least of the parents' worries (McConkey 1986).

The independent evaluation of the Zim care program (Madzima et al. 1985) revealed that the home visitors spent a high proportion of their time on matters other than rehabilitation such as counseling family members and giving economic support.

In spite of what has mentioned ,and according to my experience in the field , showed that the person's own carets as the primary training agents, and the family needs to learn how best to help, through systematic support and encouragement from the environment in which the disabled person lives ,are strongly affecting the progress in the activity of daily livings of the CP individuals.

But it may sometimes be unrealistic and unreasonable to assume that all parents can adopt the role of teacher or trainer in relation to their child. In addition, a closer examination of much CBR work on the ground reveals that the 'community' often amounts only to the families directly affected; and, in place of 'parents', there is frequently a mother struggling alone to balance the needs of her disabled child along with her many other responsibilities. In more than one family with whom we have worked, in many areas in Gaza governorate , the household is maintained by a woman, and there is no father figure at all. In many others, the father's role does not extend to assisting the disabled child ,although the deterioration in any activity of daily living will affect all life domain,& hence in the quality of life .

So the progress in activity of daily living extremely affects the self worth of any person specially the person with disability , his intimate relation with others , the process of integration in family or/and in large community, in addition to the essential effects on the self – independency .

Conclusion:

The findings of this study revealed that there are statistical differences, for the effect of CBR programs on the daily living activities of Cerebral Palsy's clients in Gaza governorates before and after worked with them by the CBR workers. Overview of these findings showed that CP clients have more opportunities of obtaining services, care, and more attention from society. In spite of poverty, and limited sources, it was easier for them to benefit from the other social services to promote further, independency and community's integration. Regarding that, there is scope to further improvement in other functions for them.

Also the findings illustrated how CBR programs worked through the main items of the daily living activities(eating-drinking-grooming-–locomotion & transferring). where there was no difference in the respondents of the samples for the effect of CBR programs on eating and drinking, basically because the respondents are trained by their parents to perform eating & drinking skills. But the second finding showed there was difference in the respondent of the samples for grooming function . That means there were concert changes in the items of grooming(wash hands, face ,bathe himself,

control bowel & bladder, wear his clothes), before and after work. Which would add overload on the whole family life, if the family did not cooperate with the CBR workers in the training process .

Also the findings showed, there was difference in the respondent of the samples in(transfer& locomotion) before and after work. That means there was valued outcome of the physiotherapy training exercises , and the provided technical aids prescribe by professionals (wheel chair, walker , crèches), or even surgical intervention to CP clients. All of that can help in the transfer & locomotion of the cerebral palsy clients in door and out door. On the contrary , when CP client is not able to transfer or locomotive in the environment where he is living , he will be completely dependant , on the family's members that consumes most of their times , specially when we are speaking about permanent and developmental disability affects on the CP health state.

The improvement in of functional training for cerebral palsy's persons, (in daily living care) , will lead to valued outcomes , by using the functional abilities to reach, health facilities; schools , vocational training , special education centers.

Although CP Parents obviously have very different degrees of capability, time, and energy in dealing with their children; and there are some for whom greater involvement may be unrealistic, whether because of unemployment, poverty, or ingrained attitudes,

or because of other circumstances. There may simply be no one through whom the home visitor could work.

Based on my experiences in this study, I suggested that we need a study based on gathering information from the CP themselves the users of CBR, instead of using just their files .

So that the CP clients should be active partners in the planning and Implementation of all measures affecting their functional, social and cultural rights, persons with disabilities have not yet become sufficiently involved in evaluations and impact assessments.

In general, the results mean the progress achieved in the daily living activity of the CP will lead to more engagement in the community. Where it will help to change psychological atmosphere, break the isolation for the excluded, increasing opportunities and making their human rights a reality; in short for persons with disabilities recognition of their dignity replacing the customary prejudice.

Finally this study concluded that there is difference in the respondent of the samples for the effect of CBR program on the daily living activities of Cerebral Palsy Clients in Gaza governorates before and after work with them .

Difficulties faced the researcher :

1. There was Difficulties in classifying the type and the site of cerebral palsy disability (CP) .
2. The researcher was obliged to take the CP closed files of (2006), since the files of (2007) was not closed yet.
3. Resources were not available. No national or regional previous study.
4. Closure of Gaza Strip, electricity breakdown, and exacerbation of the paper cost.
5. The shortage of references related to the topic in the local libraries.

RECOMMENDATIONS:

1. improve coordination, and communications between the various partners in the rehabilitation process, if meaningful progress is to be achieved .
2. it is increasingly clear that CBR workers need more acknowledge more about skills related to clinical functional tasks of daily living activity .
3. Implementation of continuous education programs to the CBR workers to adopt new learning skills for training both the family and their CP child.
4. Further researches on the effectiveness of CBR programs services to other types of physical disabilities .
5. Further researches on the effectiveness of CBR programs services to visually and hearing impaired people.
6. Further researches on the effectiveness of CBR programs services to mentally retarded people .
7. Making the family participation in the rehabilitation training process as top priority .
8. It is important to construct specific tool assessment for each type of disability(metal, visual , mute, physical, speech) , rather than working with one tool for all disabled.

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30/8/2008)

Annexes

Annex 1

بسم الله الرحمن الرحيم

الجامعة الإسلامية – غزة
The Islamic University - Gaza

عمادة الدراسات العليا
Ref. ج س غ/35/
Date 2008/03/19

هاتف داخلي: 1150

الأخ الفاضل/ أ. عبد الهادي أبو خوصة
مدير جمعية الإغاثة الطبية

حفظه الله،

السلام عليكم ورحمة الله وبركاته،

الموضوع/ تسهيل مهمة طالب ماجستير

تهديكم عمادة الدراسات العليا بالجامعة الإسلامية أعطر تحياتها، وترجو من سيادتكم التكرم بتسهيل مهمة الطالب/ **ناصر محمد مصطفى غانم** برقم جامعي **2004/4840** المسجل في برنامج الماجستير بكلية **التربية** تخصص **الصحة النفسية المجتمعية/علوم التأهيل**، وذلك بهدف تطبيق استبانته والحصول على المعلومات التي تساعده في إعداد دراسته والمعنونة:

"The effectiveness of Community Based Rehabilitation Servicess Provided to Cerebral Palsy' individuals in Gaza Governorates"

والله ولي التوفيق ،،،

عميد الدراســات العليا

د. مازن إسماعيل هنية

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- الملف.

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Annex 2

بسم الله الرحمن الرحيم

الجامعة الإسلامية – غزة
The Islamic University - Gaza

عمادة الدراسات العليا
Ref. ج س غ/35/
Date 2008/03/19

هاتف داخلي: 1150

الأخ الفاضل/ د. عبد الرحمن البرقاوي حفظه الله،
مدير الجمعية الوطنية لتأهيل المعوقين

السلام عليكم ورحمة الله وبركاته،

الموضوع/ تسهيل مهمة طالب ماجستير

تهديكم عمادة الدراسات العليا بالجامعة الإسلامية أعطر تحياتها، وترجو من سيادتكم التكرم بتسهيل مهمة الطالب/ **ناصر محمد مصطفى غانم** برقم جامعي **2004/4840** المسجل في برنامج الماجستير بكلية **التربية** تخصص **الصحة النفسية المجتمعية/علوم التأهيل**، وذلك بهدف تطبيق استبانته والحصول على المعلومات التي تساعده في إعداد دراسته والمعنونة:

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Annex 3

Panel Committee Names

No.	Member	Society	Degree
1.	Issam Atallh	Physically disabled society	Master
2.	Nahid Aide	Palestinian A venire society	Master
3.	Abed-El Hady Masalha	UNRW Visional impaired Center	Doctor
4.	Ahmed Faieq	Mercy Society	Master
5.	Wasef Al-wekhery	Palestinian A venire society	Master
6.	Mahmoud Hemaid	Community College for A applied Science	Master
7.	Salah Saleh	Community College for A applied Science	Master
8.	Sammy Abu-shamala	Community College for A applied Science	Master
9.	Nafez Parkaat	Islamic University	Doctor
10.	Mohamed EL-helow	Islamic University	Doctor

Annex 4

بسم الله الرحمن الرحيم

بطاقة تحكيم

الدكتور/ة.....حفظه الله

السلام عليكم ورحمة الله وبركاته،،،

تهدف هذه الاستبانة إلى جمع البيانات اللازمة لدراسة حول:

" تقييم اثر الخدمات المقدمة من مؤسسات التأهيل المجتمعي على أنشطة الحياة اليومية لمعاقي الشلل الدماغي في قطاع غزة"

أرجو التكرم بالتعاون في تعبئة هذه الاستبانة والتي هي جزء من دراستي للحصول على درجة الماجستير في علوم التأهيل من الجامعة الإسلامية –بغزة .

كما سيكون لأرائكم بالغ الأثر في نجاح هذه الدراسة وما يترتب عليها من تطوير للخدمات المقدمة من برامج التأهيل المجتمعي.

تحتوي الاستبانة بالإضافة للبيانات الشخصية على المجالات التالية:

الأول: (الأكل والشرب) ويتضمن الجلوس بشكل صحيح و عملية تناول الطعام و الشراب .

ثانياً: (النظافة الشخصية) و يتضمن غسل الوجه واليدين ،تنظيف الأسنان ، قص الأظافر والعناية بالشعر، قضاء الحاجة ، وخلع و ارتداء الملابس و التحكم بالتبول والتبرز والوصول للحمام .

ثالثاً: (الحركة و التنقل) وتتضمن الجلوس و الوقوف والمشي والتحرك داخل وخارج المنزل

ويتم الإجابة من خلال خيارين (بداية العمل و نهاية العمل) على بنود كل محور من محاور المجالات السابقة و حسب الأداء الوظيفي للمعاق عند بداية العمل معه ، ومن ثم التطور الوظيفي الحاصل بعد الانتهاء من العمل معه .

وتفضلوا بقبول فائق الاحترام والتقدير،،،

الباحث: ناصر محمد غانم

إشراف أ. د. محمد الحلو

كلية التربية - قسم علم النفس- الجامعة الإسلامية

Annex 5

بيانات شخصية :

.1	**تاريخ الميلاد** :				
.2	**الجنس**:	£ ذكر	£ أنثى		
.3	**المستوى التعليمي**:	£ ابتدائي	£ إعدادي	£ ثانوي فما فوق	
.4	**نوع الشلل الدماغي**:	£ شلل تشنجي	£ شلل ترنحي	£ شلل كنعي	£ شلل مختلط
.5	**الشلل الدماغي حسب الإصابة في الجسم** :	£ شلل رباعي	£ شلل ثلاثي	£ شلل ثنائي	£ شلل أحادي
.6	**مدة تلقي الخدمة**:	£ 1-3 شهور	£ 4-8 شهور	£ 9 شهور فأكثر	
.7	**عدد أفراد الأسرة**				
.8	**مستوى الدخل الشهري**	£ جيد	£ متوسط	£ سيء	
.9	**المستوى التعليمي للأب**	£ ابتدائي	£ إعدادي	£ ثانوي فما فوق	
.10	**المستوى التعليمي للام**	£ ابتدائي	£ إعدادي	£ ثانوي فما فوق	
.11	**عمل الأب**				
.12	**عمل الأم**				

Annex 6

الاختبار الوظيفي لمهارات الحياة اليومية
المقياس :
5- استقلال تام (يستطيع إنجاز الهدف).
4- استقلال متوسط (يستطيع إنجاز الهدف بمساعدة شخص أو جهاز).
3-استقلال بسيط (يستطيع إنجاز الهدف بمساعدة كبيرة).
2- اتكالية تامة (لا يستطيع إنجاز الهدف دون مساعدة).
1- لم يتلقى اى تدريب.

م.	الوظيفة	بداية العمل	نهاية العمل				
	أولا /الطعام والشراب						
1.	يجلس عند تناول الطعام بطريقة سليمة						
2.	يتناول الطعام بيده بطريقة سليمة						
3.	يضع كمية مناسبة من الطعام في فمه						
4.	يستخدم الملعقة لتناول الطعام						
5.	يشرب من الكوب بيديه						
	ثانيا/النظافة الشخصية						
6.	يغسل يديه بالماء والصابون						
7.	يغسل وجهه بالماء والصابون						
8.	ينظف أسنانه باستخدام المعجون و الفرشاة						
9.	يخلع الملابس						
10.	يرتدي الملابس						
11.	يرتدي الحذاء						
12.	يمشط شعره						
13.	يمسح انفه وفمه بالمنديل						
14.	يقلم أظافره						
15.	يستحم بمفرده						
16.	يتحكم في التبول						
17.	يتحكم في التبرز						
18.	يستخدم الحمام لقضاء الحاجة						
	ثالثا / مهارات التنقل						
19.	يجلس من وضع الاستلقاء						
20.	يقف من وضع الجلوس						
21.	يمشي أكثر من 10خطوات						
22.	يتنقل داخل المنزل						
23.	يتنقل خارج المنزل						
24.	يصعد الدرج						
الإجمالي							
النسبة المئوية							

Annex 7

Evaluation the effectiveness of Community Based Rehabilitation Services on daily living activities of Cerebral Palsy' individuals in Gaza Governorates

Dear Mr./ Mrs./Ms.: .....

Subject: Refereeing content analysis card

The researcher is carrying out an MA research on ***effectiveness of Community Based Rehabilitation Services on daily living activities of Cerebral Palsy*** .

Based on the international models for classifying life skills needed to be applied to physically disabled, the researcher modified a model which includes three main domains for daily life activity eating & drinking , grooming , transferring & locomotion .

You are kindly invited to referee the list by adding, deleting or modifying the items in the light of the following:

1. Its importance to the Cerebral Palsy individuals.
2. Its appropriateness to the Palestinian Cerebral Palsy individuals .
3. Its clearness and comprehension in covering the needed daily living activities.

Thank you for collaboration

The researcher
Nasser Mohammad Ghanem

Annex 8

Initial personal information :

Date of birth:

Gender:

Client's level of education:

Type of Cerebral Palsy:

Spastic – Ataxic – Athitoed – Mixed

Site of body lesion:

Quadra pelagia –triplegia – diplegia - monoplegia

Service delivery Period:

Number of family's members:

Level of monthly income:

Level of education of father:

Level of education of mother:

Father's work :

Mother's work :

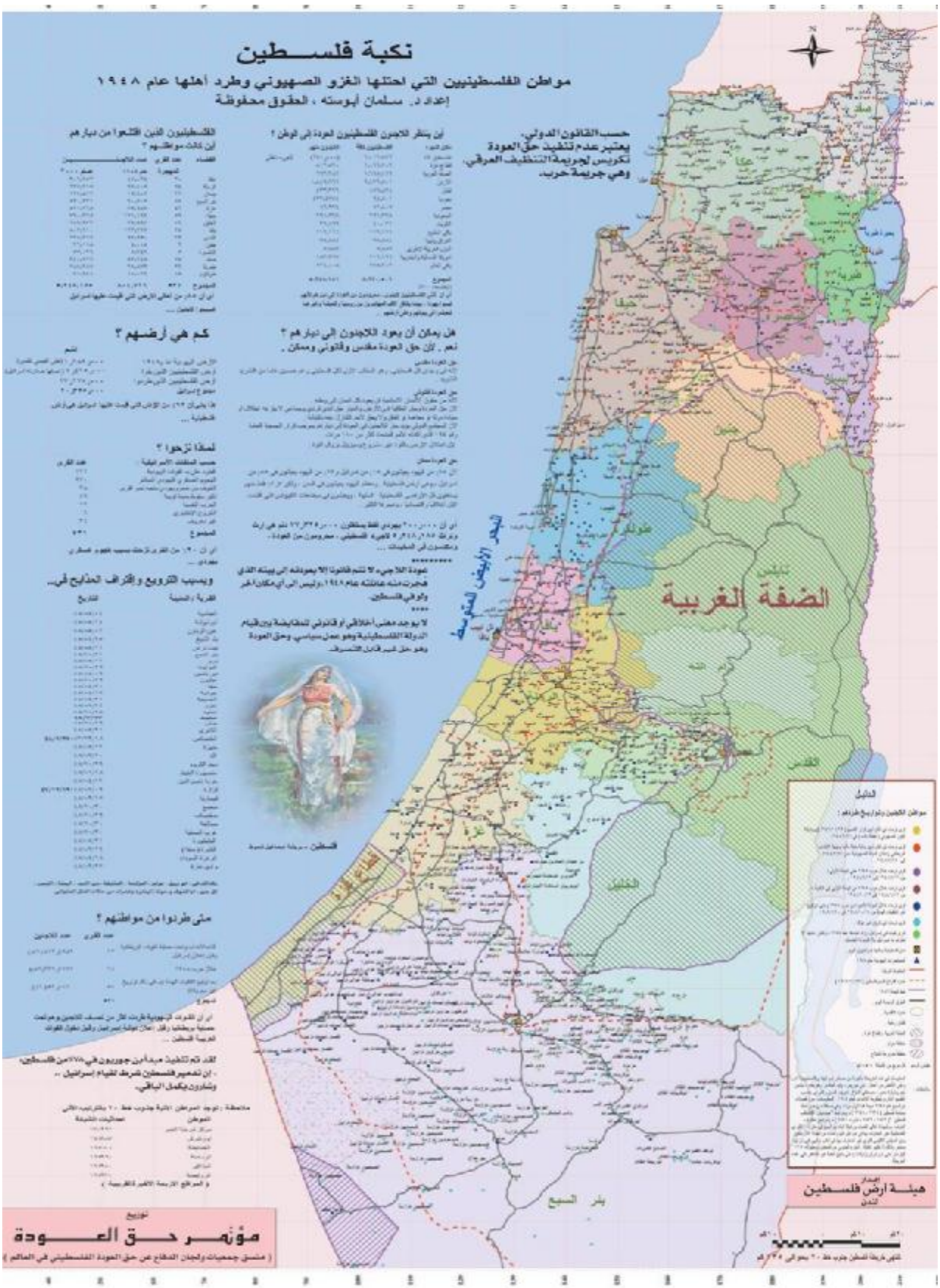
Annex 9

Functional Assessment And Outcomes Measures To The Activities Of Daily Living Instrument

Levels	5- Complete independence
	4- Modified independence (using device)
	3- Minimal independence
	2- Total dependence.
	1- Have not received any training.

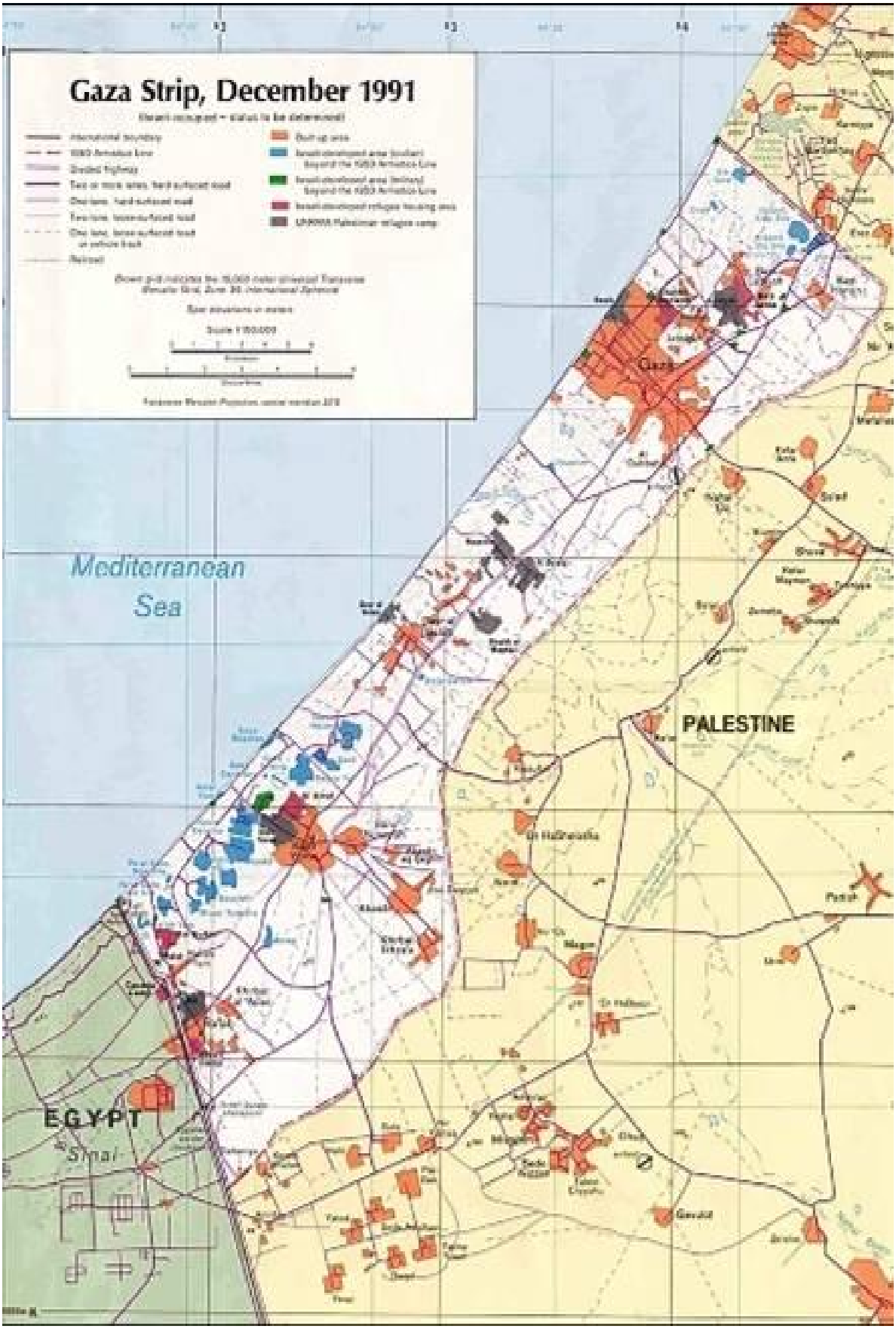
Eating and drinking	**admission**	**discharge**
1. Sets properly when eating.		
2. Uses hands properly when eating .		
3. Puts a suitable amount of food in his mouth .		
4. Uses spoon for eating .		
5. Drinks from the cup using his hands .		
GROOMING		
6. Washes his/ her hands.		
7. Washes his/her face .		
8. Brush his/her teeth .		
9. Tares off his /her clothes .		
10. Wear his/ her clothes .		
11. Wear his/her shoes .		
12. Comb his/her hair .		
13. Clean his mouth and nose		
14. Nails his/her fingers.		
15. Bath him/her self .		
16. Balder management.		
17. Bowel management .		
18. Using toilet .		
TRANSFER AND LOCOMOTION		
19. Sets up form laying dawn position.		
20. Stands up from setting position .		
21. Walks more than 10 steps .		
22. Mobilizes inside the house.		
23. mobilizes outside the house.		
24. Ascends the stairs .		
TOTAL SCORES		
PERCENTAGE		

Annex 10



http://www.countryseek.com/geos/palestine.html
(Accessed 30/8/2008)

Annex 11


Gaza Strip, December 1991
Mediterranean Sea
PALESTINE
EGYPT
Sinai
Gaza