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**Al-Quds University**



**Evaluation of the Outreach Physiotherapy Services  
Provided to the Injured after the 51-day War on Gaza**

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# **Evaluation of the Outreach Physiotherapy Services Provided to the Injured after the 51-day War on Gaza**

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**Thesis Approval**

**Evaluation of the Outreach Physiotherapy Services Provided to the Injured  
after the 51-day War on Gaza**



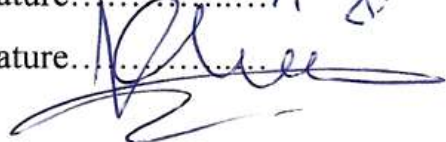
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**Jerusalem – Palestine**

**1438 / 2017**

## **Dedication**

To my beloved family, my father (may his soul rest in peace), my mother (may Allah protect her) and my soul mates and partners (my brothers, my sisters and my husband). To them and to everyone who helped and supported me, I dedicate this effort.

Love,

Nadia Alfarra

## **Declaration**

I certify that this thesis submitted for the degree of Master, is the result of my own research, except where otherwise acknowledged, and this study (or any part of the same) has not been submitted for a higher degree to any other university or institution.

**Signed:**

Nadia Rafeek Alfarra

...../...../.....

## **Acknowledgment**

First of all, praise to Allah, the lord of the world, and peace and blessings of Allah be upon our prophet Muhammad, all thanks for Allah who granted me the capability to accomplish this thesis.

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Yours Respectfully,

Nadia Alfarra

## Abstract

*Physiotherapy is a client-focused health profession dedicated to improving quality of life by promoting optimal mobility and physical activity. This study aims to evaluate the outreach physiotherapy services provided to the injured during the 51-day war on the Gaza Strip in 2014. The design of the study is evaluative one utilizing both quantitative and qualitative methods. The sample of the study consisted of 185 beneficiaries (130 males and 55 females), 148 medical records, and 14 physiotherapists. Data has been collected using an interviewed questionnaire, checklist for records review, and focus group discussions. The researcher used the SPSS for quantitative data analysis and open coding thematic technique for the qualitative analysis.*

*Results showed that the mean age of beneficiaries was 24.49 years, 35.1% of them were from Gaza, 35.1% from Khanyounis and 29.7% from Rafah governorate. The injury resulted in losing jobs as 32.4% of participants were working before the injury which decreased to 14.5% after the injury. Results also showed that 67% had orthopedic or physical injury, 17.3% had neurological injury, and 9.7% had mixed injuries. For the types of services, 86.5% received manual physiotherapy, 69.7% received counseling, 37.8% received family training, and 29.7% received assistive devices. More than half of beneficiaries received the services for 4–7 weeks, half of beneficiaries had 2 visits weekly, and the mean time for each visit was 37 minutes. In addition, 76.2% of beneficiaries said that there was a plan for sessions and 78.9% thought that the physiotherapist was committed to the plan. Furthermore, the vast majority (95.7%) reported that the physiotherapist performed assessment in the first visit, 68.6% received verbal instructions. Moreover, 97.3% mentioned that their privacy was maintained during sessions, 89.2% said that the physiotherapist listened to their complaints, 73% received answers to their questions, 37.8% were involved in treatment plan, and 67% thought that they received suitable care. Also, 79.5% described the physiotherapist's attitudes as good. Concerning re-gained activities after receiving physiotherapy, 53.5% said that they can walk, 44.9% reported they can stand, 41.9% can move, 27.6% can wear their clothes, 25.4% can take a bath, and 22.2% can use toilet. Qualitatively, physiotherapists reported that they spend 30–40 minutes with each beneficiary during each visit, and they provide instructions and guidance to them. As reported by physiotherapists, some beneficiaries regained their social activities and engagement in community activities.*

*Results from checklists reflected that personal information was completely filled in 68.9% of the files, past history was completely filled in 35.8% of files, present history was completely filled in 73.6% of files and diagnosis was completely filled in 69.6% of files. Investigations were completely filled in 31.1% of files, muscle power test was completely filled in 50.7% of files, ROM test was completely filled in 50.7% of files, sensation test was completely filled in 54.7% of files, and assessment of reflexes was completely filled in 6.8% of files. Aim of treatment was completely filled in 68.2% of files, treatment plan was completely filled in 66.2% of files. The study concluded that outreach programs are of great value for beneficiaries. Areas that require improvement include involving beneficiaries and their families in treatment plan, increase the number of physiotherapist to meet the needs of PWD, and keep accurate and complete documentation.*

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## List of Abbreviations

<b>ACS</b>	Assalama Charitable Society
<b>ADL</b>	Activities of Daily Living
<b>CBR</b>	Community Based Rehabilitation
<b>CP</b>	Cerebral Palsy
<b>FGD</b>	Focus Group Discussion
<b>GS</b>	Gaza Strip
<b>HCPC</b>	Health and Care Professions Council
<b>ICF</b>	International Classification of Functioning, Disability and Health
<b>ILO</b>	International Labour Organization
<b>MOH</b>	Ministry of Health
<b>NGOs</b>	Non-Governmental Organizations
<b>NIS</b>	New Israeli Shekel
<b>NSR</b>	The National Society for Rehabilitation Gaza Strip
<b>PACF</b>	Palestine Avenir for Childhood Foundation
<b>PCBS</b>	Palestinian Central Bureau of Statistics
<b>PMRS</b>	Palestinian Medical Relief Society
<b>PT</b>	Physiotherapy
<b>PTs</b>	Physiotherapists
<b>PWDs</b>	Persons with Disabilities
<b>ROM</b>	Range of Motion
<b>SPSS</b>	Statistical Package for Social Sciences
<b>UK</b>	United Kingdom
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNRWA</b>	United Nation Relief and Works Agency for the Refugees of Palestine in the Near East
<b>WB</b>	West Bank
<b>WCPT</b>	World Confederation for Physical Therapy
<b>WMRH</b>	Al Wafa Medical Rehabilitation Hospital
<b>WHO</b>	World Health Organization

# **Chapter One**

## **1.1 Introduction**

The prolonged conflict in the Palestinian territories has gravely jeopardized the lives of the Palestinian people, especially the people living in the Gaza Strip (GS), which has been affected by several subsequent conflicts. In the recent years between 2008 to 2014, Israel launched three aggressions on the GS ; the first war in December 2008 and lasted for 23 days, the second war in November 2012 and lasted for 12 days, and the third war in July 2014 and lasted for 51 days. These wars led to loss of life and injury of tens of thousands of people and massive destruction in all the aspects of life. This unequal confrontation left thousands of injured with subsequent temporary or life-long disabilities. The past war (the 51-day war) in the summer of 2014 was the most aggressive one which left more than 2,200 martyrs and about 11,000 Palestinians wounded (The Independent, 2014). According to a report produced by Palestinian Central Bureau of Statistics – PCBS (2014), among those who had been wounded during the war are 1134 ( $\approx 10\%$ ) individuals who acquired disability and are recognized as Persons with Disabilities (PWDs) who need appropriate rehabilitation services.

Globally, around 785-795 million persons aged 15 years and older are living with disability based on 2010 population estimates; of these, the World Health Survey estimates that 110 million people (2.2%) have very significant difficulties in functioning while the Global Burden of Disease Survey estimates 190 million (3.8%) have severe disability, and over a billion people (about 15% of the world's population) were estimated to be living with disability (World Health Organization - WHO, 2011).

In Arab countries, according to a report issued by United Nations Economic and Social Commission for Western Asia (ESCWA) and League of Arab States (2014), disability prevalence ranges from 0.4% in Qatar to 4.9% in Sudan.

In Palestine, 2.7% of the population suffered from at least one disability (2.9% are males and 2.5% are females) (PCBS, 2015b). In GS, due to the frequent wars and increasing the number of PWDs, which created an overwhelming demand for health and rehabilitation services to PWDs and their families, and that raised the need for effective rehabilitation and Physiotherapy (PT) programs to help these persons regain their functions and being active in their community.

Because many PWDs are unable to go to PT centers in hospitals or clinics, it is important to reach out for these people in their homes and offer the needed services at home setting. Community Based Rehabilitation (CBR) programs are one of the tools to offer services at home setting to PWD, and the International Labour Organization (ILO), United Nations Educational, Scientific and Cultural Organization (UNESCO), WHO, (2004) considered CBR as a strategy within general community development for rehabilitation, equalization of opportunities, and social inclusion of all people with disability.

WHO recognized that PWDs have a large need for rehabilitation and have very limited access to rehabilitation facilities, so, WHO has developed CBR programs which are designed to integrate with primary health programs and emphasizing the goal of ensuring the benefits of the convention on promotion and protection of the rights of PWDs by supporting them to maximize their physical and mental abilities, and to maximize their access to regular services and opportunities, to achieve social justice and become active contributors in their society (WHO, 2009a).



CBR has been rapidly evolving since the 1970s, in terms of theoretical development. At the beginning, CBR was largely a practical program disseminating useful rehabilitation knowledge and skills to mainly rural disabled people, and nowadays it became an inclusive development strategy in many communities (Khasnabis and Motsch, 2008). While many claims are being made about the quality, the appropriateness, the effectiveness and the efficiency of CBR, little scientific evidence exists as to what extent CBR is offering individual beneficiaries a better prognosis for recovery and restoration of function in order to improve their quality of life, better opportunities for participation in community life and better acceptance within the community (Velema et al., 2008). In the United Kingdom (UK), a study included clients with brain injury concluded that CBR yields benefits to the clients (Powell et al., 2002), and in North America, trends over the past years focused on shorten inpatient rehabilitation while enhancing the provision of community based interventions (Willer et al., 1999). In addition, reports from UK indicated that significant benefits were reported of post-discharge support to clients with mild or moderate traumatic brain injury (Cornielje et al., 2008).

In Palestine, CBR outreach programs started with some pilot rehabilitation programs in Gaza in 1990, and other programs in West Bank (WB) in 1992 and 1993. The regional committees with Nongovernmental Organizations (NGOs) were partners in the development of CBR , while the technical and financial support were provided by the Norwegian Association for the Disabled field office in Jerusalem (Eide, 2010).

Currently, there are many community based outreach programs run by different institutions in GS. This study intends to evaluate outreach PT services for PWDs after the 51-day war in summer in order to gain insight on how these programs are working, which parts of programs are working the best and which parts have to be modified or need improvement.

## **1.2 Justification of the study**

There has been a little research on PT field, and according to the researcher's best of knowledge, no local studies have been conducted to evaluate outreach PT services in particular. However, there are some studies that evaluated PT and rehabilitation services in hospitals (Hillis, 2008; Assaf, 2009; Matter, 2016), while Radwan, (2011) evaluated CBR programs.

Focusing on outreach PT programs for PWDs in GS, the researcher hopes that identifying and describing the current outreach PT services will enrich the information about these services offered to PWDs at home setting, which in turn will help planners and health care providers in designing new programs in the future. In a place like GS with unstable security circumstances due to frequent aggressions by Israel which resulted in a big number of injuries and disabilities, the need for effective outreach PT programs is essential. Moreover, the researcher hopes that this study will identify gaps between the pre-designed objectives of these programs and the actual performance in the field, and how to bridge these gaps (if present). In addition, the results of this study may be a beneficial tool that may contribute to the development and modification of the national rehabilitation strategy.

## **1.3 Research problem**

Politically, the GS can be described as a war-inflicted area. Its people live in a hard and exhausted situation as they are exposed to sequences of troubles related to Israeli occupation. After the last war (51-day war in 2014) on GS, some local NGOs conducted outreach programs to provide rehabilitation services to the injured, but these programs haven't been adequately evaluated. It is important to say that offering a comprehensive PT services is important factor in determining the effectiveness and efficacy of these

programs. In addition, meeting the PWDs individual physical, mental, and social needs in a way that maintain dignity is vital for the success of both the physiotherapists (PTs) and beneficiaries in reaching their intended goals and attaining the best recovery and regain functioning in the community as a respectful human being.

By proper evaluation of the outreach PT services, the researcher hopes to explore the current status of these services and the challenges facing PTs during their work, and take step forward to suggest recommendations that may help in maximizing the benefits from these programs.

#### **1.4 General objective**

The general objective of this study is to evaluate the outreach PT services which are provided to PWDs due to the war on the GS.

#### **1.5 Specific objectives**

- To assess the outreach PT programs (input, process, output) provided to PWDs in GS.
- To examine beneficiaries' satisfaction about PT outreach programs.
- To identify areas of strengths and areas of weakness in outreach PT services.
- To suggest recommendations that might promote and improve outreach PT services performance.

#### **1.6 Research questions**

- How appropriate are the provided PT services of the outreach programs as perceived by beneficiaries and providers?
- Are the input factors(beneficiaries, type of injury, service provider) appropriate to response to beneficiaries' expectations and needs?

- Are the process factors(interaction, referral system, contact time) appropriate to response to beneficiaries' expectations and needs?
- Are the output factors(outcome, satisfaction) appropriate to response to beneficiaries' expectations and needs?
- Do PTs use appropriate assessment to appraise beneficiaries' health condition?
- How many sessions are provided per week?
- Do PTs use appropriate approach during interaction with beneficiaries?
- Are there differences in perception about outcomes of outreach PT services in relation to gender, age, governorate, and type of injury?
- Are there differences in satisfaction of outreach PT services in relation to gender, age, governorate, and type of injury?
- What are the suggested recommendations to improve the quality of outreach PT services?

## **1.7 Context of the study**

### **1.7.1 Demographic context**

GS is a small piece of land located in the southern area of Palestine with a narrow section about 365Km<sup>2</sup>,and it is divided into five governorates: the North, Gaza, the Middle, Khanyounis and Rafah governorate(PCBS, 2010).

The total population of Palestinians in GS was 1,82 million with male to female ration 103.3 : 100, (but latest reports indicated that the number exceeded 2 million), and the population density (capita/km<sup>2</sup>) is 4,986 (PCBS, 2015).The Palestinian population is characterized by high percentage of young age and the median age was 18.2 years (PCBS, 2015).

### **1.7.2 Socioeconomic context**

The final results of the indicators of the survey on the impact of the Israeli aggression in 2014, on socio-economic conditions of the households in GS based on PCBS that 59% of the labor force suffered deterioration of their business after the aggression, 16% had to stop their business entirely and as for wage employees, their percentage was 85%, and 38% of them did not receive their pay during the aggression of 2014 as it stopped entirely and 5% their wages had decreased(PCBS, 2014).Gaza's unemployment and poverty rates have been driven to higher levels due to the level of destruction(Coordinating Catholic Aid Organizations, 2014).According to report issued by UNRWA in June (2016), the blockade has created high unemployment and aid dependency rates: over 80% of the people of GS depend on humanitarian assistance, and unemployment stood at an average of 41% and for the youth at 61%. So, affordability of health services and transportation are two main reasons why PWDs do not receive needed health care. Based on that, providing outreach rehabilitation programs help PWDs to receive the service which he/she needs to improve his/her health status especially with the rehabilitation services in Gaza have been remarkably developing.

### **1.7.3 Health care system**

Palestinian health care system is complex as there are the five main providers of healthcare services; MOH, UNRWA,NGOs, military medical services, and the private for-profit service providers(MOH, 2013).NGOs are operated by the charitable, international and local societies, which provide primary, secondary and tertiary rehabilitation services at minimal fees or free of charge. MOH is the main health care provider; it provides primary, secondary, and tertiary services and purchases advanced medical services through referral system to other advanced health care facilities, but the conditions in GS made the provision of health care services is adversely affected by the continuous siege of the strip and the

internal political division (MOH, 2014b). Despite this complexity in the strip and in the health system, coverage and accessibility to healthcare services is feasible most of the times, unless emergencies occur. In addition the political commitment to health is obvious as evidenced by high spending on health which was estimated to be 11% of GDP (PCBS, 2016).

#### **1.7.4 Institutions that currently offer outreach rehabilitation services**

**Assalama Charitable Society (ACS):** non-profit association established in 2004 in GS. It is considered the first assembly in Palestine specialized in improving the quality of life of the wounded in the GS. Targets of the association is to strengthen the role with disabilities and invest their energies and improve the health, psychological and vocational their status and activating their participation at the field and community level.

The message of the association: safety charity organization specialized in providing comprehensive rehabilitation services to the wounded in the GS from the moment of injury leading to autonomy. The data base in the association includes more than 12000 wounded individuals and many of them sustained some form of disability. The association offer health services to the wounded Palestinians due to Israeli aggressive acts, through different programs including outreach rehabilitation and physiotherapy services (Al Salama Charitable Society, 2013).

**Palestinian Medical Relief Society (PMRS):** The PMRS runs a rehabilitation program since the 1980s in around 100 sites in WB and GS, with a data base of more than 12000 PWDs who benefit from PMRS programs and services. Through its rehabilitation programs it aims to social engagement of PWDs within their societies and offer equal opportunities and rights for PWDs. The outreach program is one of the major programs in PMRS through home visits to assess the needs of PWDs and their families and set a

program of treatment. The program offer rehabilitation and PT services, besides vocational training and school enrolment and empowerment in the society (Palestinian Medical Relief Society, 2016).

**Palestine Avenir for Childhood Foundation (PACF):**A non-governmental nonprofit organization that was established in January 1995 to serve physically disabled children. Implementing a profound and multidisciplinary concept of rehabilitation PACF seeks to help deprived and marginalized Palestinian children mainly physically disabled ones in gaining equal rights and opportunities. Educational therapeutic and social services are provided for physically disabled children. Special education department concerns with development of children's mental abilities while therapeutic program provides them with physiotherapy services to prevent complications and develop their motor abilities. In addition to the institutionalized services teams of PACF are working in the community for those marginalized groups in an outreach integration and awareness raising programs. PACF mainly deal with children suffering from cerebral palsy (CP). Statistics in Gaza strip show that there are about 6000 cases of CP in GS. This significant sector didn't receive any rehabilitative services in the past. Hence the establishment of PACF was a response to the community need in this regard. PACF is the only organization dealing with rehabilitation of CP children in GS and it is a registered member of the International Cerebral Palsy Association. PACF has accumulated rich experience in the field of rehabilitation. PACF staff has a wide variety of experience and qualifications. Highly trained PTs, special education teachers, social workers, vocational training specialists, speech specialists, and others work in harmonious teams to provide comprehensive rehabilitative services to CP children (Palestine Avenir for Childhood Foundation, 2017).

**The National Society for Rehabilitation Gaza Strip (NSR):** The National Society for Rehabilitation, hereafter known as NSR - Gaza strip was established in 1990. It started

working under the title National Committee for Rehabilitation in Jerusalem, WB and GS until 1993. At that time, there was a clear lack of services and rehabilitation in particular. In 1993, NSR started its activities in Beach refugee and Bureij refugee camps, through building the first model of CBR. Then, as a result of achievements, NSR has generalized the concept of CBR and administered it over 25 geographical localities in the GS. CBR established in 1991. NSR adopted the CBR program since then. This program covers 75% of GS in governorates of Gaza, Middle-Area, Khanyounis and Rafah. It aims to facilitate access of PWDs to services providers and also to strengthen disability movement. This can be achieved by allowing them to participate in the processes of planning, implementing, and evaluating of the CBR Program. Also, it educates PWDs, families, and NGOs about PWDs rights. CBR entails professional activities that lead to rehabilitation and integration of PWDs in their local communities through training the disabled, their families and local committees, as well as supporting them to take an effective role in this process, side-by-side, with cooperation and coordination with various resources such as education, culture, health and social (The National Society for Rehabilitation Gaza Strip, 2017).

## **1.8 Operational definitions**

### **Outreach services**

The researcher defines outreach program as a rehabilitation program that offer rehabilitation and PT services to PWDs by appointed home visits for free of charge.

### **Disability**

The researcher defines disability as a limitation of physical functioning and mobility occurred as consequence of injury which obstructs the activity of daily living of the individual.



## **Person with disability**

The researcher defines person with disability as any person with explicit disability that restricts his ability to perform and function independently and is in need for rehabilitation services.

### **1.9 Layout of the study**

This study composed mainly from four chapters: introduction, conceptual framework and literature review, methodology, results and discussion, conclusion and recommendations.

The first chapter browsed general introduction to the study, where a brief introduction regarding the subject of the study was provided. The researcher illustrated the research problem, justification for conducting the study, the general objective and specific objectives, research questions, context of the study, and definition of terms.

The second chapter consisted of two parts: the first part is conceptual framework where the researcher provided a diagram of the conceptual framework of the study. The second part is the literature review related to the study topic and variables. Indepth detailed inquiry including previous studies was presented.

The third chapter described methodology including study design, population, sample and sampling method, instruments for data collection, statistical analysis, ethical and administrative considerations, and limitations of the study.

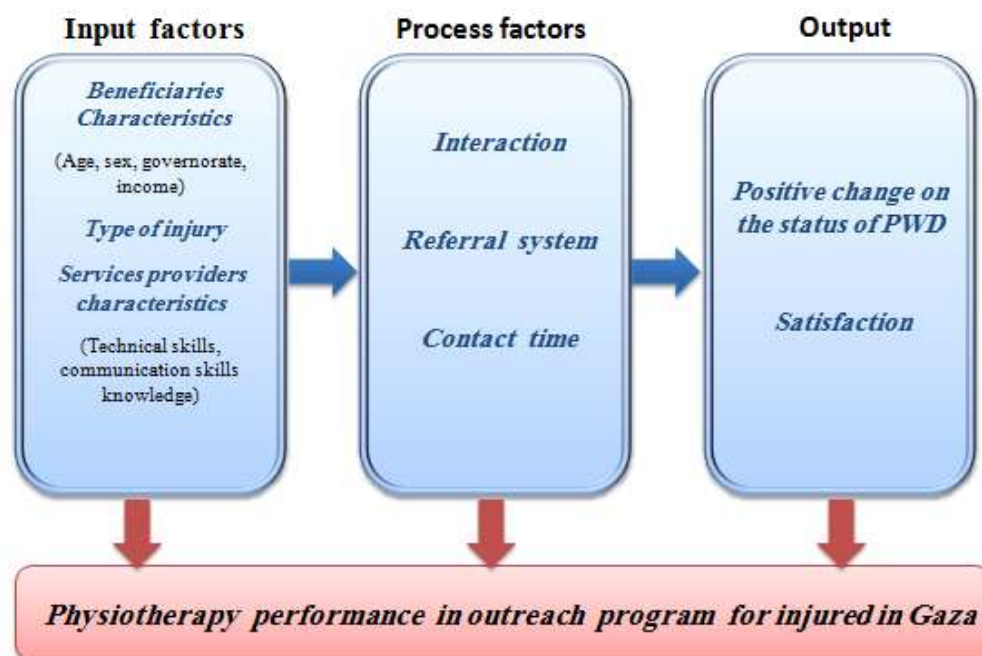
The fourth chapter composed of two parts: in the first part the researcher presented the study results and discussion. The researcher treated the results in form of tables and figures that make it easy for the reader to understand. The results were discussed in respect to available previous studies that directly related to the topic of this study and its objectives. Finally, the researcher presented a conclusion and recommendations in the light of the study results.

## Chapter Two

### Conceptual framework and literature review

#### 2.1 Conceptual Framework

The conceptual framework was designed by the researcher based on review of the available literature. Conceptual framework is the map that guides the design and the implementation of the study and its effect mechanism for illustration and summarizing the whole study variables.



**Figure (2.1): Diagram of conceptual framework (Self developed)**

The above diagram demonstrates the dimensions that affect the PT provision. Each dimension contains domains and each domain contains variables. According to Donabedian Model (1988), those dimensions could be as the following:

1. Input factors: Those factors include beneficiary's characteristics, injury characteristics and providers characteristics

2. Process factors: The process factors include interaction, referral system and contact time.
3. Output factors: It is the intended end product of the delivered outreach PT services and it includes positive changes on the status of PWDs, and the beneficiaries satisfaction. The domains of the study illustrated as below:

## **1. Input factors**

### **Characteristics of beneficiaries**

PT services may be affected by beneficiary socio-demographic factors, including gender, age, marital status, financial status, level of education and place of residency. Age is an important factor, and it is assumed that adults will understand the treatment plan and will be more cooperative compared to children and elderly beneficiaries. Also, those who have good education will be more cooperative and understand instructions easier than those with low education and illiterate.

### **Characteristics of injury**

Multiple factors may affect PT services including characteristics of injury. The characteristics of injury included type of injury, and development of health complications as a result of the injury. Type and severity of injury shape the physiotherapy treatment plan, methods and length of treatment sessions.

### **Characteristics of providers**

Characteristics of providers include gender, knowledge, qualification, experience, and skills. Physiotherapists who have good knowledge, experience, and competent skills to manage different types of injuries and disabilities are a key to the success of PT programs.

In addition, these characteristics are playing important role in gaining trust and confidence of the beneficiary and that will enhance the quality of outcome and satisfaction of beneficiaries.

## **2. Process factors**

Process factors are the core of health care services, because these factors interact directly with beneficiaries who will receive the service. Process factors include:

### **Interaction**

Interaction factor implicit behaviors from the PTs side including approach, assessment, attitudes, respect, and discrimination between different beneficiaries. Moreover, putting treatment plan according to the needs of the beneficiary, and giving the beneficiary the opportunity to participate in the treatment plan. Adding to that listening to beneficiaries' complains and respond to his queries. Also, involving family members in the course of treatment by training them to perform some exercises for the beneficiary to facilitate recovery. Ability of the PTs to carry out these activities will make the difference for the beneficiary, and set an example of competent PTs who are committed to their work and to their clients.

### **Referral system**

Referral system concerns with holistic approach of treatment to enable the beneficiary to receive all the needed treatments from different places and providers. Referring the beneficiary to appropriate place for further treatment is one role of PTs to ensure continuity of care, and it is the responsibility of PTs to direct beneficiaries to appropriate place and facilitate the process of referral.

## **Contact time**

Contact time concerns with time allocated and frequency of home visits. It is important to the PTs to set appointments for home visits to ensure readiness of the beneficiaries to receive the intended care. Also, determining the length of each visit to suit the needs of the each beneficiary and to receive the required care in adequate span of time.

## **3. Output factors**

Output factors mainly concern with two factors that determine the quality of end product of PT services. These factors are:

### **Positive changes on the status of PWDs**

Positive changes concerns with progress and achievements. Comparing the situation at the beginning of the services, and achievements through all the stages will determine the effectiveness of the program in attaining its goals. Positive change measures include health status and ability of beneficiary to perform some activities as sitting, standing, walking, eating, putting on clothes, and using toilet. In addition, focusing in some social activities as interaction with others, participation in family and community activities. These factors indicate moving the beneficiary from being dependent on others to a state of independence and being active person in his family and his community.

### **Satisfaction**

Satisfaction is one indicator of quality of services in healthcare settings. Gaining satisfaction of beneficiaries is not easy, and beneficiaries' satisfaction concerns with perception of beneficiaries that the services they received met their expectations and needs.

## **2.2 Literature review**

### **2.2.1 Background**

Throughout the years of struggling for freedom from Israeli occupation, the Palestinians sustained huge amount of offensive acts by Israeli military forces which led to thousands of injuries and disabilities, and as a consequence, there was a higher need for follow up and continuity of treatment for these people in the short and long-term phases. Part of health services they need is rehabilitation and PT services. It is obvious to say that many PWDs cannot get access to PT centers or can't afford to pay for private services, so they need to be treated at their homes. PT outreach programs work towards decreasing the impact of disability and improving quality of life of disabled individuals. Evaluation of these programs to examine their effectiveness in meeting the beneficiaries' needs is very important to determine the extent of services' quality and how to improve the provided services in future programs. To be effective, evaluation of program should be based on defined indicators and outcome measures. Evaluation is a form of appraisal using valid and reliable research methods that examines the process or outcomes of an organization with the reason of exists to fulfill some social needs (Grinnell and Unrau, 2008).

### **2.2.2 Disability**

Disability refers to any restriction or lack of ability to perform an activity in a manner or within the range considered normal for the human beings, or disability is the loss of functional capacity resulting from an impairment organ (Barbotte et al., 2001). Disabilities is an umbrella term, covering impairments, activity limitations, and participation restrictions; it is a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives (WHO, 2016).

Disability is an important public health problem especially in developing countries, and approximately 80% of disabled live in low-income countries, where they are living in poverty and have limited or no access to basic services, including medical and rehabilitation facilities (WHO, 2006a).

The International Classification of Functioning, Disability and Health (ICF) states that a variety of conceptual models has been proposed to understand and explain disability and functioning, which it seeks to integrate. These models include the following:

#### **2.2.2.1 Medical model**

The medical model views disability as a problem of the person, directly caused by disease, trauma, or other health conditions which therefore requires sustained medical care in the form of individual treatment by professionals. In the medical model, management of the disability is aimed at a cure, or the individual's adjustment and behavioral change that would lead to an almost-cure or effective cure. In the medical model, medical care is viewed as the main issue, and at the political level, the principal response is that of modifying or reforming healthcare policy (Nikora et al., 2004; Donovan, 2012).

#### **2.2.2.2 Social model**

The social model of disability sees disability as a socially created problem and a matter of the full integration of individuals into society. In this model, disability is not an attribute of an individual, but rather a complex collection of conditions, created by the social environment. The management of the problem requires social action and it is the collective responsibility of society to create a society in which limitations for people with disabilities are minimal. Disability is both cultural and ideological in creation. According to the social model, equal access for someone with an impairment/disability is a human rights concern (Nikora et al., 2004; Donovan, 2012).

### **2.2.2.3 Social construction**

The social construction of disability is the idea that disability is constructed by social expectations and institutions rather than biological differences. Highlighting the ways society and institutions construct disability is one of the main focuses of this idea (Mallon, 2014). In the same way that race and gender are not biologically fixed, neither is disability. Around the early 1970s, sociologists, notably Eliot Friedson 1970, began to argue that labeling theory and social deviance could be applied to disability studies. This led to the creation of the social construction of disability theory. The social construction of disability is the idea that disability is constructed as the social response to a deviance from the norm. The medical industry is the creator of the ill and disabled social role. Medical professionals and institutions, who wield expertise over health, have the ability to define health and physical and mental norms. When an individual has a feature that creates an impairment, restriction, or limitation from reaching the social definition of health, the individual is labeled as disabled. Under this idea, disability is not defined by the physical features of the body but by a deviance from the social convention of health. Social construction of disability would argue that the medical model of disability's view that a disability is an impairment, restriction, or limitation is wrong. Instead what is seen as a disability is just a difference in the individual from what is considered "normal" in society (Burch, 2009).

### **2.2.2.4 Other models**

- **The spectrum model**, which refers to the range of audibility, sensibility, and visibility under which people function. The model asserts that disability does not necessarily mean reduced spectrum of operations. Rather, disability is often defined according to thresholds set on a continuum of disability (International organizations report on disability, 2011).



- **The moral model** which refers to the attitude that people are morally responsible for their own disability (Kaplan, 2011).
- **The expert/professional model** which provided a traditional response to disability issues and can be seen as an offshoot of the medical model. Within its framework, professionals follow a process of identifying the impairment and its limitations using the medical model, and taking the necessary action to improve the position of the disabled person (Nikora et al., 2004).
- **The social adapted model** which states that although a person's disability poses some limitations in an able-bodied society, often the surrounding society and environment are more limiting than the disability itself (Nikora et al., 2004).
- **The economic model** which defines disability in terms of reduced ability to work, the related loss of productivity and economic effects on the individual, employer and society in general (Michigan Disability Rights Coalition, 2012).

In the Palestinian case, due to presence of different types of disabilities, and some injuries need long-term care, a combination of different models is required to be implemented to meet the different needs of PWDs in GS.

### **2.2.3 Rehabilitation**

WHO defined the rehabilitation of PWDs is a process aimed at enabling them to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels. Rehabilitation provides PWDs with the tools they need to attain independence and self-determination (WHO, 2015).

Traditionally, rehabilitation outcome measures have focused on the individual's impairment level. More recently, outcomes measurement has been extended to include

individual activity and participation outcomes. Measurements of activity and participation outcomes assess the individual's performance across a range of areas including communication, mobility, self-care, education, work and employment, and quality of life. Also, activity and participation outcomes may be measured for programs. Examples include the number of people who remain in or return to their home or community, independent living rates, return to work rates, and hours spent in leisure and recreational pursuits (WHO, 2011).

The outline of the development of modern rehabilitation services in developing countries given dilemma that gradually emerges in most countries should one aim at giving community based services that invariably reach only a limited number of those in need be the first priority. Outreach services combining the expertise of, for instance, PTs or speech therapist based in center with regular home visits in the district nearby is a middle solution. This is, however, often costly because of need for transport and cannot reach everyone in need. In most countries, however, the developments are not steered by government decision making alone but are the result of complex processes in which history, influences from foreign agencies and general socioeconomic development play important role (Ingstad, 2001).

Structured rehabilitation programs in Gaza started a few decades ago and have been built on various models such as CBR. Gaza has been the pioneer of this model since 1990 – Institutionalized Rehabilitation. The outreach programs as a part of a long term strategy aimed at strengthening the rehabilitation sector as a whole in order to address the needs of PWDs where CBR approach is of utmost importance to reach the population in targeted areas at their settings. Also, to minimize the extent of their disabilities and to improve functions, reduces the vulnerability of PWDs, empowers them and encourages their families to support them. The psycho-social therapy gives tools for strengthening the

household's ability to deal with disaster from a psychological point of view and referral services also creates awareness about and links to other services available in the community. The CBR model is well documented through evaluations and studies and has had a documented impact on the lives of PWDs and their families, especially at the family and community level (Cornielje, et al., 2008).

A key strength of the outreach rehabilitation programs is the enhanced opportunity for provision of education and training of others (i.e., family, support workers) and skill sharing with those in the immediate social network surrounding the client. This social ecology of the person includes their family, friends, and work colleagues, as well as the community and services supporting the person. Greater collaboration with the community and empowerment of the support network of people and services surrounding the client is possible in a CBR model and enables the client to make sustainable gains (Kuipers and Doig, 2010).

#### **2.2.4 Physiotherapy definition and value**

PT provides services to individuals and populations to develop, maintain and restore maximum movement and functional ability throughout the lifespan. This includes providing services in circumstances where movement and function are threatened by ageing, injury, pain, diseases, disorders, conditions or environmental factors.

Functional movement is central to what it means to be healthy. PT is concerned with identifying and maximizing quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, habilitation and rehabilitation. This encompasses physical, psychological, emotional and social wellbeing. PT involves the interaction between the PTs, patients/clients, other health professionals, families, care givers and communities in a process where movement potential is assessed and goals are

agreed upon, using knowledge and skills unique to PTs (World Confederation for Physiotherapy - WCPT, 2013).

PT is an intellectually, physically and psychologically demanding profession, but it is an extremely rewarding career in utilizing professional skills for those in need. PT can be delivered through in-patient services to the patients hospitalized inside different health facilities' departments, out-patient services inside out-patient departments of health facilities, private sectors, NGOs, or through home visits (WCPT, 2013). PT process includes examination/assessment, evaluation, diagnosis, prognosis, plan of care/intervention and re-examination (WCPT, 2011).

Assessment includes, (1) the examination of individuals or groups with actual or potential complains, and the use of specific tests and measures, and (2) the evaluation of the results of the examination of individuals/groups and/or the environment through analysis to determine the barriers to optimal human functioning (HCPC, 2013).

Diagnosis and prognosis arise from the examination and evaluation of the problems and interventions. Prognosis (including plan of care/intervention) begins with determining the need for care/intervention and normally leads to the development of a plan of care/intervention, including measurable outcome goals negotiated in collaboration with the patient/client, family or care giver. Alternatively it may lead to referral to another agency or health professional in cases which are inappropriate for PT. Intervention is implemented and modified in order to reach agreed goals. It may include manual or electrical treatment intervention or just instruction and counseling. Intervention/treatment may also be aimed at prevention of impairments, activity limitations, participatory restrictions, disability and injury including the promotion and maintenance of health, quality of life, workability and fitness in all ages and populations (WCPT, 2011).

### **2.2.5 Health services evaluation**

Evaluation is an important aspect of the health services management. It is a critical component in maintaining the efficiency and effectiveness of any organization or system; collecting and applying information about the operation and outcomes of a program allows it to adapt and improve (Oxford Health Alliance Program, 2017).

Evaluation facilitates the successful completion of the service and inform decisions about the future of the service. Building process evaluation activities into program implementation and using the results of these activities to conduct continuous quality improvement is perhaps one of the most important yet overlooked strategies in public health practice. Health services evaluation is a process of collecting and analyzing information in order to understand the progress, success and effectiveness of the health services (Moynihan, 2004).

In healthcare setting, evaluation of healthcare services is an integrated process that involves the recognition of values, setting goals, then evaluates the effects of the action in order to achieve a high quality of services provided by health professionals (Trochim, 2006). The purpose of any evaluation is to provide information for action, once evaluation information is available, it should be integrated into management practices. If this not done, evaluation is a waste of organization resources. The result of the health services evaluation can be used to: identify ways to improve activities, facilitate changes in the plan, plan for the sustainability of the services, learn more about the environment in which the services are being or have been carried out, learn more about the target population of the service, present the worth and value of the services to stakeholders and the public, compare among project to plan for their future and make evidence-based organizational decisions (Zarinpoush, 2006).

Systemic evaluations are being produced by many organizations around the world and they are being used across much of nurses, pharmacists, doctors and other health professionals, patients, insurers, policymakers, advocates and health care executives are looking to systematic evaluation of the health programs and provided health services to update their thinking, decision making and practice, but systematic evaluations are often incomplete, deficient or skewed toward the most profitable treatment. Sometimes systematic evaluations themselves are poorly conducted as for example when the evaluation of relevant dimensions of health services has not been as comprehensive as possible (Moynihan, 2004).

#### **2.2.6 Evaluation of outreach rehabilitation programs**

Evaluation of any program is a mean to examine the effectiveness of its activities to meet the target objectives of the program, and identifying strong areas and weak areas that need modifications for improvement. Evaluation is usually gives a picture about where we are, and help in designing of future programs. Program evaluation is defined as a form of appraisal using valid and reliable research methods that examines the process and outcomes, with the reason of existence to fulfill some social needs (Grinnell and Unrau, 2008). Moreover, WHO (1998) defined evaluation as a systematic examination and assessment of an initiative and of its effects, in order to produce information that can be used by those who have interest in its improvement or effectiveness.

In this study, evaluation will focus mainly on three main aspects: 1) input factors, 2) process factors, and 3) output factors. These factors are adopted from Donabedian triad of quality.

### **2.2.6.1 Input factors**

Input involves something that one can touch, see or feel. In outreach PT setting, this includes the beneficiaries, type of injury, and physiotherapists (Chen and Yang, 2009).

#### **2.2.6.1.1 Beneficiaries' factor**

Healthcare services evaluation is a complex process, and includes clients' perception about the care they received. The clients can reflect their thoughts and beliefs, which are considered important predictors of quality of health care (Maslin, 1991). Moreover, Massoud et al., (2001) showed that focusing on the clients is the first principle for quality improvement initiatives and raised the importance of being client-centered while designing and providing health care services. This approach in health care ensures that each step in the caring process goes in line with meeting clients' needs that would finally lead to client satisfaction and improvement of health outcomes. Another study carried out by Krevers et al (2002) reflected the importance of client's perspectives about the received care and rehabilitation and the influence of client's expectations and their characteristics.

The client's opinion is an essential part when evaluating the quality of health services they received. According to Healthcare Commission-North West London Hospitals NHS Trust (2005), asking patients what they think about the care and treatment they have received is an important step towards improving the quality of care, and ensure that health services are meeting patients' needs. It is an established fact that satisfaction influences whether a person seeks medical advice, complies with treatment and maintains a continuing relationship with practitioners (Westaway et al., 2003).

#### **2.2.6.1.2 Type of injury**

Beneficiaries with different disabilities require different plans and models of intervention to alleviate the dysfunctions resulted from the injury. Ability of the PTs to assess the

clients, put accurate diagnosis, and design specific plan for intervention are vital process for proper treatment. In the outreach PT program, a wide range of different injuries and disabilities are dealt with including physical, neurologic, and disabilities resulted from burn injuries. According to the type of injury, interventions are implemented and modified to suit the needs of the PWD. Interventions may include manual or electrical treatment, or just instructions and counseling. Intervention may also be aimed at prevention of impairments, activity limitations, participatory restrictions, disability and injury including the promotion and maintenance of health, quality of life, ability to work and fitness in all ages and populations (The Chartered Society of Physiotherapy, 2010).

The literature shows that the characteristics of injury plays a main role in the service effectiveness, the Lancet published in 2004 study that aimed to assess the effects of therapy-based rehabilitation services targeted at stroke patients residents in the community within one year of stroke onset or discharge from hospital, the study concluded that therapy-based rehabilitation services targeted at selected patients after stroke improve ability to undertake personal activities of daily living and reduce risk of deterioration in abilities. Moreover, Naylor (2006) conducted survey aimed to describe standard care after total knee replacement in Australia and found that elements of consistency and diversity across the acute and post-acute phases were evident. Consistent findings included the provision of gait retraining and exercise prescription in the acute period, the requirement for independent ambulation as a criterion for discharge from acute care and the routine referral to ongoing outpatient or community-based PT services.

#### **2.2.6.1.3 Service provider factor**

Providers of outreach PT services are a major determinant of the effectiveness of the program. Having adequate number of qualified, skillful, and competent PTs is a key stone for the implementation of outreach PT programs. Toole and McConkey(1998) reported that



flexibility and innovation are required to ensure that PTs are adaptable and used to maximum effect in any given situation. Ensuring that PTs are competent in transferring their skills and knowledge to others, as well as recognizing this as a legitimate professional activity needs to be incorporated into professional education programs. According to literature, outreach rehabilitation programs in developing countries rely largely on family members and community volunteers who operate with very basic training, often within a community committee structure. In some cases these volunteers are assisted by intermediate level workers, with limited access to qualified health and rehabilitation professionals. Bury (2003) found that PT provision is insufficient for the needs of most countries, therefore service delivery models need to be developed that result in the skills and knowledge of PTs meeting the needs of a higher proportion of those in need. PT professional education needs to equip PTs with the appropriate knowledge and skills to work in a variety of settings as well as promoting the value of working in these settings. Also the importance one that the PTs should be aware of the current international review of outreach programs and ready to assess and act on its implications. Judd (2009) mentioned that training and guiding of the rehabilitation workers (RWs) is essential for supporting and sustaining the CBR programs and this is established by expertise including physicians, PTs, psychiatrists, and others. It is important to know that the primary role of RWs is a trainer, facilitator, and consultant, but not only health provider because they help PWDs in several things as training and facilitates the development of a plan of rehabilitation. In addition, WHO (2010) reported that community rehabilitation workers are the key in the implementation of CBR, and their responsibilities include achievement of home-based rehabilitation, identifying PWDs, carrying out basic assessment of their function and providing of therapeutic interventions. Also, they educate and train family members to support and help PWDs, providing information about services available within the

community, and linking PWDs and their families with these services through referral and follow up.

#### **2.2.6.2 Process factors**

Process measures are used to determine the extent to which providers consistently give patients specific services that are consistent with recommended guidelines. These measures are generally linked to procedures or treatments that are known to improve health status or prevent future complications or health conditions (Cromwell et al., 2011).

Process factors concern with issues related to behaviors and performance during the treatment sessions. It includes three factors, namely interaction, referral system, and contact time.

##### **2.2.6.2.1 Interaction**

Proper interaction between PTs and their clients is an important factor for building trust relationship during the course of treatment. Communication with respect of humanity of clients is required to improve the delivery of health services and health outcomes. Ha and Longnecker (2010) reported that good communication leads to good relationship between health providers and clients, and improves the exchange of information.

The interaction with clients concerned with behaviors that include good approach and attitudes, and respecting the dignity of clients, besides competent skills that increase clients' confidence in his therapist. Hall et al., (2010) studied the influence of the therapist-patient relationship on treatment outcome found that the alliance between therapist and patient appears to have a positive effect on treatment outcome in physical rehabilitation settings.

Radwan (2011) carried out a study included 201 beneficiaries, (101 males and 100 females) from North and Gaza governorate showed that 98.5% of PWDs mentioned that the therapist respect them, and 59.2% of PWDs viewed their approach as good, 45.3% of PWDs described the therapists performance as good. Furthermore, Dambi and Jelsma, (2014) conducted a study in Zimbabwe found that children in the outreach group reported that their care givers showed higher respect, and children felt more comfort. Matter (2016) conducted a study included 350 participants (53.4% were males and 46.6% were females), their mean age was 43.97 years, the study aimed to evaluate PT services in governmental hospitals in GS found good interaction between clients and their PTs, and that 93.7% of clients said that they communicated freely with their PTs, the majority of clients reported that the PTs asked questions in professional manner, and listen carefully to their complaints, and 79% of clients said that the PTs answer their questions. In addition, Abu Hamad (2009) found that almost all beneficiaries regarded the interaction with the CBR team as good, and team members provided explanation to beneficiaries about their health status and answered their questions. Also, more than two thirds of beneficiaries reported their involvement in treatment plan, and more than 80% of beneficiaries reported receiving appropriate care.

#### **2.2.6.2.2 Referral system**

Referral describes the processes of how a beneficiary gets in touch with an individual professional or institution about his/her case and how professionals and institutions communicate and work together to provide his/her with comprehensive support.

An evaluation study of CBR programs in Gaza carried out by Abu Hamad (2009) showed that through individual initiatives, some CBR organizations are trying to enhance channels of communication and coordination amongst related bodies, facilitate the training of local

human resources, implement rehabilitation projects at the community level, encourage activities aiming at the prevention of disabilities and promote public awareness towards the PWDs in Gaza. However, Valerie and Webstera (2008) noted that PT was regarded positively by all referral groups, particularly by self-referred patients, despite there being a distinct lack of knowledge about the profession. There is a clear need to raise awareness and knowledge of PT if autonomous health-seeking behaviors are to be encouraged and self-referral schemes progressed appropriately.

#### **2.2.6.2.3 Contact time**

According to the little experience of researcher on the field, she thinks that there is a relation between the time of conducting the service and the effectiveness of these services that parallel with Abu Hamad (2009) who noted that the lack of continued care after the discharge of the injured with serious injuries, the possibility of complications occurrence and readmission increases which is accompanied by many complexities including unnecessarily high costs. Also, Bandholm (2012) showed that in recent years, a combination of unimodal evidence based perioperative care components has been demonstrated to enhance recovery, with decreased need for hospitalization, convalescence, and risk of medical complications after major surgery—the fast-track methodology or enhanced recovery programs. It is the nature of this methodology to systematically and scientifically optimize all perioperative care components, with the overall goal of enhancing recovery. In addition to that there is support from the literature that the use of adequate contact time with patients has an association with their satisfaction. As the findings of Kamau (2005) demonstrated that most of the patients (83.6 %) were comfortable with the time the PTs spent with them during the treatment, and there was significant association between time factor and patient satisfaction. The results obtained by

Matter (2016) indicated that two thirds of clients said that their PTs spent adequate time with them.

### **2.2.6.3 Output factors**

Output measures evaluate patients' health as a result of the care they have received. More specifically, these measures look at the effects, either intended or unintended, that care has had on patients' health, health status, and function, and they also assess whether or not the goals of care have been accomplished (Morris and Bailey, 2014). In this study, output focused on two dimensions: outcome and satisfaction of recipients of the services.

#### **2.2.6.3.1 Outcome of rehabilitation programs**

Positive changes on the status of PWDs is one aspect of output factors in evaluation of healthcare services. According to Donabedian model, output is the third component for evaluation of quality of healthcare services, and it refers to the effects of healthcare on the health status of patients and populations (Donabedian, 1988). Positive changes are states of health or events that follow care. In addition, one of the main purposes of CBR is to produce socially beneficial results. It is intended to create social atmosphere with equality, solidarity, integration, and dignity. An ideal CBR program should make positive changes in attitudes (Zhao and Kwok, 2002).

Outcome measures evaluate patients' health as a result of the care they have received. More specifically, these measures look at the effects, either intended or unintended, that care has had on patients' health, health status, and function. They also assess whether or not the goals of care have been accomplished. Outcome measures frequently include traditional measures of survival (mortality, incidence of disease (morbidity), and health-related quality of life issues (Morris and Bailey, 2014).

Outcome contains all the effects of healthcare on patients or populations, including changes to health status, behavior, or knowledge as well as patient satisfaction and health-related quality of life. Outcomes are sometimes seen as the most important indicators of quality because improving patient health status is the primary goal of healthcare. However, accurately measuring outcomes that can be attributed exclusively to healthcare is very difficult, and drawing connections between process and outcomes often requires large sample populations, adjustments by case mix, and long-term follow ups as outcomes may take considerable time to become observable (Donabedian, 2003).

A study conducted by Legg and Langhorne, (2004) aimed to assess the effects of CBR among patients with stroke in the community, found that patients regained ability to carry out activities of daily living after CBR. Another study conducted in China aimed to evaluate the effects of CBR found significant improvement among the rehabilitation group in neurological function after five months of treatment (Yu et al., 2009). Moreover, a study carried out in by Abu Mansour (2007) evaluated the effective of CBR programs in refugee camps in GS found that rehabilitation services were very effective, and there were statistically no significant differences in effectiveness of services related to gender, but differences existed in relation to age, level of education, and years of experience. Also, Nilsson and Qutteina (2005) carried a study aimed to evaluate CBR programs in Palestine, reported that CBR programs resulted in positive changes on emotional status, personal development, participation in social activities, and improved interpersonal interactions. Another study included 22 countries from Asia, Africa, and America aimed to determine the effectiveness of CBR programs found improvement in participants social inclusion, and about 50% of them became more independent (Velema et al., 2008).

In an evaluation study of emergency CBR programs in GS carried out by Abu Hamad (2009), the results reflected that CBR programs were effective in meeting the needs of

PWDs, after receiving the services, 35% described their health status as good, 46% described it as moderate, 19% described their health status as bad, and generally 96% of PWDs felt that their current health status is better than their status at the time of injury. In addition, around 80% of PWDs felt that they are integrated and normally interacting with their families and community, another positive change is that the majority of PWDs are participating in social events such as attending weddings, going for parties and dinners. Moreover, more than half of PWDs can independently perform activities of daily living (ADL), 52% can walk, 57% can use toilet, 56% can wear their clothes, 43% can eat, 47% can take a shower, 30% went to school / university, and 14% can do house work.

In this study, we will focus on selected measures as health status after receiving PT services, feeling energetic, ability to interact with others, and ability to participate in family and community activities.

#### **2.2.6.3.2 Beneficiary satisfaction**

Satisfaction from health services is an important factor in the process of evaluation, and usually it reflects quality of the service. Client satisfaction is the level of satisfaction that clients experience having used a service. It therefore reflects the gap between the expected service and the experience of the received service, from the client's point of view. Patients' satisfaction is based on a range of characteristics and experiences, including subjective perception of the service and care, the degree of personalization of care, the expectations and psychosocial needs of the patient, and the ultimate health outcome (Cowing et al., 2009).

Measuring clients' satisfaction has become an integral part of health management strategies across the globe. Moreover, the quality assurance and accreditation process in most

countries requires that the satisfaction of clients be measured on a regular basis (Mathew and Beth, 2001).

Shaikh, (2005) reported that for measuring healthcare performance, the assessment of patient satisfaction is a more sensitive indicator than the traditional measures such as morbidity and mortality patterns and more reliable than other methods such as physician peer review.

Client satisfaction is considered as one of the desired outcomes of health care and it is directly related with utilization of health services. Measurement of patient satisfaction fulfils three distinct aspects: understanding patients' experiences of health care, identifying problems in health care, and evaluation of health care. Evaluation is regarded as the most important dimension (Sitzia and Wood, 1997). Donabedian (1988) reported that client satisfaction is one of the desired outcomes of care, an element in health status, a measure of the quality of care, and as indispensable to assessment of quality as to the design and management of health care system. PT has several dimensions that may influence client's satisfaction: the interaction often extends longer than routine medical visit, it involves more physical contact, and usually requires the client's active participation (Hillis, 2008).

Some studies evaluated quality of health services revealed that clients' satisfaction level ranging from 22.0% to 57.1% (Ethiopian MOH, 2003; Mitike et al., 2002; Girmay, 2006). In addition, the study carried out by Hillis (2008) included 151 participants (50.3% were males and 49.7% were females, aimed to measure clients satisfaction with PT services in Al Shifa hospital and Al Wafa medical rehabilitation hospital, found that clients' satisfaction with PT services was 87.4%, and there were no significant differences in clients' satisfaction related to gender, age, marital status, level of education.



Patient's satisfaction with health care is important for various reasons; first, satisfied patients are more likely to maintain a consistent relationship with a specific provider; second, by defining sources of patient dissatisfaction, an organization can address system weaknesses and shortness, thus improving its risk management; third, satisfied patients are more likely to follow and implement specific medical regimens and treatment plans (Dansky and Miles, 1997).

Abu Hamad (2009) emphasized that client satisfaction is an important determinant of the quality of services, which affects the acceptance of the interventions and subsequently the compliance of beneficiaries with the management regime, medical instructions, and follow up. Furthermore, Abu Hamad found that more than 90% of beneficiaries were satisfied with the different types of services they received, and that PT, disposables, and nursing services elicited the highest level of satisfaction.

Overall patient satisfaction with PT care is related to the quality of the physiotherapist-patient interaction; for example, the PTs treated the patient with respect, explained the treatment, and answered the patient's questions (Beattie et al., 2002, 2005). Also, patients' satisfaction measurement adds important information on system performance, thus contributing to the organization's total quality management. In addition, understanding factors that inhibit or promote consumer satisfaction will aid management not only to identify its strengths and limitations but also on how to adequately channel its efforts in improving service delivery. An improved and customer centric service delivery will end up bringing the desired customer satisfaction (Ofili, 2014).

### **2.2.7 Summary**

PWDs are vulnerable strata of the society who need special care and long-term treatment, follow up and rehabilitation to regain their lost abilities and functions. Charitable organizations are the main actors in offering community-based, outreach programs to offer health services and relief aids to those PWDs and their families. Different outreach physiotherapy programs for PWDs are taking place in GS, with different staff, different durations, and different characters. Evaluation of the effectiveness of these programs is an essential step for the organizations, beneficiaries, and decision makers. The researcher designed the evaluation framework to include three main aspects; quality of service delivery, perceived services quality by beneficiaries, and intervening factors that include characters of both service provider and beneficiaries. In addition, beneficiaries' satisfaction from the services received is a key factor in evaluation process which reflects to which degree the services meet the beneficiaries' expectations and fulfill their needs.

## **Chapter Three**

### **Methodology**

#### **3.1 Study design**

The researcher used mixed method that utilized both quantitative and qualitative data. The researcher collected quantitative data from beneficiaries who received outreach physiotherapy services by using a structured questionnaire and collected qualitative data by two focus groups from physiotherapists who are employed in the outreach physiotherapy programs. In mixed method studies, researchers intentionally triangulate the quantitative and qualitative data rather than keeping them separate. Triangulation gives a more detailed and balanced picture of the situation (Altrichter et al., 2008). This will provide combination to validate findings from one method to another or to enhance understanding of the facts on the ground (Donovan and Sanders, 2005).

#### **3.2 Study population**

The study population consisted of two parts:

##### **Quantitative part**

This part consisted of PWDs who received services from the current outreach rehabilitation programs, and their total number was 460 persons. In addition, medical records of PWDs were used in this part, and the available records were 230.

##### **Qualitative part**

This part consisted of 30 PTs who are employed in the outreach PT programs and offer services to beneficiaries at home settings.

### **3.3 Sampling method and sample calculation**

#### **3.3.1 Quantitative sample**

##### **a. Beneficiaries sample calculation**

A probability systematic selection for beneficiaries have been done depending on the list of beneficiaries names for each area. Accordingly, the 2<sup>nd</sup> beneficiary existed, and every second name was selected. The sample size for beneficiaries equals 230. The final number of beneficiaries who agreed to participate in the study and filled the questionnaires was 185 with response rate 80.4%.

##### **b. Medical records sample calculation**

The total number of available medical records was 230 records. The researcher got permission from institutions to review the records, and could obtain 156 records. The records that included physical, social and psychological care were selected, and the number of records that were suitable for data collection (included physical assessment checklist) were 148 records.

#### **3.3.2 Qualitative sample**

The qualitative sample consisted of 14 PTs who agreed to participate in the focus groups. Two focus group discussions were carried out. The first one included 8 male PTs, and the second one included 6 female PTs.

### **3.4 Setting of the study**

This study included four organizations that provided outreach PT services for PWDs as a result of the war 2014. The study included three settings; Gaza, Khanyounis, and Rafah governorates.

### **3.5 Period of the study**

The study took 21 months in execution; it started in October 2015 and completed by July 2017. The research proposal has been submitted and approved by the Al-Quds University School of Public Health Council in December 2015. Then the researcher developed the tool and shared with a group of 10 experts at the arbitration stage before the finalization of the tool, of them nine have responded. The arbitration stage lasted for two weeks including refining of tools in the light of reviewers and the academic supervisor's feedback. In March 2016, a peer was asked to propose Arabic translation of the tool and an Arabic language professional was asked for Arabic version validation. In April 2016, the tool was ready to go for data collection Actual data collection started on 15 April through 15 May 2016. Data entry and Initial analysis of quantitative data were done between June and July 2016. The researcher extracted findings, created descriptive tables and then performed inferential statistical analysis and in the same period 158 medical records were reviewed. After finishing quantitative part, qualitative data collection started in November 2016. The researcher stayed about 8 weeks in collection and analysis of the qualitative data. Two FGDs were done. The drafted report "thesis" has been frequently enriched and edited by the research supervisor. The final draft for defense was handed by mid July 2017.

### **3.6 Eligibility criteria**

#### **3.6.1 Inclusion criteria**

##### **Beneficiaries group**

- PWDs who injuries during the war in 2014 and registered in the selected organizations and received PT services from the outreach rehabilitation programs.
- Male and female, aged 2 years and above.
- Sustained injury with considerable disability that needs rehabilitation and PT exercises.

### **Physiotherapists group**

- Male and female PTs who provide PT services through the outreach rehabilitation programs.

### **3.6.2 Exclusion criteria**

#### **Beneficiaries group**

- PWDs who received PT services at hospital-based setting.
- PWDs who suffered from injury and disability due to any reason rather than Gaza war on 2014.
- PWDs with mental retardation due to congenital anomalies (CP) or disease complication (as meningitis).

#### **Physiotherapists group**

- PTs who provide the PT services at private sector.
- PTs who are working in hospitals or UNRWA health centers.

### **3.7 Ethical and administrative considerations**

Before conducting the study, the researcher got approval from Al Quds University. Also, approval from Helsinki Committee was obtained(annex 1). In addition, verbal approvals were obtained from the director of each outreach rehabilitation program. Furthermore, each participant received explanation about the study, with cover letter indicating that confidentiality will be assured for all of them after obtaining a consent (annex 2). The researcher assured every participant that the participation in the study is optional, and she/he can withdraw any time and has the right to refuse to participate.

### **3.8 Instruments of the study**

This study utilized three instruments for data collection; structured questionnaire for beneficiaries, beneficiaries' medical records for quantitative part, and focus groups for outreach PT providers for qualitative part.

#### **3.8.1 Quantitative part**

##### **3.8.1.1 Structured questionnaire**

Structured questionnaire was developed by the researcher. The questionnaire intended for data collection from the beneficiaries or their parents (annexes 3, 4). It is consisted of the following parts:

- Sociodemographic characteristics including age, gender, residency, level of education, type of work, and family income.
- Information related to type of injury and health status.
- Information related to characteristics of outreach PT services including type of service received, frequency and duration of home visits, and planning for visits.
- Information related to assessment and instructions, communication and treatment approach.
- Attitudes of physiotherapists and respect.
- Information related to referral system including reasons and place of referral, problems encountered in referral process.
- Information about perceived quality of services, and clients' satisfaction.
- Information about positive changes on the status of PWD (outcomes) of outreach services.

### **3.8.1.2 Checklist**

Abstraction sheet was prepared to collect relevant data from beneficiaries' medical records. Availability and filling of data was checked in each medical record (annex 5). The checklist was subdivided to three areas:

- General data including personal information, past and present history, and diagnosis.
- Examination data including investigations, tests that were performed (muscle test, range of motion (ROM), reflexes, ...).
- Treatment plan including aim of treatment, plan and follow up, training and instructions, discharge summary, and signature.

### **3.8.2 Qualitative part**

Focus group discussion with pre-set guiding questions. The researcher used open-ended questions to maximize understanding. The questions were categorized under 5 themes as follows: (Annex 6)

- Appropriateness and responsiveness of outreach PT services.
- Quality of outreach PT services.
- Characteristics of service providers.
- Impact of outreach PT services on beneficiaries.
- Strong points and areas need development in outreach PT services.



### **3.9 Data collection**

#### **Quantitative part**

##### **a. Questionnaires**

Data from beneficiaries was collected by the researcher and three assistants through direct interviewed questionnaire with the beneficiaries during home visits. Assistants were trained on how to be impartial during data collection and how to deal with different participants whatever their age and educational level.

After getting permission from managers of included organizations, filling of questionnaires took place during home visits immediately after offering PT sessions for beneficiaries. Parents helped in questionnaires filling for young children who can't understand the questions. During the period of data collection, some of the beneficiaries addresses were changed or wrong, therefore the researcher searched for their new address and reach them to be assured as much as possible that all eligible beneficiaries are included and fulfill the questionnaire. This process lasted for two months. The researcher and three assistants started from Gaza then Khanyounis and Rafah area. Time allocated for each questionnaire ranged between 15-20 minutes.

At the beginning of each interview, the participants received explanation to clarify the purpose of the study and to obtain consent from participants. To maximize understanding, the questionnaires were implemented in Arabic language. Participants were given adequate time to response to questions, and data collectors provided clarifications of questions when needed.

## **b. Checklist**

The researcher reviewed the available medical records for all beneficiaries who are registered in the selected organizations, and found that 148 medical records were eligible for data collection.

Abstraction sheets were filled by the researcher and the one assistant at the same time to ensure standardization of data collection from the medical records. Relevant data had been documented according from medical records according to the manner of documented data for each item in the abstraction sheet (completely filled – partially filled – not filled).

## **Qualitative part**

The focus groups discussions (FGDs) were carried out after the quantitative part in order to explore issues that emerged from the quantitative study. The purpose of FGD is to gain in-depth understanding of the perspectives about outreach PT services.

The researcher conducted two FGDs, one with 8 male PTs and the second with 6 female PTs. The researcher set date and time and invited PTs to participate in the FGDs. Semi-structured tool had been designed and used, and notes had been taken during discussions and tape recorded to allow further capturing of information. The two FGDs had been conducted in the fourth month after the end of quantitative data collection. The two FGDs were conducted in Peace Sporting Club for people with disability, with one week apart between the two groups, and each FGD lasted for 90-100 minutes.

## **3.10 Data entry and analysis**

### **Quantitative part**

The researcher used Statistical Package for Social Sciences (SPSS) program. Data processing and analysis were as follows:

- Over viewing of questionnaires.
- Designing an entry model.
- Variables were coded and entered to the computer.
- Data cleaning was done through checking out a number of the questionnaires. All suspected or missed values were checked by revising the available questionnaires.
- Descriptive statistical analysis was made by calculating frequencies and percentages.
- Inferential statistical analysis was made by using (t) test and One way ANOVA for positive changes in the status of PWDs, and cross tabulation and Chi square for beneficiaries' satisfaction from outreach PT services.
- For the checklist obtained from medical records, the researcher calculated frequencies and percentage.

### **Qualitative part**

Open coding thematic analysis method was used to analyze qualitative data that have been collected from focus groups. During focus groups, the researcher wrote notes and tape-recording of the group discussion, then obtained data was categorized under the appropriate theme. Integration between the quantitative and the qualitative findings was implemented to enrich the results of the study.

### **3.11 Scientific rigor**

#### **Quantitative part (questionnaire and checklist)**

##### **a. Validity**

The questionnaire had been evaluated by experts to assess its relevance, clarity of language and wording, and their comments were considered in modifying the questionnaire (annex 8).

Furthermore, review of the medical records assessed in maintaining of instrument validity.

## **b. Reliability**

The following steps were taken to assure instruments reliability:

- Training of data collectors on the beneficiary interviewing steps and the way of asking questions. This will assure standardization of questionnaire filling.
- Then, the data entry in the same day of data collection would allow possible interventions to check the data quality or to re-fill the questionnaire when required.
- Re-entry of 5% of the data after finishing data entry to assure correct entry procedure and decrease entry errors.

## **Qualitative part (Focus groups)**

The following had been done to assure the trustworthiness of the qualitative part in this study. First, a peer check had been performed through health experts to revise the FGDs themes and questions to assure that they cover all the required dimensions. Then, a member check to assure accuracy and transparency of the transcripts during the FGDs. Prolonged engagement was maintained as the researcher tried to probe for answers and cover all the FGDs dimensions properly. In addition, recording the FGDs to enhance tracking up facts and re-check the accuracy of the transcripts. Finally, all the transcripts and recordings were kept for tracking the information by others at any time.

## **3.12 Limitations of the study**

- Systemic data base for outreach rehabilitation programs is not available.
- Difficulty to access the sample in the community.
- Lack of resources and materials about the study.
- Frequent, long hours of electricity cut-off.

## Chapter Four

### Results and Discussion

This chapter presents the findings of quantitative and qualitative data. It begins with description of demographic characteristics of study participants, followed by inferential findings for selected variables, and the findings were tackled and discussed with relevant previous studies. The second part highlights qualitative findings obtained from focus groups.

#### 4.1 Descriptive results

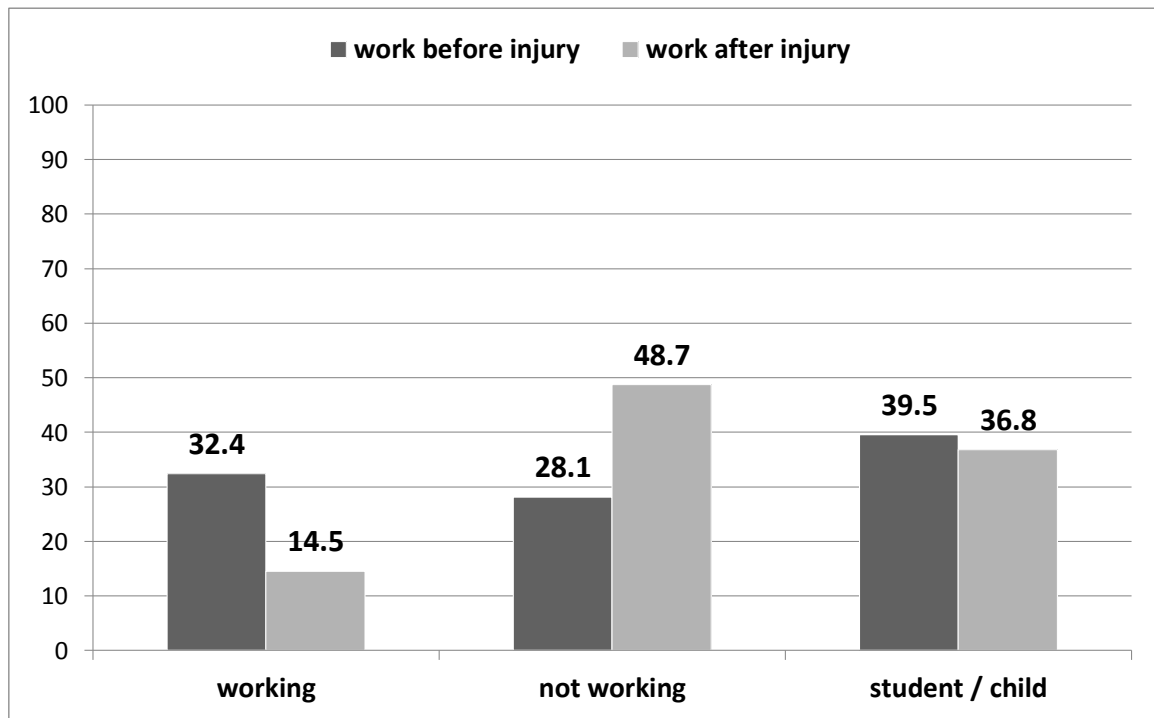
##### 4.1.1 Sociodemographic characteristics

**Table (4.1): Demographic characteristics of study participants (N = 185)**

Variable	Category	N	%
Gender	Male	130	70.3
	Female	55	29.7
Age	Less than 18 years	56	30.3
	18 – 30 years	84	45.4
	31 years and more	45	24.3
	<i>Mean age = 24.49 years      SD = 12.8</i>		
Type of house	Flat	88	47.6
	Detached house	97	52.4
Level of education	Illiterate / child	16	8.6
	Preparatory and less	65	35.1
	Secondary school	66	35.7
	University	38	20.5
Place of residency	Gaza	65	35.1
	Khanyounis	65	35.1
	Rafah	55	29.7
Marital status	Single	105	56.7
	Married	80	43.3
Monthly income	Less than 1000 NIS	138	74.6
	1000 – 3000 NIS	47	25.4

This study included 185 PWDs who received PT services from outreach programs in GS, 70.3% males and 29.7% females, their mean age was 24.49 years, of them 45.4% aged between 18 – 30 years, and 52.4% lived in detached house, 35.1% had preparatory school education and less, 35.7% had secondary school education. Regarding place of residency, 35.1% were from Gaza governorate, 35.1% from Khanyounis, and 29.7% from Rafah, and 56.7% were single. The majority of study participants were from low income class as 74.6% earn less than 1000 New Israeli Shekel (NIS). Previous studies showed variations in the characteristics of participants. In an evaluation report carried out by Abu Hamad (2009), a total of 100 beneficiaries were included, and Radwan study (2011) included 201 beneficiaries, 101 males and 100 females from North and Gaza governorate, 22.9% aged 1 – 5 years, 45.3% aged 6 – 18 years, and 31.8% were above 18 years old. Also, 24.4% were illiterate, 25.4% had primary school education, 20.9% had secondary school education, 2.4% had university education, and 26.4% were preschoolers. Another study conducted by Matter (2016) included 350 participants, 53.4% were males and 46.6% were females, their mean age was 43.97 years, 51.1% were from Gaza, 27.7% from Khanyounis, 16.3% from Rafah, and 2.6% from North Gaza, 64% completed up to 12 years education, and 36% had university education, 72.3% were married, 22.6% were single, and 5.1% were divorced or widowed, and the study conducted by Hillis (2008) included 151 participants, 50.3% were males and 49.7% were females, 69.5% were married, 21.2% were single, and 9.3% were divorced / widowed, 33.1% were working and 66.9% were not working. Our results reflected that the majority of study participants were males and from the young age, which is logic when talking about war casualties, because usually young males are going out of homes and engaged in outdoor activities or rescuing victims so they are more prone to be injured while females generally stay inside homes so the chance of injury is less.

Also, our results indicated that more than two-thirds of study participants had prep school and secondary school education, while only one fifth had university education, which reflected the low chance of PWD to continue their education to the university level. Continuation of study is a basic right in human laws, and those PWD should have equal chances for education if their condition permits.



**Figure (4.1): Work status before and after injury**

Figure 4.1 shows that before injury, 32.4% of study participants were working, and after injury the number decreased to 14.5%. This result reflected that the disability resulted from the injury made many people to lose their ability to work, and this result explain the high number of persons with low income as 74.6% earn less than 1000 NIS monthly.

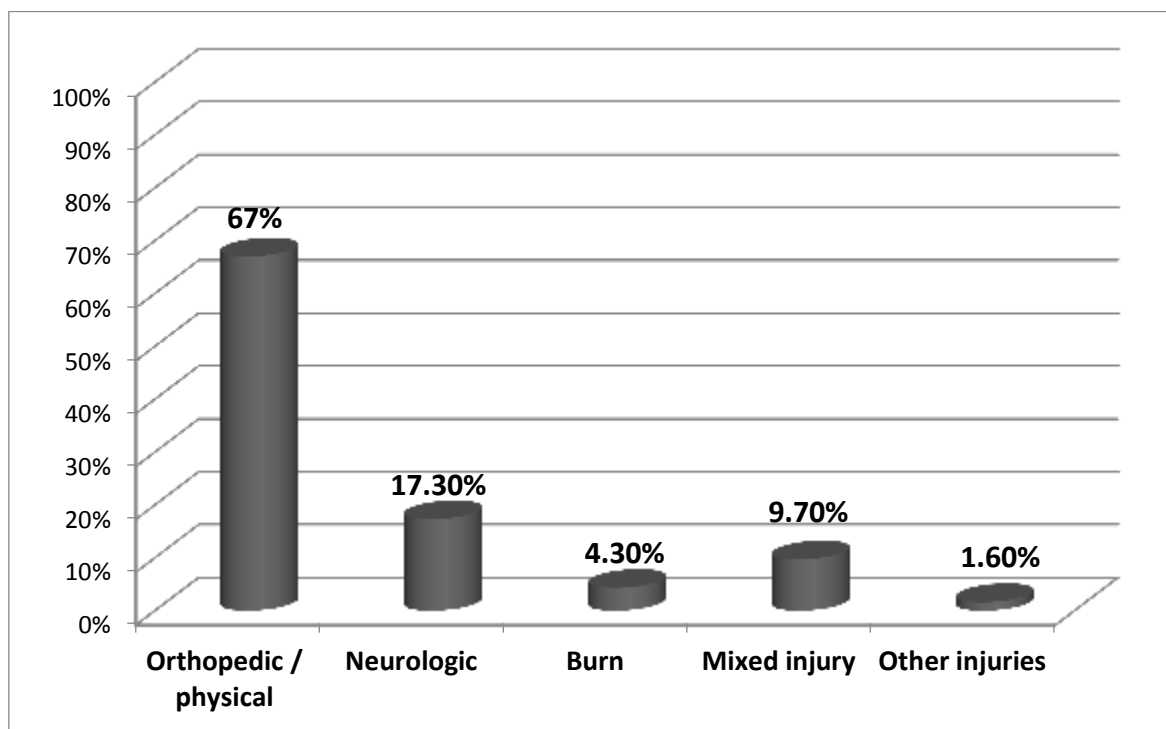
These results are supported by a study carried out by Radwan (2011) which found that 8.5% of PWD were working, 7.5% without work, 12.9% housewives, 3% employers, 53.2% were children, and 14.9% were students. Also, 80.6% were from the low income

class earn less than 1000 NIS monthly, 15.9% earn 1000 – 3000 NIS, and 3.5% earn more than 3000 NIS per month.

The researcher assumes that disability decreases the individual chance to find a suitable job, which in turn will increase the inflation rate in an area like GS with already scarce work opportunities. As the number of PWD increase, the burden of disability also will increase because individuals with disability need special care and rehabilitation programs to enable them regain their ability to function and be productive in their community.

#### 4.1.2 Type of injury

It is obvious to say that the outreach PT program treat persons with different types of injuries. Injuries of beneficiaries from the program were mainly physical, neurological and burns, beside other types of injury as presented in figure 4.2.



**Figure (4.2): Distribution of study participants by type of injury**

Figure 4.2 shows that more than two thirds of study participants 67.0% had orthopedic / physical injury, 17.3% had neurological injury, 4.3% had burns, 9.7% had mixed



injuries, and 1.6% had other injuries. Moreover, 26.5% sustained additional health problems as a result of their injury. This result was consistent with the results obtained by Radwan (2011) which showed that 76.1% of study participant were physically disabled and 26.4% had multiple disability, and that 71.6% of cases had acquired disability with various types, and accidents constituted 52.1% of causes, communicable diseases constituted 16.7% of causes, and wars constituted 14.6% of causes.

It is worth to say that the number of PWD from physical injuries in GS increased due to frequent Israeli wars against the strip in the recent years with high numbers of serious injuries that led to long-term disability of victims as a result of shooting and shelling, adding to that disabilities caused by accidents and falls, which increase the burden of disability and raised the need for continuation of rehabilitation programs to manage the increasing number of people who need PT and rehabilitation services.

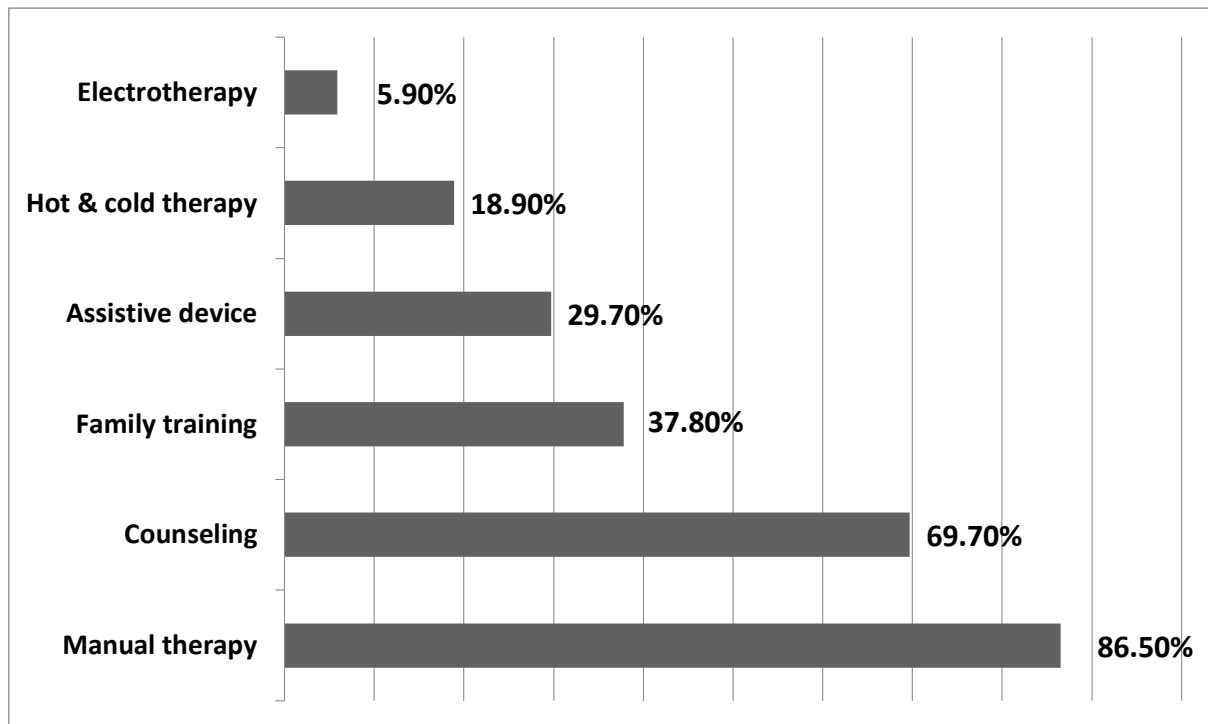
Focus group interviews with PTs reflected the need for rehabilitation programs to meet the needs of individuals with disability as they said: *Because the Gaza Strip is a war zone, with increasing number of injuries and disabilities, the need for outreach programs is very essential.* Male PTs said: *Due to high number of victims, the hospitals provide emergency and medical treatment, and when the victims became stable, they will be discharged home. At this stage, many injured people are unable to function properly, so the rehabilitation program is necessary to overcome or decrease the burden of disability.*

#### 4.1.3 Utilization of outreach physiotherapy services

In this part, the researcher presented information about received PT services as perceived by beneficiaries. Their perceptions focused on three areas including type of services offered, characteristics of home visits, and PTs performance. These issues are important components for evaluation of the program to highlight strengths and weaknesses that will help in designing future rehabilitation programs to suit the beneficiaries' demands and be more effective in meeting beneficiaries' needs to enhance their recovery and adaptation to their environment.

**Table (4.2): Type of received outreach physiotherapy service**

Variable	Category	N	%
Type of received service	Manual therapy	163	86.5
	Counseling	129	69.7
	Family training	70	37.8
	Assistive devices	55	29.7
	Hot and cold therapy	35	18.9
	Electrotherapy	11	5.9
Receiving physiotherapy services from other rehabilitation programs	Yes	62	33.5
	No	123	66.5
Causes of receiving physiotherapy services from other programs	Need extra service	9	4.9
	Better quality	8	4.3
	Adequate professionals	4	2.2
	Enhance recovery process	43	23.2
	No justified reason	11	5.9



**Figure (4.3): Type of received outreach physiotherapy service**

As shown in table 4.2 and figure 4.3, the majority of study participants 86.5% received manual therapy, 69.7% received counseling, and 29.7% received assistive device, while 5.9% received electrotherapy. Different results were obtained by Radwan (2011) which indicated that 27.1% of PWDs received PT, 28.6% received assistive devices, 42.8% received relief aids, 26.3% received psychological support, 9% received health education, and 3% received environmental adaptation.

In addition, 33.5% received PT services from other rehabilitation programs. This result indicated that one third of PWDs seek further PT services from other outreach programs and this could be attributed to the feeling that beneficiaries did not receive adequate service from one program, another cause could be poor coordination between outreach programs that are working in GS. Among those who received services from other outreach programs, 4.9% related that to their need for extra services, 4.3% related that to the need for better quality, 2.2% related that to adequate professionals, 23.2% related that to the need to

enhance their recovery. This result reflected that one third of study participants received services from more than one program. The researcher believed that this duplication in services may interfere with the beneficiaries' progress in the course of treatment, also it is misuse of resources. To avoid this duplication, it is important to establish a network coalition for outreach programs to maximize the utilization and benefits from these programs for a wider range of persons who need these services.

One PTs said that: *we offer different types of exercises and training modalities including therapeutic exercises, training on walking, home adaptation, offer different types of assistive devices, and family training.* One female PTs said that *family training is a major objective of our program aiming to create a physiotherapist in every house.* The physiotherapist visits the client once or twice a week, *but when a family member is trained he will perform the required exercises for the client every day and that helps in avoiding deterioration and fostering the recovery process.* To maintain sustainability of family training, *we give a handbook with diagrams and instructions for the family so they can learn from it and helps them in remembering how to do the exercises properly.*

The researcher believed that this result was logic because the majority of PWDs need a mixture of different services including PT by a qualified PTs, assistive devices that help them in managing some of their daily activities (like crutches, walkers, support devices), cold and hot therapy, and electrotherapy. Also counseling and family training is very important to enable family caregivers to take care of the PWD at home.

For home visits characteristics, table 4.3 shows that more than half of study participants 53.5% received the outreach service since 4 – 7 weeks, and 16.2% received the service for more than 12 weeks. Concerning frequency of outreach visits, half of the participants 50.3% had two visits / week, 31.9% had three visits / week, and 17.8% had one visit / week.

**Table (4.3): Frequency and duration of home visits (N = 185)**

Variable	Category	N	%
Duration of receiving service	Less than 4 weeks	32	17.3
	4 – 7 weeks	99	53.5
	8 – 12 weeks	24	13.0
	More than 12 weeks	30	16.2
Number of visits / week	1 visit	33	17.8
	2 visits	93	50.3
	3 visits	59	31.9
Length of each visit	Less than 40 minutes	118	63.8
	40 minutes	9	4.9
	More than 40 minutes	58	31.4
The physiotherapist has spent enough time with you	Yes	137	74.1
	To some extent	31	16.8
	No	17	9.2
The physiotherapist visits you regularly	Yes	141	76.2
	No	44	23.8
Presence of plan for each visit	Yes, always	141	76.2
	Sometimes	18	9.7
	No	26	14.1
Commitment of physiotherapist to the plan	Yes	146	78.9
	To some extent	24	13.0
	No	15	8.1
Number of times that the physiotherapist didn't commit to the visits plan (N = 15)	1 – 4 times	1	6.7
	5 – 9 times	9	60.0
	10 – 14 times	3	20.0
	15 times and more	2	13.3

The results indicated variation in frequency and time allocated for each visit and that depends on the type and severity of the disability. One PTs said that *the nature and frequency of home visits will be established after the first visit according to the severity of the case and the need for physiotherapy. Usually we make one or two visits per week for each client.* Others said that *at the beginning of the project there was a high number of clients so we made one visit per week, but as the project advanced, the number of staff in the project increased and some clients travelled outside the Gaza Strip, so we could make*

*two visits per week to every client. Also, some clients receive outreach physiotherapy from other projects, so they will have at least two visits every week (one from each project).*

Concerning commitment to the schedule of home visits, PTs said that *they are committed to the planned schedule of visits and the administrators of the project monitor and follow up our visits either by calling the client or by the field rounds of the supervisor. In case of staff meeting, we call the client on advance to inform him that we are not coming the next visit.*

Furthermore, 63.8% reported that each visit lasts less than 40 minutes, 31.4% reported that each visit lasts more than 40 minutes, and the mean time for each visit was 37 minutes. In addition, the majority of study participants 74.1% reported that the PTs spent adequate time with them each visit, while 9.2% felt that the PTs did not spend adequate time with them, and 76.2% said that the PTs visits them regularly.

Physiotherapists said that *duration of visits lasts between 30 – 40 minutes. At the beginning we spend longer time with the client, but after we train family members we spend less time with clients.* Other physiotherapists said: *when we have high number of clients we shorten the duration of the visit to 20 minutes. Some times when we have to visit several clients in one day and they live far away from each other, then we have to take transportation, and this will affect the duration of the visit.*

Radwan (2011) reported that 73% of beneficiaries received home visits, 26.5% received one visit per month, 23.2% received more than one visit per month, and 69.7% mentioned that the RWs spend enough time with them. Another evaluation study carried out by Deville et al., (2016) found that 52% of respondents rated the time spent with them by the therapist as adequate time. Another study showed that appointment home visits ranged between 4 – 6 visits with median 6 visits during the course of study, and beneficiaries from the outreach group reported that PTs spent more time with them during visits compared to

institutional based group (Dambi and Jelsma, 2014). In addition, Matter (2016) found that 49% of clients spent up to 24 minutes with their therapist each visit, 40.4% spent 25 – 40 minutes, 10.6% spent more than 40 minutes, and the average time was 26.41 minutes for each visit.

Female physiotherapist said that *many factors play a role in determining the duration of visits including number of clients, severity of the case, family training, progress of the case, and availability of transportation from the project.*

The researcher believed that having scheduled visits according to the need of each beneficiary is a key success to the outreach program. Reimer and Lenavenec (2002) supported this idea and emphasized that the success of community outreach program mainly through providing services three hours or more per week for particular clients in the community.

In addition, the results showed that 76.2% of study participants reported that there is always a plan for each visit, 9.7% reported that sometimes there is a plan, while 14.1% reported that there is no plan for each visit. Also, 78.9% said that the PTs always committed to the plan, and 8.1% said that the PTs were not committed to the plan. Having plans for intervention with clients is essential to meet their individual needs. In his evaluation report for the community-based rehabilitation project, Abu Hamad (2009) reported that the development of an individual management plan for each beneficiary represented an ideal intervention model. He added that this reflects an appropriate responsiveness approach in the design of the project.

Individuals with disabilities need different management plans to meet the individual needs. Planning for each visit and putting the plan in action is very important for the success of rehabilitation program. Also, communicating the plan with the client will increase the understanding of the client about what will be done and what is his role during the visit and

after the visit, which increase the possibility of cooperation of clients and enhance their recovery and adaptation.

Data obtained from beneficiaries and PTs highlighted some weak areas that need development and should be considered in designing future programs. Duplication of PT services as the results of the study reflected that one third (33.5%) of beneficiaries received PT services from other programs. Beneficiaries related that to their need for extra service, better quality, and to enhance their recovery.

Some physiotherapists mentioned that *sometimes they have high number of beneficiaries to be visited in a day, and that led to shortening of the time allocated for the visit, others said that sometimes I spend around 15 minutes with the beneficiary, which is not adequate, but I have to finish my list. Also, lack of coordination between institutions resulted in duplication of services.* In addition, around one fourth (23.8%) of beneficiaries said that the PTs does not visit them regularly, and that makes them searching for other programs that offer the service.

**Table (4.4): Assessment and instructions given by physiotherapists**

Variable	Category	N	%
Physiotherapist performed assessment at the first visit	Yes	177	95.7
	No	8	4.3
Tools that were used in assessment (can choose more than one)	Manual muscle testing	167	90.3
	Sensation tools	41	22.2
	Goniometer	25	13.5
	Tape measure	14	7.6
	Special tests	11	5.9
Receiving instructions	Verbal	127	68.6
	Written	2	1.1
	Mixed	14	7.6
	Not received	42	22.7
Application of received instructions	Yes	97	67.8
	To some extent	39	27.3
	No	7	4.9



Table 4.4 shows that the vast majority of PTs 95.7% perform assessment for the beneficiary in the first visit, and for the tools used in assessment, 90.3% mentioned manual muscle testing, 22.2% mentioned sensation tools, 13.5% mentioned goniometer, 7.6% mentioned tape measure, and 5.9% mentioned special tests.

Concerning instructions, 68.6% said that they received verbal instructions, 1.1% received written instructions, 7.6% received both verbal and written instructions, while 22.7% did not receive any instructions. Moreover, 67.8% said that they apply the received instructions exactly as being told, 27.3% apply the instructions to some extent, while 4.9% did not apply the instructions.

Deville et al., (2016) found that 43% of respondents reported that the PTs assessed their condition very well, 44% felt that they were well-informed throughout the therapy they received, and 35% reported feeling very involved in setting their goals. Another study indicated that beneficiaries from outreach group received more instructions from their PTs compared to institutional based group (Dambi and Jelsma, 2014). Performance of technical activities in a good manner by the therapist is an important factor for beneficiaries' compliance and satisfaction from the service they received, and in this regard reported that technical quality is more influential on the satisfaction of the utilized services and functional quality is more important determinant factor of satisfaction (Lien and Kao, 2008).

A male physiotherapist reported that *treatment of beneficiaries is client centered, depends on the type and severity of disability, so, we do not depend on specific protocols for all. Our goal is to maximize the clients' abilities and functions, so instructions will be given to clients according to their condition and according to the physiotherapist experience.* Other physiotherapists said that *they use universal protocols of physiotherapy. For example, when doing exercise we depend on protocols for specific joint exercise to avoid damage of*

*the joint, and on one stage we focus on muscle strengthening, and without written protocols, we may harm the client.*

The researcher believed that initial assessment in the first visit to the client is a key factor in building trust relationship with clients. Also, assessment will enable the PTs to identify the client's type and severity of disability, and accordingly design a proper plan of treatment that would be followed with the client. In addition, having a written plan will enable the client to expect the activities that will be done, and enable the PTs to monitor the effectiveness of home visits sessions and evaluate the progress on the client.

**Table (4.5): Communication and treatment approach**

Item	Yes		To some extent		No	
	N	%	N	%	N	%
Privacy assured during visits	180	97.3	5	2.7	0	0
Had a chance to express your complain to the physiotherapist	165	89.2	11	5.9	9	4.9
The physiotherapist listen carefully to you	165	89.2	13	7.0	7	3.8
Received answers to your questions	135	73.0	38	20.5	12	6.5
Involvement in management plan	70	37.8	45	24.4	70	37.8
Received suitable care	124	67.0	33	17.8	28	15.1

Table 4.5 shows that the vast majority of study participants 97.3% said that their privacy was assured during the visits, 89.2% said that they had the chance to express their complain to the PTs, 89.2% said that the PTs listened carefully to them, 73.0% received answers to their questions, 37.8% have been involved in management plan, while 37.8% were not involved in the management plan, and 67.0% believed that they received suitable care. In her study, Radwan (2011) reported that 92% of therapists

listened to questions, 91% gave answers to the beneficiaries, and 60.7% informed the beneficiaries about the rehabilitation plan. In addition, Jorge et al., (2001) reported that the most powerful predictor for client satisfaction with health services was provider behavior, especially respect and politeness. Moreover, Matter (2016) found that 72.6% of participants said that they participate in preparing treatment plan, and 79% were allowed to discuss treatment plan with their therapist.

One female physiotherapist said that *communication is an essential part of their job; we spend 30 – 40 minutes with each client in every visit, during that we have to talk with the client, assure him and increase his self-confidence*. Another physiotherapist said: *communicating with clients is usually therapeutic, we give the client instructions and feedback about his condition and progress, we gain trust of the client and his family, and that increase the clients' cooperation and acceptance of us as professionals*.

A study conducted in Zimbabwe aimed to compare outreach program and institutional-based program found that children in the outreach group reported that their PTs give them more explanation, listen to their concerns and queries, having all their questions answered, and giving instructions on home exercise (Dambi and Jelsma, 2014). In addition, Matter (2016) found that the overall mean percentage of accessibility to information was 78.15%, about two thirds of participants agreed that the therapist explain the progress of treatment plan, about two thirds of participants reported that they have received full explanation about PT interventions, and 82.2% of participants were able to ask questions to their therapist.

These results indicated that the PTs treat the beneficiaries as humans by ensuring their privacy and listening to their queries and complaints, answer their questions, and involve them in the treatment plan. It is obvious that treating the disabled as a human

being and involve them in decision-making regarding their condition will increase their understanding and cooperation with their care giver.

**Table (4.6): Attitudes and interaction of physiotherapists**

Variable	Category	N	%
Physiotherapist approach	Good	147	79.5
	Moderate	30	16.2
	Not acceptable	8	4.3
Physiotherapist attitudes	Very good	151	81.6
	Good	30	16.2
	Not good nor bad	4	2.2
The physiotherapist treat you with respect	Yes	182	98.4
	To some extent	3	1.6
The physiotherapist discriminate between the beneficiaries	Yes	3	1.6
	No	182	98.4

Table 4.6 shows that the majority of study participants 79.5% described the PTs approach as good, 16.2% described the approach as moderate, but 4.3% described the approach as not acceptable. Also, 81.6% thought that the PTs had very good attitudes toward them, 16.2% said that the physiotherapist had good attitude, and 98.4% believed that the PTs treat them with respect, and 98.4% said that the PTs did not discriminate between clients.

Similar results obtained by Radwan (2011) which showed that 98.5% of PWDs mentioned that the therapist respect them, and 59.2% of disabled viewed their approach as good, 27.8% viewed their approach as moderate, while 5% viewed their approach as bad. In addition, 45.3% of disabled described the therapists performance as good, 37.3% described their performance as moderate, and 17.5% described their performance as bad, and Dambi and Jelsma, (2014) found that children in the outreach group reported that their care givers showed higher respect, and children felt more comfort.

Performance of therapists is a key factor for the success of the rehabilitation programs, and that requires the selection of individuals who have high professional skills and communicate with their clients in a kind, human manner with respect and positive attitudes, which in turn will encourage the client to be more cooperative and follow instructions and management plans.

**Table (4.7): Description of referral system**

Variable	Category	N	%
Referral to other institutions	Yes	14	7.6
	No	169	91.4
	Do not know	2	1.1
Reasons for referral (N= 14)	Project ended	10	71.4
	Nature of the case needs referral	1	7.1
	I do not know	1	7.1
	No need for outreach visit	1	7.1
	Needs bone-graft surgery	1	7.1
Place of referral	Local NGO	7	50.0
	International NGO	7	50.0
Problems encountered during referral process	Yes	2	14.3
	No	12	85.7
Nature of problems encountered during referral	Inadequate documents and medical reports	1	50.0
	The organization refused to accept the case	1	50.0

Table 4.7 indicates that 7.6% were referred to another institution, of them 71.4% were referred because the current project came to end, and half of them were referred to local NGO and the other half were referred to international NGO, and 85.7% did not face problems during referral to the new institution. In her study, Radwan (2011) reported that 28.8% of study participants were referred to other institutions, of them 41.4% were referred to NGOs, and 31% were referred to private sector, and reasons for referral included the need for more services, sufficient professionals, and the need for drugs. The researcher attributed the variation between our result and the results of Radwan because the study of Radwan was CBR study that includes wider range of services including

medical, social, and psychological care, while our study focused mainly on outreach PT services.

The researcher believed that referral of beneficiaries is needed for selected cases who need special service that is not available in one program. So, collaboration and cooperation between projects and different sectors (MOH, UNRWA, local and international NGOs) is essential to offer holistic services to the disabled to meet their needs and foster their adaptation and recovery.

**Table (4.8): Beneficiaries' expectations and satisfaction from services (N = 185)**

Variable	Category	N	%
The physiotherapy services met my expectation	Yes, to high extent	107	57.8
	To some extent	28	15.1
	No	50	27.0
If no, how did you expect the outreach physiotherapy services?	Better	35	70.0
	Worse	15	30.0
The physiotherapy services met my needs	Yes, to high extent	107	57.8
	To some extent	57	30.8
	No	21	11.4
If no, the missing service (N= 21)	More commitment	8	38.1
	More professional approach	5	23.8
	Mechanical and electrotherapeutic modalities	2	9.5
	The need for surgery	2	9.5
	Electrotherapy	1	4.8
	Need more exercises	2	9.5
	Period of the project inadequate	1	4.8
Overall satisfaction about services received	High satisfaction	104	56.2
	Moderate satisfaction	62	33.5
	Not satisfied	19	10.3

Table 4.8 shows that 57.8% of study participants reported that the PT service met their expectations to high extent, 15.1% said it met their expectations to some extent, and 27.0% said that it did not meet their expectations, of them 70% expected the service to be better. Also, 57.8% said that the PT services met their needs to high extent, 30.8% said it met

their needs to some extent, while 11.4% said it did not meet their needs. Among those who said that the service did not meet their needs, 38.1% related that to the need for more commitment, 23.8% wanted more professional approach during the exercises, 9.5% related that to missing of mechanical and electrotherapeutic modalities, 9.5% related that to the need for surgery, 9.5% needs exercise more than instructions, and 4.8% thought that the period of the project is not enough. A study conducted by Matter (2016) showed that 76.6% of participants received the service that they supposed to receive, 79% of participants said that the services met their expectations, 22.3% said that the service met their needs, and that 65.1% were satisfied from the services they received, 34.6% were partially satisfied, and 0.3% were not satisfied.

In addition, 56.2% of participants said that they were highly satisfied from the service they received, 33.5% said that they were moderately satisfied, while 10.3% were not satisfied. An evaluation study of emergency rehabilitation program in GS showed that 94.2% of beneficiaries described their satisfaction from the service they received as good, and 5.8% described their satisfaction as moderate (Abu Hamad, 2009). Another study showed that 36.8% of subjects reported complete satisfaction from the service they received, and those who had one therapist during the course of treatment reported higher satisfaction compared to those who received service by different therapists (Beattie et al., 2005). An earlier study carried out by Beattie et al., (2002) showed that patients were highly satisfied which reflected high quality interaction with the therapist (time, adequate explanation and instructions to patients). Also, Dambi and Jelsma, (2014) found that the outreach group reported greater satisfaction with services.

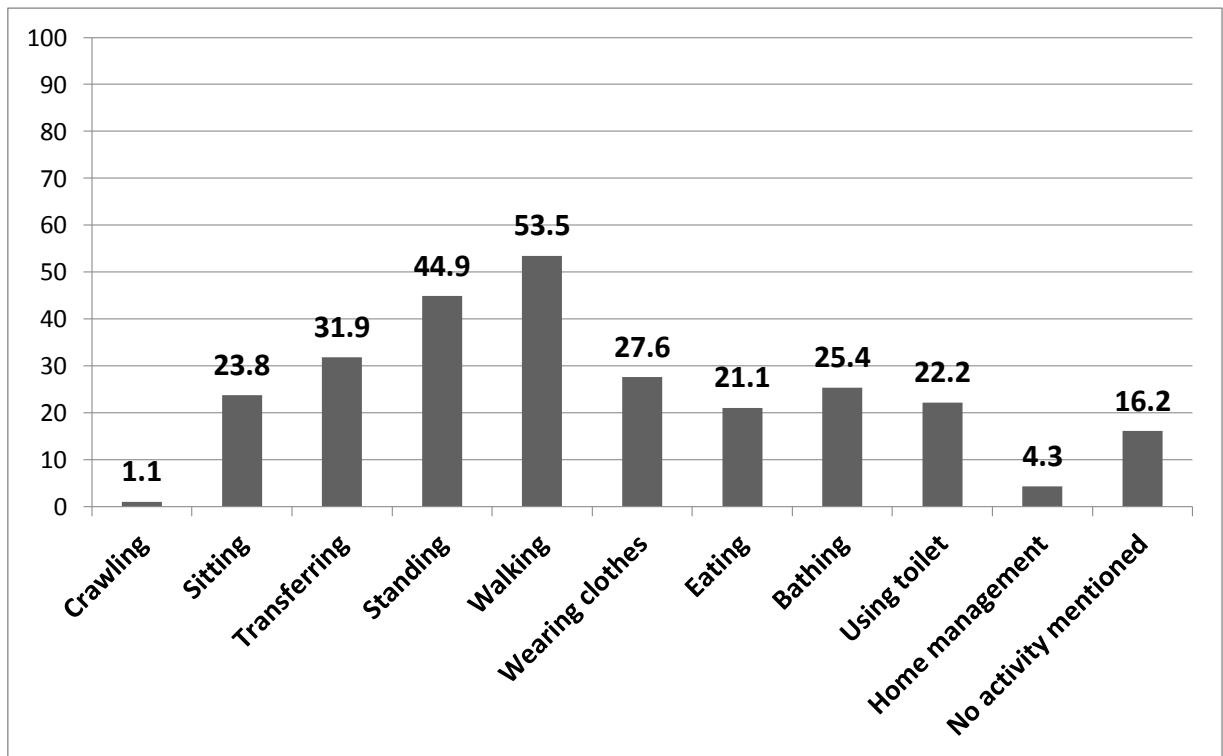
Other studies revealed that clients' satisfaction level ranging from 22.0% to 57.1% (Ethiopian MOH, 2003; Mitike et al., 2002; Girmay, 2006). Understanding factors that inhibit or promote consumer satisfaction will aid management not only to identify its

strengths and limitations but also on how to adequately channel its efforts in improving service delivery. An improved and customer centric service delivery will end up bringing the desired customer satisfaction (Ofili, 2014). One female physiotherapist said that *she is updating her knowledge and skills periodically by reading articles, and watching videos of physiotherapy techniques*. Another physiotherapist said that *he receives monthly training classes from his institution to keep updated and qualified to be able to treat all types of disabilities and meet beneficiaries' expectations and needs*. Another male physiotherapist said that *he is working on the basis of "client's center", so I focus on client's type and severity of disability and design treatment plan according to that*.

The researcher believes that clients' perception of service quality will influence their satisfaction positively, which in turn will exhibit favorable behaviors and apply instructions received from the PTs.

It is worth to say that patient satisfaction is a topic that is important both to healthcare providers, the patients / consumers themselves, and other third-party stakeholders in the healthcare industry. For healthcare providers ensuring that consumers are satisfied is a continuous effort. It is therefore, critical to them that the true state of consumers' satisfaction is known. Measuring the degree of clients' satisfaction can help facilitate service provision and management as well as increase and maintain the quality of service provision.





**Figure (4.4): Activities that beneficiaries can perform after receiving physiotherapy services**

After receiving PT services, 53.5% of study participants are able to walk, 44.9% are able to stand, 31.9% are able to transfer themselves, 27.6% are able to wear their clothes, 25.4% are able to bath themselves, 23.8% are able to sit, 22.2% are able to use toilet. Similar results obtained by Abu Hamad (2009) which revealed positive outcomes after receiving the rehabilitation services, 52% of PWDs can walk, 57% can use bathroom, 56% can wear their clothes, 43% can eat, 47% can take a shower, 30% can go to school, and 14% can do house work.

These results reflected a considerable improvement in the beneficiaries' ability to perform ADL which revealed that the PT services offered were effective and resulted in positive changes in their health status.

To measure the positive changes items, the researcher calculated frequencies, percentages and mean scores. To obtain the mean scores, the researcher gave 3 scores to the highest response, 2 scores to the second response, and 1 score to the lowest response, then these scores were calculated and divided by the number of items.

**Table (4.9): Positive changes after outreach physiotherapy services**

Variable	Category	N	%	Mean
Health status after receiving services	Better	145	78.4	2.78
	Same	39	21.1	
	Worse	1	0.5	
Feeling energetic after receiving services	Yes, to high extent	129	69.7	2.58
	To some extent	34	18.4	
	No	22	11.9	
Ability to interact with others after receiving services	Good	136	73.5	2.71
	Moderate	45	24.3	
	Not Acceptable	4	2.2	
Ability to engage in family activities	Yes, to high extent	149	80.5	2.76
	To some extent	27	14.6	
	No	9	4.9	
Ability to engage in community activities	Yes, to high extent	13	7.0	1.33
	To some extent	35	18.0	
	No	137	74.1	
Over all mean score				2.43

Table 4.9 shows that the majority of participants 78.4% said that their health status is better after PT, 69.7% of participants felt energetic to high extent, 73.5% described their interaction with others as good, 80.5% were able to engage in family activities to high extent, but 7.0% were able to engage in community activities to high extent.

The results also indicated that the highest scores were in health status after receiving PT services with mean score 2.78, followed by ability to engage in family activities with mean score 2.76, ability to interact with others after receiving PT services with mean score 2.71, feeling energetic after receiving PT services with mean score 2.58, and the lowest score was in ability to engage in community activities with mean score

1.33. The overall mean score was 2.43 which revealed that the outreach PT services were effective and yield positive change on the status of PWDs.

Interview with PTS reflected positive impact of the outreach visits. One physiotherapist said that *the physiotherapy program improved the clients physically and psychologically*. Male physiotherapist said: *I could move the client from being dependent on others to being independent in many aspects of daily living including ability to walk and use of toilet. Some clients regained their social activities and engagement in community activities. Also, the home visits saved money and efforts for the clients and their families. One client said that going to private physiotherapy center cost me between 20 – 30 NIS each time, but the outreach home visit program is free of charge and I saved the money for other things as buying clothes and food*. Female physiotherapist said that *some clients are very old and it was difficult to take them to private center, and the home visits made the situation easier for the family*. Dambi and Jelsma, (2014) found that outreach group improved by 2.49 points more on motor functions compared to institutional based services, and this equates to approximately a 6% difference in improvement from baseline. Abu Hamad (2009) found that 96% of PWDs felt that their current health status is better than their status at the time of injury, 80% felt that they are integrated and normally interacting with their families and community, 57% had good interaction with others, 66% reported inclusion with family, and 58% reported inclusion in society.

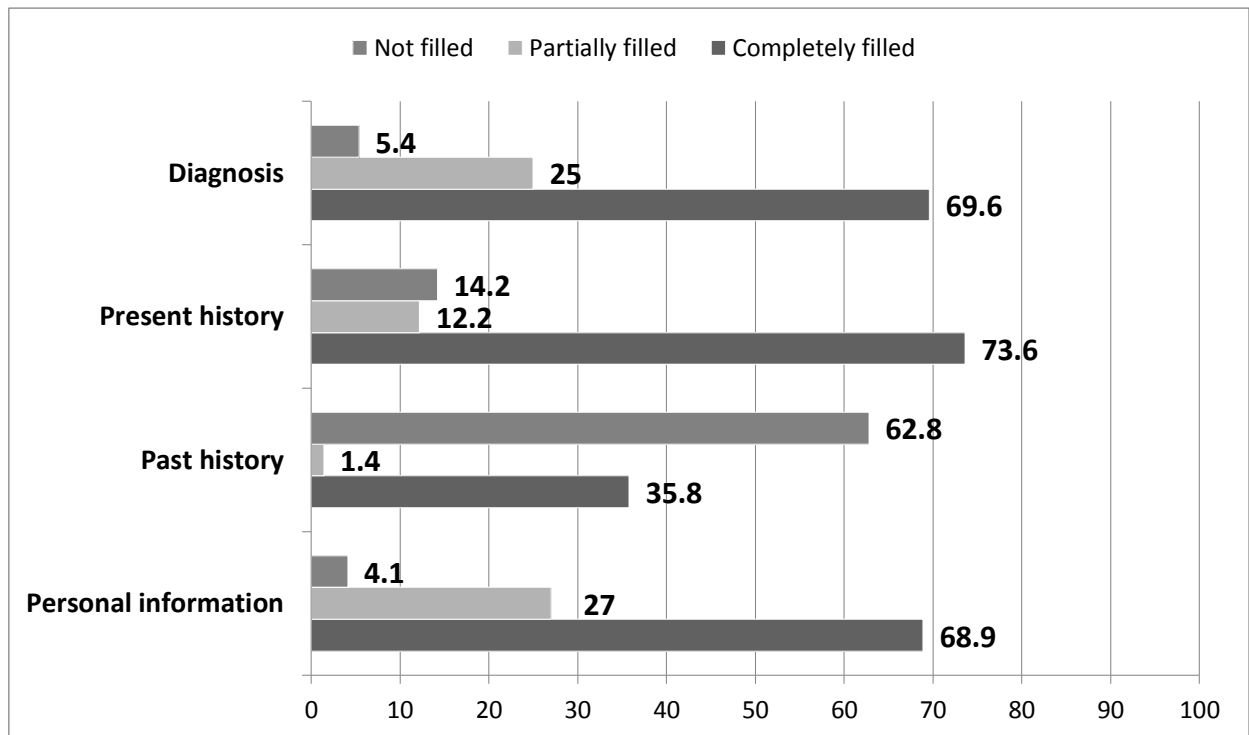
It is obvious that the outreach PT program had positive change on the status of PWDs. Many of them became independent and able to perform some activities and increase their interaction in the family and in their community. The process of transfer from dependency to independency is the major goal for PT programs, and achieving this goal is a key indicator for the success of this program.

#### **4.1.4 Physiotherapy records and documentation as revealed from the abstraction sheet**

In this part the researcher presented the parameters that were included in the PT records which included 3 domains. A total of 148 files were reviewed randomly from the beneficiaries list for appropriate filling. The researcher designed abstraction sheet and data were divided into three themes: general data, examination data, and treatment plan. Data were categorized as completely filled (all the data are documented), partially filled (some data is missed), and not filled. Summary of checklists is presented in the following table and figures.

**Table (4.10): Summary of documentation practices as revealed from the abstraction sheet**

Theme	Item		Completely filled	Partially filled	Not filled	Total
General data	Personal information	N.	102	40	6	148
		%	68.9	27.0	4.1	100.0
	Past history	N.	53	2	93	148
		%	35.8	1.4	62.8	100.0
	Present history	N.	109	18	21	148
		%	73.6	12.2	14.2	100.0
	Diagnosis	N.	103	37	8	148
		%	69.6	25.0	5.4	100.0
Average percentage			61.97	16.4	21.63	
Examination data	Investigations	N.	46	58	44	148
		%	31.1	39.2	29.7	100.0
	Muscle power test	N.	75	56	17	148
		%	50.7	37.8	11.5	100.0
	ROM test	N.	75	57	16	148
		%	50.7	38.5	10.8	100.0
	Sensation test	N.	81	41	26	148
		%	54.7	27.7	17.6	100.0
	Reflexes	N.	10	24	114	148
		%	6.8	16.2	77.0	100.0
Special test	N.	38	28	82	148	
	%	25.7	18.9	55.4	100.0	
Average percentage			36.62	29.72	33.66	
Treatment planand follow up	Aim of treatment	N.	101	0	47	148
		%	68.2	0	31.8	100.0
	Treatment plan	N.	98	0	50	148
		%	66.2	0	33.8	100.0
	Follow up sheet by date and time	N.	129	0	19	148
		%	87.2	0	12.8	100.0
	Family training sheet	N.	2	0	146	148
		%	1.4	0	98.6	100.0
	Instruction part	N.	0	0	148	148
		%	0	0	100.0	100.0
	Discharge strategy	N.	13	0	135	148
		%	8.8	0	91.2	100.0
	Physiotherapist signature	N.	87	0	61	148
		%	58.8	0	41.2	100.0
Average percentage			41.51	0	58.49	



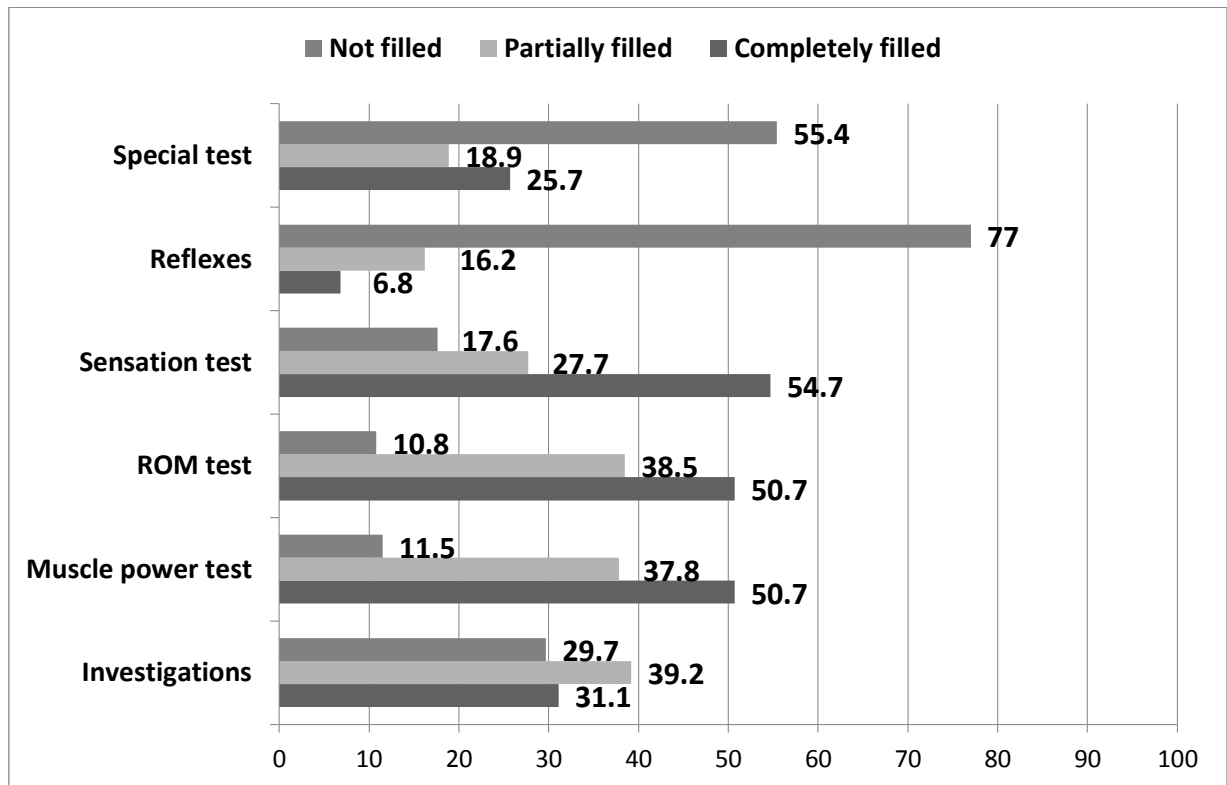
**Figure (4.5): Summary of documentation of general data**

Figure 4.5 showed that personal information was completely filled in 68.9% of the files, and partially filled in 27% of the files, past history was completely filled in 35.8% of files, partially filled in 1.4% of files, and not filled in 62.8% of files. Present history was completely filled in 73.6% of files, and partially filled in 12.2% of files, and not filled in 14.2% of files. Diagnosis was completely filled in 69.6% of files, partially filled in 25% of files, and not filled in 5.4% of files.

The results obtained by Abu Dagga (2014) showed that personal information was completed in 84.3% of files, while patients' name was documented in all the files and clients' address was documented in only 8.8% of files. Also, the study conducted by Reedy and Basha (2009) which showed that address was missed in 8.6% of discharge summaries, and the accuracy and clarity of documentation ranged from 40.2 %- 100%.

It is important that complete, accurate information documented in patients' files. Documentation of personal information including name, age, beginning of home visits, adding to that diagnosis of the clients including cause and type of injury, severity of

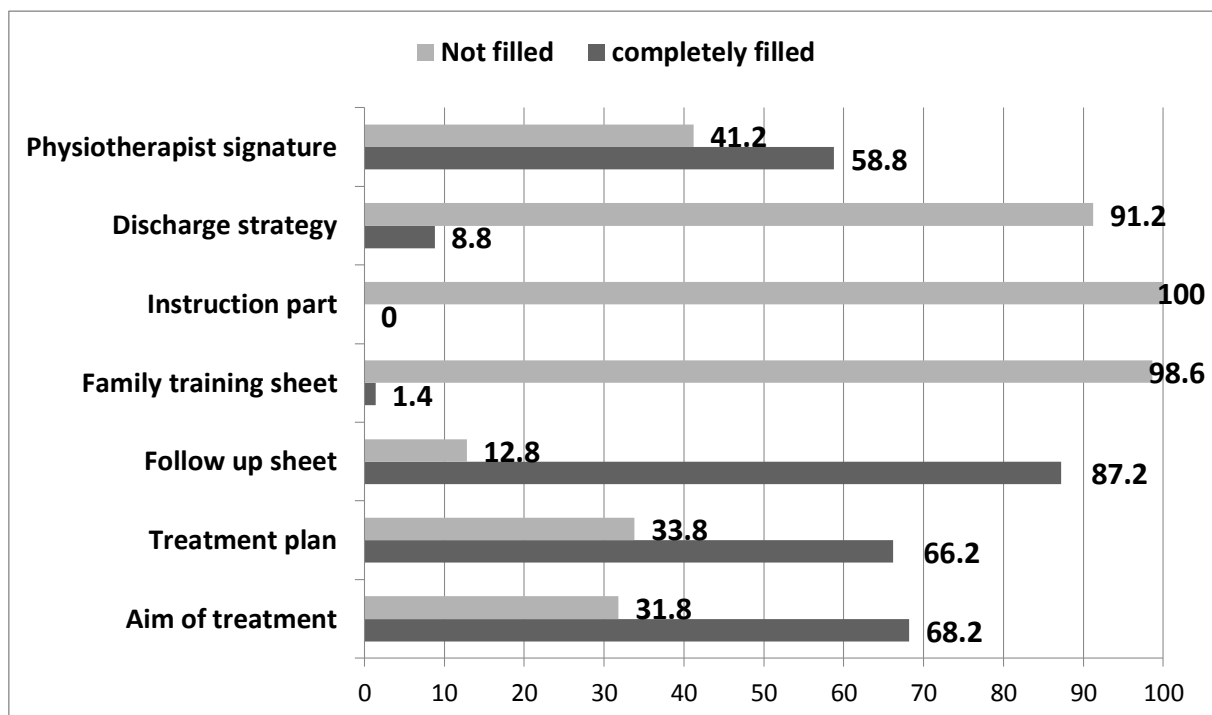
disability will help in designing the treatment plan. Also, presence of information about past and present medical problems will give the physiotherapist information about health status and precautions that should be considered during intervention with clients.



**Figure (4.6): Summary of documentation of examination data**

Figure 4.6 showed that investigations were completely filled in 31.1% of files, partially filled in 39.2% of files, and not filled in 29.7% of files. Muscle power test was completely filled in 50.7% of files, partially filled in 37.8% of files, and not filled in 11.5% of files. ROM test was completely filled in 50.7% of files, partially filled in 38.5% of files, and not filled in 10.8% of files. Sensation test was completely filled in 54.7% of files, partially filled in 27.7% of files, and not filled in 17.6% of files. Assessment of reflexes was completely filled in 6.8% of files, partially filled in 16.2% of files, and not filled in 77% of files. Special tests was completely filled in 25.7% files, partially filled in 18.9% of files, and not filled in 55.4% of files.

Data about investigations and examination tests are of great value for the physiotherapists. Having these data documented as a baseline data helps in follow up and monitor and evaluate the progress of the case. These results indicated poor documentation of different investigations in beneficiaries' files, and instructions should be directed toward emphasizing the importance of these investigations for the therapists to monitor progress of health status of their beneficiaries.

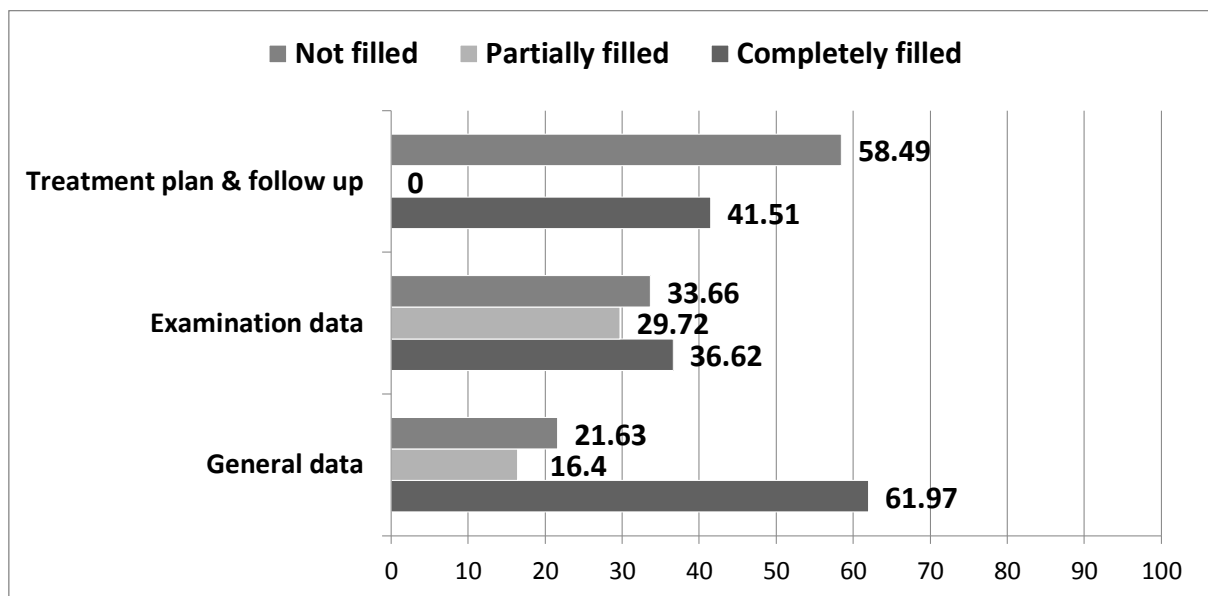


**Figure (4.7): Summary of documentation of treatment plan and follow up**

Figure 4.7 shows that aim of treatment was completely filled in 68.2% of files, and not filled in 31.8% of files. Treatment plan was completely filled in 66.2% of files, and not filled in 33.8% of files. Follow up sheet by date and time was completely filled in 87.2% of files, and not filled in 12.8% of files. Family training sheet was completely filled in only 1.4% of files, while it was not filled in 98.6% of files. Instructions part was not filled in all the files, and discharge strategy was completely filled in 8.8% of files and not filled in 91.2% of files. Signature of physiotherapist was completely filled in 58.8% of files, and not filled in 41.2% of files. It is important to have clear and adequate information about the



treatment plan for every client, and the treatment plan should be written and reviewed periodically to suit for the client's condition and progress. In addition, having written treatment plan and instructions will help different physiotherapists who treat the client to follow the same procedures and strategies, which will unify the treatment process and enhance the recovery of clients. Moreover, discharge strategy will include client's status and activities that should be done after the end of the project to maintain and sustain the achieved progress and avoid deterioration or going back of the client's condition to earlier stages. It is also important to have a recognized signature of each physiotherapist, because the signature will identify the physiotherapist and ease communication between outreach team members.



**Figure (4.8): Average percentage of documentation of themes of abstraction sheet**

As presented in figure (4.8), general data was completely filled in 61.97% of files, examination data was completely filled in 36.62% of files, while treatment plan and follow up was completely filled in 41.51% of files. In more detail, review of clients' files reflected some strong points including personal information, present history, aim of treatment, and treatment plan, and follow up sheet. On the other hand, some points were weak including past history, examination data related to different tests and investigations, family training,

instructions and discharge summary, and it is important that physiotherapists pay attention to these points and make sure that the needed information in clients' files are fully documented. Previous studies of patients' files from different health settings also reflected incomplete data filling in some aspects. The study carried out by Mishra et al., (2009) found that 66.15% of patients' files were missing data about patients' condition at discharge, patients' address was missing in 16.1% of cases, almost all the discharge sheets lacked mailing address, age and sex were missing in 0.76% of cases, doctor's signature was illegible in 79.3% and missing in 1.5% of summaries, doctor's name and their position were missing in 90.76% and 96.1% of summaries respectively. Furthermore, Al Ron (2009) reported that 47% of patients' files were missing data about instructions and recommendations in the discharge summary, while Abu Sad'a (2012) indicated that only 25% of patients files had complete instructions. In addition the study carried out by Radwan (2011) showed that clients' name, age, and phone number was documented in all the files, type of disability was documented in 95% of files, date of receiving service was documented in 85% of files, investigations was documented in 80% of files, assessment was documented in 85% of files, plan of treatment was documented in only 5% of files, follow up was documented in 60% of files, evaluation was documented in 5% of files, and signature was documented in 65% of files.

## **4.2 Inferential analysis of results**

### **4.2.1 Outcome of physiotherapy services and selected variables**

To explore positive changes on the status of PWD in relation to selected variables, the researcher used (t) test to compare between male and female participants, and used One way ANOVA to compare differences in positive change related to age, governorate, and type of injury. The results are presented in the following tables.

**Table (4.11): Positive changes on the status of PWDs in relation to gender**

<b>Variable</b>	<b>Gender</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>T value</b>	<b>P</b>
Health status after receiving services	Male	130	2.79	0.426	0.677	0.499
	Female	55	2.75	0.440		
Feeling energetic after receiving services	Male	130	2.59	0.690	0.418	0.677
	Female	55	2.55	0.715		
Ability to interact with others after receiving services	Male	130	2.74	0.475	1.046	0.297
	Female	55	2.65	0.552		
Ability to engage in family activities	Male	130	2.77	0.506	0.489	0.625
	Female	55	2.73	0.592		
Ability to engage in community activities	Male	130	1.31	0.555	-0.763	0.446
	Female	55	1.38	0.707		
Total score	Male	130	12.20	1.371	0.640	0.523
	Female	55	12.05	1.508		

Table 4.11 shows that males had better health status after receiving PT services compared to females (mean score was 2.79 vs. 2.75), but these differences were statistically not significant ( $P= 0.499$ ). In addition, males reported feeling more energetic compared to females (mean score was 2.59 vs. 2.55), but these differences were statistically not significant ( $P= 0.677$ ). Also, males showed higher ability to interact with others compared to females (mean score was 2.74 vs. 2.65), but these differences were statistically not significant ( $P= 0.297$ ). Furthermore, males showed higher ability to engage in family activities compared to females (mean score was 2.77 vs. 2.73), but these differences were statistically not significant ( $P= 0.625$ ), while females showed higher ability to engage in community activities compared to males (mean score was 1.38 vs. 1.31), but these differences were statistically not significant ( $P= 0.446$ ). Overall, male participants showed higher positive change in their status compared to female participants (mean score was 12.20 vs. 12.05), but these differences were statistically not significant ( $P= 0.523$ ).

These results indicated that after receiving PT services, all PWD, male and female acquired positive changes on their health status, and their ability to engage in family and community activities. This results were consistent with Abu Mansour study (2007) which indicated that rehabilitation services were very effective, and there were statistically no significant differences in effectiveness of services related to gender. In addition, Barnes and Radermaher (2001) suggested a positive effect of home rehabilitation on social activity, activities of daily living (ADL), motor capacity, and walking.

Achieving these positive changes is a result of hard work and commitment from PTs toward their beneficiaries, and offer equitable opportunities to receive skillful and quality care for all the beneficiaries. What was interesting is the number of female PTs who are employed in these programs which almost equals the number of male PTs, and this point is good to meet the needs of female beneficiaries as the results showed that almost one third of beneficiaries were females. To obtain the greatest benefits, one female physiotherapist said that *we treat beneficiaries according to their gender as much as possible, so, male physiotherapists take care of male beneficiaries and female physiotherapists take care of female beneficiaries especially for adults and older ages, and that will ease the treatment plan and increase cooperation of beneficiaries.*

**Table (4.12): Positive changes on the status of PWDs in relation to age**

Variable	Age	N	Mean	SD	F	P value
Health status after receiving services	< 18 years	56	2.71	0.456	1.047	0.353
	18 – 30 years	84	2.82	0.415		
	> 30 years	45	2.78	0.420		
Feeling energetic after receiving services	< 18 years	56	2.43	0.759	1.879	0.156
	18 – 30 years	84	2.64	0.633		
	> 30 years	45	2.64	0.712		
Ability to interact with others after receiving services	< 18 years	56	2.57	0.599	3.339	0.038
	18 – 30 years	84	2.77	0.421		
	> 30 years	45	2.78	0.471		
Ability to engage in family activities	< 18 years	56	2.61	0.652	3.255	0.041
	18 – 30 years	84	2.82	0.470		
	> 30 years	45	2.82	0.442		
Ability to engage in community activities	< 18 years	56	1.57	0.735	7.106	0.001
	18 – 30 years	84	1.25	0.535		
	> 30 years	45	1.18	0.442		
Total score	< 18 years	56	11.89	1.691	1.501	0.226
	18 – 30 years	84	12.30	1.181		
	> 30 years	45	12.20	1.407		

Table 4.12 shows that PWDs aged 18 – 30 years reported better health status ( $m=2.82$ ) compared to other ages, but the differences were statistically not significant ( $P=0.353$ ). Also, PWDs aged 18 – 30 years and those aged more than 30 years feeling more energetic ( $m=2.64$ ) compared to those aged less than 18 years ( $m=2.43$ ), but the differences were statistically not significant ( $P=0.156$ ). In addition, mean scores obtained in ability to interact with others were ( $m=2.57$ ) for PWDs aged less than 18 years, ( $m=2.77$ ) for PWDs aged 18 – 30 years, and ( $m=2.78$ ) for PWDs aged more than 30 years, and the differences in mean scores were statistically significant ( $P=0.038$ ), Post hoc Scheffe test indicated that participants aged 18 – 30 years had higher ability to interact with others. Furthermore, mean scores obtained in ability to engage in family activities were ( $m=2.61$ ) for PWDs aged less than 18 years, ( $m=2.82$ ) for PWDs aged 18 – 30 years, and ( $m=2.82$ )

for PWDs aged more than 30 years, and the differences in mean scores were statistically significant ( $P= 0.041$ ), Post hoc Scheffe test indicated that participants aged 18 – 30 years had higher ability to engage in family activities. The results also showed that mean scores obtained in ability to engage in community activities were ( $m= 1.57$ ) for PWDs aged less than 18 years, ( $m= 1.25$ ) for PWDs aged 18 – 30 years, and ( $m= 1.18$ ) for PWDs aged more than 30 years, and the differences in mean scores were statistically significant ( $P= 0.001$ ), Post hoc Scheffe test indicated that PWDs aged less than 18 years reported more engagement in community activities compared to other age groups. Overall, the results showed no significant differences in positive changes on status of PWDs related to age ( $P= 0.226$ ). These results indicated improvement in health status and abilities of PWDs from different ages, and that revealed the effectiveness of the PT services offered to these beneficiaries. Those aged 18 – 30 years exhibited better outcomes and the researcher explains that in the context that this age is the most energetic and productive age and individuals in this age want to work and be active in their life, and on other hand, much of the younger age in our sample were very young and preschoolers and usually they depend on their parents and other family members in their activities. This result agreed with the results obtained by Abu Mansour (2007) which found significant differences in effectiveness of services related to age. Also, this result indicated that the PT services was adapted to meet the different needs of beneficiaries (physical and social) from all age groups, the young and the older ones, and that reflects good qualification and skills of staff and preparation of PTs to offer care to all beneficiaries regardless of their age. Nilsson and Qutteina (2005) reported positive changes in different aspects among PWDs including emotional status, personal development, participation in social activities, and improved interpersonal interactions. One female physiotherapist said that *before starting home visits, the team members received training and instructions to increase our ability to offer PT*

*services to beneficiaries from all ages. One male physiotherapist said that he received special training on care of children especially those with physical and neurologic disabilities. Offering training to physiotherapists before starting the actual work in the field inflicts positive impact on physiotherapists and increase their self-confidence, and that will be reflected in their skills when offering PT services to their beneficiaries.*

**Table (4.13): Positive changes on the status of PWDs in relation to governorate**

Variable	Governorate	N	Mean	SD	F	P
Health status after receiving services	Gaza	65	2.78	0.414	0.521	0.595
	Khanyounis	65	2.74	0.443		
	Rafah	55	2.82	0.434		
Feeling energetic after receiving services	Gaza	65	2.51	0.753	1.419	0.245
	Khanyounis	65	2.54	0.731		
	Rafah	55	2.71	0.567		
Ability to interact with others after receiving services	Gaza	65	2.62	0.550	2.520	0.083
	Khanyounis	65	2.72	0.484		
	Rafah	55	2.82	0.434		
Ability to engage in family activities	Gaza	65	2.63	0.651	3.033	0.051
	Khanyounis	65	2.80	0.474		
	Rafah	55	2.85	0.405		
Ability to engage in community activities	Gaza	65	1.42	0.659	1.129	0.326
	Khanyounis	65	1.31	0.610		
	Rafah	55	1.25	0.517		
Total score	Gaza	65	11.95	1.525	1.956	0.144
	Khanyounis	65	12.10	1.426		
	Rafah	55	12.45	1.214		

Table 4.13 shows that PWDs from Rafah had higher mean score in health status ( $m= 2.82$ ) compared to PWDs from Gaza ( $m= 2.78$ ) and PWDs from Khanyounis ( $m= 2.74$ ), but these differences were statistically not significant ( $P= 595$ ). Also, PWDs from Rafah had higher mean score in feeling energetic ( $m= 2.71$ ) compared to PWDs from Gaza ( $m= 2.51$ ) and PWDs from Khanyounis ( $m= 2.54$ ), but these differences were statistically not significant ( $P= 245$ ). Moreover, PWDs from Rafah had higher mean score in ability to

interact with others ( $m = 2.82$ ) compared to PWDs from Gaza ( $m = 2.62$ ) and PWDs from Khanyounis ( $m = 2.72$ ), but these differences were statistically not significant ( $P = 0.83$ ). In addition, PWDs from Rafah had higher mean score in ability to engage in family activities ( $m = 2.85$ ) compared to PWDs from Gaza ( $m = 2.63$ ) and PWDs from Khanyounis ( $m = 2.80$ ), but these differences were statistically not significant ( $P = 0.051$ ). The researcher attributes this result to the fact that PWDs from Rafah are living in rural areas and they viewed the services they received as of high quality while people living in Gaza had higher standards of life style and their expectations are high. Besides that some PWDs may be receive services from private clinics and centers and pay for that, so they received high quality services. The results also indicated that PWDs from Gaza had higher mean score in ability to engage in community activities ( $m = 1.42$ ) compared to PWDs from Khanyounis ( $m = 1.31$ ) and PWDs from Rafah ( $m = 1.25$ ), but these differences were statistically not significant ( $P = 0.326$ ). Overall, the results showed no significant differences in positive changes on status of PWDs related to governorate ( $P = 0.144$ ). These results indicated PWDs from all the governorates showed positive changes and improvement in general health, and social aspects including ability to interact with others, participation in family and community activities. A study included 22 countries from Asia, Africa, and America reported improvement in social inclusion, and about 50% of them became more independent (Velema et al., 2008).

Ability to reach beneficiaries at their homes in different governorates aiming to maintain a continuity of physiotherapy and exercises to overcome disabilities among PWDs. One male physiotherapist said that *the goal of outreach services is to reach all the registered PWDs who need our service regardless of their place of residency. We worked hard to reach every one, and sometimes we have to walk from home to home because of unavailable transportation.* A female physiotherapist said that *sometimes we could not*



*reach some beneficiaries because they are living in areas very close to the borders especially in eastern parts of Khanyounis and Rafah because we could not find transportation, and our organization did not offer a car to ease reaching everyone at his home.*

**Table (4.14): Positive changes on the status of PWDs in relation to type of injury**

Variable	Type of injury	N	Mean	SD	F	P value
Health status after receiving services	Orthopedic	124	2.79	0.428	1.178	0.322
	Neurologic	32	2.75	0.440		
	Burn	8	2.50	0.535		
	Mixed	18	2.83	0.383		
	Others	3	3.00	0.000		
Feeling energetic after receiving services	Orthopedic	124	2.64	0.654	0.916	0.456
	Neurologic	32	2.50	0.762		
	Burn	8	2.25	1.035		
	Mixed	18	2.50	0.707		
	Others	3	2.33	0.577		
Ability to interact with others after receiving services	Orthopedic	124	2.73	0.496	0.554	0.697
	Neurologic	32	2.63	0.554		
	Burn	8	2.88	0.354		
	Mixed	18	2.67	0.485		
	Others	3	2.67	0.577		
Ability to engage in family activities	Orthopedic	124	2.79	0.530	0.444	0.776
	Neurologic	32	2.66	0.545		
	Burn	8	2.75	0.463		
	Mixed	18	2.72	0.575		
	Others	3	2.67	0.577		
Ability to engage in community activities	Orthopedic	124	1.30	0.584	0.808	0.521
	Neurologic	32	1.47	0.718		
	Burn	8	1.25	0.463		
	Mixed	18	1.28	0.575		
	Others	3	1.67	0.577		
Total score	Orthopedic	124	12.25	1.359	0.580	0.678
	Neurologic	32	12.00	1.481		
	Burn	8	11.62	1.995		
	Mixed	18	12.00	1.455		
	Others	3	12.33	1.154		

Table 4.14 shows that PWDs who had mixed injuries and other injuries had higher mean score in health status ( $m= 3.00$  and  $2.83$  respectively) compared to those with orthopedic injury ( $m= 2.79$ ), those with neurologic injury ( $m= 2.75$ ), and those with burn injury ( $m= 2.50$ ), but these differences were statistically not significant ( $P= .322$ ). Also, PWDs who had orthopedic injury had higher mean scores in feeling energetic ( $m= 2.64$ ) compared to those with neurologic injury ( $m= 2.50$ ), those with burn injury ( $m= 2.25$ ), those with mixed injury ( $m= 2.50$ ), and those with other injuries ( $m= 2.33$ ), but these differences were statistically not significant ( $P= 0.456$ ). Furthermore, PWDs who had burn injury had higher mean score in ability to interact with others ( $m= 2.88$ ) compared to those with orthopedic injury ( $m= 2.73$ ), those with neurologic injury ( $m= 2.63$ ), those with mixed injury ( $m= 2.67$ ), and those with other injuries ( $m= 2.67$ ), but these differences were statistically not significant ( $P= 0.697$ ). In addition, PWDs who had orthopedic injury had higher mean score in ability to engage in family activities ( $m= 2.79$ ) compared to those with neurologic injury ( $m= 2.66$ ), those with burn injury ( $m= 2.75$ ), those with mixed injury ( $m= 2.72$ ), and those with other injuries ( $m= 2.67$ ), but these differences were statistically not significant ( $P= 0.776$ ). Moreover, PWDs who had other injuries had higher mean score in ability to engage in community activities ( $m= 1.67$ ) compared to those with orthopedic injury ( $m= 1.30$ ), those with neurologic injury ( $m= 1.47$ ), those with burn injury ( $m= 1.25$ ), those with mixed injury ( $m= 1.28$ ), but these differences were statistically not significant ( $P= 0.521$ ). Overall, the results showed no significant differences in positive changes on status of PWDs related to type of injury ( $P= 0.678$ ).

These results indicated positive changes among beneficiaries regardless of their type of disability, and that reflects good skills of PTs and ability to treat different types of injuries. Similar results obtained by Legg and Langhorne, (2004) who found that patients became

able to carry out ADL after CBR, and Yu et al., (2009) found significant improvement in neurological function after five months of treatment.

The study of PT is complex, mixed with theory in class setting and practice in hospital settings to acquire adequate skills and competency in caring for a wide range of injuries and disabilities.

In addition, PTs are selected carefully by organizations to be employed in outreach PT programs, and usually competent ones are chosen, then they receive training sessions before the actual start of the outreach program to ensure that they can offer the intended care and services to all the clients with different disabilities and needs. A male physiotherapist said that he *received training in wide range of disabilities including physical and neurologic disabilities, and even for clients with cerebral palsy*. Another physiotherapist said that he *received training on different types of injuries including clients with burns to avoid contractions and deformities*.

#### **4.2.2 Satisfaction of physiotherapy services and selected variables**

To determine satisfaction of PWDs in relation to selected variables, the researcher used cross tabulation and Chi square to compare satisfaction level related to gender, age, governorate, and type of injury. The results are presented in the following tables.

**Table (4.15): Satisfaction from physiotherapy services related to gender**

Item	Male		Female		Chi square	P value
	N	%	N	%		
Approach of physiotherapists						
Not acceptable	5	3.8	3	5.5	0.512	0.774
Moderate	20	15.4	10	18.2		
Good	105	80.8	42	76.4		
Total	130	100.0	55	100.0		
Attitudes of physiotherapist						
Neither good nor bad	4	3.1	0	0	3.727	0.155
Good	17	13.1	12	21.8		
Very good	109	83.8	43	78.2		
Total	130	100.0	55	100.0		
The service met your expectations						
No	30	23.1	20	36.4	4.113	0.128
Yes, to some extent	19	14.6	9	16.4		
Yes, to high extent	81	62.3	26	47.3		
Total	130	100.0	55	100.0		
The service met your needs						
No	16	12.3	5	9.1	1.125	0.570
Yes, to some extent	42	32.3	15	27.3		
Yes, to high extent	72	55.4	35	63.6		
Total	130	100.0	55	100.0		
Overall satisfaction about the services						
Not satisfied	12	9.2	7	12.7	1.042	0.594
Moderately satisfied	42	32.3	20	36.4		
Highly satisfied	76	58.5	28	50.9		
Total	130	100.0	55	100.0		

Table 4.15 shows that 80.8% of male participants and 76.4% of female participants described the approach of PTs as good, while 3.8% of male participants and 5.5% of female participants described the approach of PTs as not acceptable. Also, 83.8% of male participants and 78.2% of female participants described the attitudes of PTs as very good, while 3.1% of male participants described attitudes of PTs as neither good nor bad. In addition, 62.3% of male participants and 47.3% of female participants said that the services met their expectations to high extent, but 23.1% of male participants and 36.4% of female participants said that the services did not meet their expectations. This result indicated that the PT services were below the expectations of about one third of beneficiaries, and that

may explain why some beneficiaries seek PT services from other outreach program to fill the gap between their expectations and the actual services they received.

Furthermore, 55.4% of male participants and 63.6% of female participants said that the PT services met their needs to high extent, while 12.3% of male participants and 9.1% of female participants said that the PT services did not meet their needs. Concerning overall satisfaction, 58.6% of male participants and 50.9% of female participants said that they were highly satisfied from the PT services they received, while 9.2% of male participants and 12.7% of female participants said that they were not satisfied from the PT services. These results reflected that there were statistically no significant differences between male and female participants in perception of all aspects of quality and satisfaction from PT services as P value was statistically not significant.

Compared with other studies, the results obtained by Radwan (2011) showed no significant differences in mean scores obtained in CBR between male and female participants. Another study evaluated CBR programs in Gaza refugees camps found no significant differences between males and females in their evaluation of the services they received (Abu Mansur, 2007).

In addition, the results of Hillis (2008) showed that there were no significant differences in satisfaction between male and female patients about PT services provided for outpatients in Al Shifa hospital and Al Wafa Medical Rehabilitation Hospital (WMRH), while the study conducted by Matter (2016) showed that 72.2% of male and 57.1% of female participants were satisfied from the PT services they received.

Our results indicated that all the study participants, males and females were satisfied with the outreach PT programs. The researcher believed that these programs helped the PWDs a lot as it saved the clients efforts for transportation to PT centers and saved also money that

would be paid to private centers. Also, many clients improved and became able to depend on themselves in many activities.

Offering a wide range of services for male and female beneficiaries using different modalities of services increase the benefits for beneficiaries and meet their different needs.

*The physiotherapists said that offering home services for disabled as a result of the 2014 war was a new experience for them. It was interesting to work with injured people, and these people usually recover and regain their functions and independence in a short period of time compared to other disabilities such as cerebral palsy which need long-term treatment. Also, the home visits increased the people awareness and understanding of the role of physiotherapy in helping disabled individuals to regain their optimal functions, and be active in their home and their community. Also, home visits enabled the physiotherapists to assess the home environments and making some modifications in home environment to suit for the disabled and ease their movement inside the home, and that would maximize the benefits from the program and increase beneficiaries' satisfaction from the offered services.*

**Table (4.16): Satisfaction from physiotherapy services related to age**

Item	< 18 years		18 – 30 years		> 30 years		Chi square	P value
	N	%	N	%	N	%		
Approach of physiotherapists								
Not acceptable	4	7.1	2	2.4	2	2.4	4.617	0.329
Moderate	12	21.4	10	11.9	8	17.8		
Good	40	71.4	72	85.7	35	77.8		
Total	56	100.0	84	100.0	45	100.0		
Attitudes of physiotherapist								
Neither good nor bad	1	1.8	2	2.4	1	2.2	0.366	0.985
Good	10	17.9	12	14.3	7	15.6		
Very good	45	80.4	70	83.3	37	82.2		
Total	56	100.0	84	100.0	45	100.0		
The service met your expectations								
No	17	30.4	17	20.2	16	35.6	4.752	0.314
Yes, to some extent	10	17.9	13	15.5	5	11.1		
Yes, to high extent	29	51.8	54	64.3	24	53.3		
Total	56	100.0	84	100.0	45	100.0		
The service met your needs								
No	5	8.9	7	8.3	9	20.0	13.221	0.010
Yes, to some extent	26	46.4	22	26.2	9	20.0		
Yes, to high extent	25	44.6	55	65.5	27	60.0		
Total	56	100.0	84	100.0	45	100.0		
Overall satisfaction about the services								
Not satisfied	9	16.1	5	6.0	5	11.1	6.503	0.165
Moderately satisfied	22	39.3	28	33.3	12	26.7		
Highly satisfied	25	44.6	51	60.7	28	62.2		
Total	56	100.0	84	100.0	45	100.0		

Table 4.16 shows that 71.4% of participants aged <18 years, 85.7% of participants aged between 18 – 30 years, and 77.8% of participants aged more than 30 years described PTs approach as good. Also, 80.4% of participants aged <18 years, 83.3% of participants aged between 18 – 30 years, and 82.2% of participants aged more than 30 years described PTs attitudes as very good. Moreover, 51.8% of participants aged <18 years, 64.3% of participants aged between 18 – 30 years, and 53.3% of participants aged more than 30 years said that the PT services met their expectations to high extent. Also, 44.6% of participants aged <18 years, 65.5% of participants aged between 18 – 30 years, and 60% of participants aged more than 30 years said that the PT services met their needs to high

extent. Concerning overall satisfaction, 44.6% of participants aged <18 years, 60.7% of participants aged between 18 – 30 years, and 62.2% of participants aged more than 30 years said that they were highly satisfied from the services they received. This results showed that older ages expressed higher satisfaction and that could be related to the fact that as the individual gets older his way of thinking and looking at his life in a realistic way and understands his condition better compared to children and young age.

These results indicated that the majority of participants from different ages perceived the PT services they received as of good quality and they were highly satisfied from the services they received, and there were no significant differences between different ages in their perception about the quality of the services they received and their satisfaction from the PT services.

Compared with other studies, the results obtained by Matter (2016) showed that 64.6% of clients aged 12 – 34 years were satisfied from the services they received, 69.4% of clients aged 35 – 54 years were satisfied, and 61.1% of clients aged 55 – 94 years were satisfied from the services they received, and generally, there were no significant differences in satisfaction from the services related to age of clients. In addition, Hillis (2008) showed that there were no significant differences in satisfaction of patients about PT services provided for outpatients in Al Shifa hospital and WMRH related to their age. Moreover, Al Hindi (2002) found no significant differences in satisfaction related to age, and Gadallah et al., (2003) reported that there was no association between overall clients' satisfaction and age, while Abu Saileek (2004) found that older clients exhibited higher satisfaction with nursing care compared to younger clients.

This result indicated that all the study participants, had similar perceptions about the quality of PT outreach program regardless of their age. Overall satisfaction with PT usually linked with physiotherapist-client interaction, respect, explaining the treatment plan, and



answering clients questions (Beattie et al., 2005). The researcher thinks that offering the service that will meet the needs of clients in respect to their age is a key factor for the success and outcomes of the treatment plan, so PTs should be trained and receive instructions in methods of approaching their customers that maintain customers' dignity and sense of human-being and respect them, and maintain their privacy as much as possible during home visits.

**Table (4.17): Satisfaction from physiotherapy services related to governorate**

Item	Gaza		Khanyounis		Rafah		Chi square	P value
	N	%	N	%	N	%		
Approach of physiotherapists								
Not acceptable	3	4.6	3	4.6	2	3.6	1.518	0.824
Moderate	8	12.3	13	20.0	9	16.4		
Good	54	83.1	49	75.4	44	80.0		
Total	65	100.0	65	100.0	55	100.0		
Attitudes of physiotherapist								
Neither good nor bad	1	1.5	3	4.6	0	0	4.131	0.389
Good	9	13.8	9	13.8	11	20.0		
Very good	55	84.6	53	81.5	44	80.0		
Total	65	100.0	65	100.0	55	100.0		
The service met your expectations								
No	26	40.0	18	27.7	6	10.9	15.390	0.004
Yes, to some extent	5	7.7	13	20.0	10	18.2		
Yes, to high extent	34	52.3	34	52.3	39	70.9		
Total	65	100.0	65	100.0	55	100.0		
The service met your needs								
No	7	10.8	11	16.9	3	5.5	4.700	0.320
Yes, to some extent	20	30.8	21	32.3	16	29.1		
Yes, to high extent	38	58.5	33	50.8	36	65.5		
Total	65	100.0	65	100.0	55	100.0		
Overall satisfaction about the services								
Not satisfied	6	9.2	8	12.3	5	9.1	3.326	0.505
Moderately satisfied	21	32.3	26	40.0	15	27.3		
Highly satisfied	38	58.5	31	47.7	35	63.6		
Total	65	100.0	65	100.0	55	100.0		

Table 4.17 shows that 83.1% of participants from Gaza, 75.4% of participants from Khanyounis, and 80% of participants from Rafah described PTs approach as good. In addition, 84.6% of participants from Gaza, 81.5% of participants from Khanyounis, and

80% of participants from Rafah described PTs attitudes as very good. Also, 52.3% of participants from Gaza, 52.3% of participants from Khanyounis, and 70.9% of participants from Rafah said that the PT services met their expectations to high extent. P value in this part was significant (0.004) and reflected that participants from Rafah thought that the services met their expectations to high extent compared to other areas. Moreover, 58.5% of participants from Gaza, 50.8% of participants from Khanyounis, and 65.5% of participants from Rafah said that the PT services met their needs to high extent, while 10.8% of participants from Gaza, 16.9% of participants from Khanyounis, and 5.5% of participants from Rafah said that PT services did not meet their needs. Concerning overall satisfaction, 58.5% of participants from Gaza, 47.7% of participants from Khanyounis, and 63.6% of participants from Rafah were highly satisfied from the services they received, while 9.2% of participants from Gaza, 12.3% of participants from Khanyounis, and 9.1% of participants from Rafah were not satisfied. This result indicated that the majority of beneficiaries thought that the PTs approach and attitudes were very good, more than half of beneficiaries mentioned that the services they received met their expectations and needs, and were highly satisfied from the services they received regardless of their place of residency. Radwan (2011) found that participants from Gaza had lower mean scores on CBR services compared to participants from the North governorate. Other studies, found that clients who live in city had higher satisfaction compared to those live in camps (Hillis, 2008; Abu Saileek, 2004), while Al Hindi (2002) found no significant differences in satisfaction related to place of residency.

It is obvious that outreach programs are essential for continuity of treatment and follow up for PWD to maximize their abilities and functions. To do so, PTs who will carry the outreach activities should be selected carefully and have adequate skills that enable them to

be qualified professionals and are able to meet the beneficiaries' expectations and needs, which in turn will increase beneficiaries' trust and satisfaction from the offered services.

**Table (4.18): Satisfaction from physiotherapy services related to type of injury**

Item	Orthopedic		Neurologi c		Burn		Mixed		Others		Chi square	P value
	N	%	N	%	N	%	N	%	N	%		
Approach of physiotherapists												
Not acceptable	5	4.0	2	6.3	1	12.5	0	0	0	0	4.225	0.836
Moderate	20	16.1	5	15.6	2	25.0	2	11.1	1	33.5		
Good	99	79.8	25	78.1	5	62.5	16	88.9	2	66.7		
Total	124	100.0	32	100.0	8	100.0	18	100.0	3	100.0		
Attitudes of physiotherapist												
Neither good nor bad	2	1.6	1	3.1	0	0	0	0	1	33.3	18.629	0.017
Good	18	14.5	4	12.5	3	37.5	4	22.2	0	0		
Very good	104	83.9	27	84.4	5	62.5	14	77.8	2	66.7		
Total	124	100.0	32	100.0	8	100.0	18	100.0	3	100.0		
The service met your expectations												
No	33	26.6	10	31.3	3	37.5	4	22.2	0	0	14.982	0.059
Yes, to some extent	14	11.3	6	18.8	4	50.0	4	22.2	0	0		
Yes, to high extent	77	62.1	16	50.0	1	12.5	10	55.6	3	100.0		
Total	124	100.0	32	100.0	8	100.0	18	100.0	3	100.0		
The service met your needs												
No	13	10.5	7	21.9	0	0	1	5.6	0	0	13.103	0.108
Yes, to some extent	32	25.8	11	34.4	5	62.5	7	38.9	2	66.7		
Yes, to high extent	79	63.7	14	43.8	3	37.5	10	55.6	1	33.3		
Total	124	100.0	32	100.0	8	100.0	18	100.0	3	100.0		
Overall satisfaction about the services												
Not satisfied	11	8.9	4	12.5	2	25.0	2	11.1	0	0	7.450	0.489
Moderately satisfied	40	32.3	10	31.3	5	62.5	6	33.3	1	33.3		
Highly satisfied	73	58.9	18	56.3	1	12.5	10	55.6	2	66.7		
Total	124	100.0	32	100.0	8	100.0	18	100.0	3	100.0		

Table 4.18 shows that 79.8 of participants with orthopedic injury, 78.1 of participants with neurologic injury, 62.5 of participants with burn injury, 88.9 of participants with mixed injury, 66.7 of participants with other injuries described PTs approach as good. Also, 83.9 of participants with orthopedic injury, 84.4 of participants with neurologic injury, 62.5 of

participants with burn injury, 77.8 of participants with mixed injury, 66.7 of participants with other injuries described PTs attitudes as very good. Moreover, 62.1 of participants with orthopedic injury, 50.0 of participants with neurologic injury, 12.5 of participants with burn injury, 55.6 of participants with mixed injury, 100.0 of participants with other injuries mentioned that the services met their expectations to high extent. In addition, 63.7 of participants with orthopedic injury, 43.8 of participants with neurologic injury, 37.5 of participants with burn injury, 55.6 of participants with mixed injury, 33.3 of participants with other injuries mentioned that the services met their needs to high extent. Furthermore, 58.9 of participants with orthopedic injury, 56.3 of participants with neurologic injury, 12.5 of participants with burn injury, 55.6 of participants with mixed injury, 66.7 of participants with other injuries reported that they were highly satisfied from services they received. It is clear that beneficiaries who had burn injuries were least satisfied from the PT services and that could be explained as those clients need usually medical treatment besides the PT services, and usually take longer time for healing and recovery.

The results also showed that there were no significant differences in overall satisfaction related to type of injury. Different results obtained by Hillis (2008) which found that clients with neurologic injuries had higher satisfaction compared to clients with orthopedic injuries, and the results obtained by Abu Saileek (2004) indicated that clients with chronic health problems were more satisfied with nursing services compare to clients with injuries.

Our results reflected no significant differences in overall satisfaction from PT services regardless of their injury, which means that the outreach PT programs offer quality services that meet the needs of beneficiaries with different types of injuries, orthopedic, neurologic, or mixed injuries, and that revealed good design and strength of the programs to benefit all the beneficiaries.

### **4.3 Conclusion**

Outreach PT programs are integral part for the continuity of care for those with PWDs, as these programs work towards regain of functions and move the PWD from dependency to independency. In this study, the researcher used a mixed method of quantitative and qualitative approach to expand the understanding of the results obtained from both beneficiaries and providers.

This study aimed to evaluate the outreach PT programs in GS in order to gain insight about the effectiveness of these programs in treating PWDs. The sample of the study consisted of 185 PWDs (130 males and 55 females), 148 medical records, and two focus groups included 14 physiotherapists.

This study reflected that many of PWDs sustained severe injuries that make them lose their job and ability to work, and these people need alternatives to enable them to continue their life with dignity.

The results also reflected that PTs had good technical skills during their interaction with their clients. Proper interaction with clients and show respect will be reflected on the clients' response and cooperation and enhance the healing and recovery of clients.

Treatment of PWDs with dignity and human sense is an important role for PTs, and that was reflected in responses of study participants. The vast majority of participants mentioned that the PTs treat them with respect, without discrimination, and showed positive attitudes toward their clients.

It is obvious that outreach PT programs are offering effective services and that was evidenced by positive changes in the health status and improvement of social inclusion of participants, as more than two thirds became able to interact with others, and participate in family activities, but few of them participated in community activities, and more than half of participants were highly satisfied and one third were moderately satisfied.

Inferential analysis indicated no significant differences in positive changes in the status of PWDs related to gender, place of residency, and type of injury, and no significant differences in overall satisfaction from the PT services related to gender, age, governorate, and type of injury, which is an indicator of effectiveness of outreach PT services to treat all the clients from different ages and different causes of disability.

Finally, it is important to say that the outreach PT program is importance for the continuity of care for PWD as this program aims to maximize their abilities and regain their functions to be independent and productive in their community.

#### **4.4 Recommendations**

In the light of the study results, the researcher recommends the following:

- Programs/projects administered to PWDs after war or injury are important, and require attention. The study concluded that these programs are helpful in producing tangible positive outcomes, but these require to be adequate to meet PWDs needs.
- Organizations need to encourage and motivate PTs to participate in training and continuous education courses to increase their abilities and qualifications to meet the ongoing needs of the PWDs.
- Measures to foster family members' participation and training in order to ensure daily exercise needs are implemented.
- Support PTs abilities to electively plan their visits. This includes lengthening the time of home visit sessions (contact time) to avoid PTs rush in offering the needed care to their beneficiaries.
- Increase the number of employed PTs in outreach programs to match the number of beneficiaries and enable the PTs to implement treatment plan properly.
- Expand the scope of outreach programs to cover PWDs in rural areas and border areas, and offer transportation to enable PTs to reach them in their homes.

- The need to involve beneficiaries and their family in the treatment plan and decision making about their situation, which will be reflected in increase the effectiveness of the program and enhance beneficiaries' expectations.
- Emphasize the importance of proper documentation and keep updated record for every beneficiary to monitor progress of treatment plan and achievements.
- Establish an evaluation and monitoring system to evaluate the effectiveness of different outreach programs in meeting the beneficiaries' needs, and designing unified protocols and guidelines to standardize the PT services.

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## Annexes

### Annex (1): Approval from Helsinki Committee



## المجلس الفلسطيني للبحوث الصحية Palestinian Health Research Council

تعزيز النظام الصحي الفلسطيني من خلال مأسسة استخدام المعلومات البحثية في صنع القرار

"Developing the Palestinian health system through institutionalizing the use of information in decision making"

### Helsinki Committee For Ethical Approval

Date: 04/04/2016

Number: PHRC/HC/100/16

Name: Nadia R. Alfara

الاسم: نادية الفراء

We would like to inform you that the committee had discussed the proposal of your study about:

نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم  
حول:

#### Evaluation of the Outreach Physiotherapy Services Provided to the Injured after the 51-day War on Gaza

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/100/16 in its meeting on 04/04/2016

وقد قررت الموافقة على البحث المذكور عليه  
بالرقم والتاريخ المذكوران عليه

#### Signature

Member  
*Nadia R. Alfara*

Chairman  
*[Signature]*

Member  
*[Signature]*  
4/4/2016

#### General Conditions:-

1. Valid for 2 years from the date of approval.
2. It is necessary to notify the committee of any change in the approved study protocol.
3. The committee appreciates receiving a copy of your final research when completed.

#### Specific Conditions:-

E-Mail: pal.phrc@gmail.com

Gaza - Palestine

غزة - فلسطين

## Annex (2): Consent form

### طلب الموافقة على المشاركة في عينة البحث

أنا الباحثة / نادية رفيق الفراء، طالبة ماجستير في جامعة القدس أبوديس وأقوم بعمل دراسة بعنوان "تقييم خدمة العلاج الطبيعي المنزلية المقدمة لمصابين حرب 2014" كمتطلب للحصول على درجة الماجستير حيث أقوم بجمع البيانات لهذه الدراسة التي تركز على تقييم خدمة العلاج الطبيعي التي تم تقديمها لمصابي حرب 2014 في غزة. وتتناول الدراسة عدة محاور تهدف لمعرفة جودة خدمات العلاج الطبيعي التي قُدمت للمصابين ومدى رضاك كمستفيد عنها والنتائج التي حصلت عليها بعد تلقيك الخدمة. وقد تم اختيارك من قوائم مصابي حرب 2014 التابعة للمنظمات غير الحكومية حيث ينطبق عليك معايير الدراسة، والغرض من هذه الزيارة هو جمع المعلومات التي تساعدني كباحثة على فهم طبيعة خدمات العلاج الطبيعي المنزلية وكيفية تقديمها وأبرز نقاط القوة والضعف في الخدمات المقدمة من وجهه نظرك. وعلى الرغم من أن المشاركة في هذه الدراسة طوعية، ويمكنك اختيار عدم الإجابة على بعض أو جميع الأسئلة، إلا أنني سأقدر كثيرًا مشاركتك حيث أن ردودك مهمة بالنسبة لنا.

المشاركة في هذه الدراسة ينطوي على ملء الاستبيان الذي سيتطلب حوالي 20 دقيقة من وقتك. مهما كانت المعلومات التي تقدمها سيتم الاحتفاظ بها بسرية تامة وسوف يطلع عليها فقط فريق البحث؛ حيث لن يتم تقاسمها مع أي جهات أخرى. مرة أخرى، أحب أن أؤكد أن مشاركتك طوعية ويمكنك أن تختار إما الإجابة أو عدم المشاركة - كليًا أو جزئيًا.

يبقى أن أوضح أن مشاركتك في تعبئة هذا الاستبيان لن ينتج عنها أي مقابل مالي وأن المعلومات التي تم الحصول عليها عنك وعن أسرته في هذه الدراسة لن تؤثر على أي خدمات أو أي دعم تتلقاه من قبل أي جهة وسيتم التعامل مع البيانات الخاصة بك على أنها سرية.

غير موافق	موافق	هل أنت موافق على المشاركة ؟
<input type="checkbox"/>	<input type="checkbox"/>	

### Annex (3) Questionnaire for Beneficiaries – English version

Governorate:			
<input type="checkbox"/> North	<input type="checkbox"/> Gaza	<input type="checkbox"/> Middle	
<input type="checkbox"/> Khanyounis	<input type="checkbox"/> Rafah	<input type="checkbox"/>	
Serial No. :		Interviewer Name:	
<b>Characteristic of Beneficiary</b>			
1	Gender:	<input type="checkbox"/> Male	<input type="checkbox"/> Female
2	Age: .....		
3	Type of house		
	<input type="checkbox"/> Caravan	<input type="checkbox"/> Flat	<input type="checkbox"/> Detached house
4	If you live in flat , Which floor ?		
	<input type="checkbox"/> A ground floor flat	<input type="checkbox"/> Need to climb stairs	
5	Social status at the time of injury: ASK ONLY IF RESPONDENT AGE ABOVE 15 YEAR		
	<input type="checkbox"/> Single	<input type="checkbox"/> Married	<input type="checkbox"/> Widow
	<input type="checkbox"/> Divorced	Separated	
6	Current social status: ASK ONLY IF RESPONDENT AGE ABOVE 15 YEAR		
	<input type="checkbox"/> Single	<input type="checkbox"/> Married	<input type="checkbox"/> Widow
	<input type="checkbox"/> Divorced	<input type="checkbox"/> Separated	
7	Type of work at the time of injury: .....		
8	Type of work after injury: .....		
9	Level of education	<input type="checkbox"/> Illiterate	<input type="checkbox"/> Can read and write
		<input type="checkbox"/> Elementary	<input type="checkbox"/> Preparatory
		<input type="checkbox"/> Secondary	<input type="checkbox"/> Diploma
		<input type="checkbox"/> Bachelor	<input type="checkbox"/> Post graduate/Higher education
10	Family Monthly Income		
	<input type="checkbox"/> Under 1,000 NIS	<input type="checkbox"/> 1,001 NIS – 3,000 NIS	<input type="checkbox"/> 3,001 NIS – 5,000 NIS
	<input type="checkbox"/> 5,001 NIS plus	<input type="checkbox"/> Refused to answer	
11	Do you have any health problems before the injury ?		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
12	If Yes , What's the problem ?		
.....			
<b>Characteristic of injury</b>			
13	Type of injury		
	<input type="checkbox"/> Orthopedic / physical	<input type="checkbox"/> Neurology	<input type="checkbox"/> Burn
	<input type="checkbox"/> Mixed	<input type="checkbox"/> Other	
14	Diagnosis .....		
15	When did you receive the outreach physiotherapy services after the injury ?		
	.....		
16	Do you have associated medical problems other than the injury as a consequence of injury?		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
17	If Yes , specify		

.....				
<b>Delivery service quality</b>				
<b>18</b>	Where you received the services? (Non-prompted)			
<input type="checkbox"/>	At home	<input type="checkbox"/>	At center	<input type="checkbox"/>
		Mixed	At school	<input type="checkbox"/>
				Not received
<b>19</b>	Which agency provided the PT services?			
.....				
<b>20</b>	What type of physiotherapy services received? (You Can select more than one choice )			
<input type="checkbox"/>	Manual Therapy	<input type="checkbox"/>	Electrotherapy	<input type="checkbox"/>
				Hot and cold therapy
<input type="checkbox"/>	Counseling	<input type="checkbox"/>	Family training	<input type="checkbox"/>
				Assistive device
<input type="checkbox"/>	All that apply	<input type="checkbox"/>	None of the above	<input type="checkbox"/>
				Other .....
<b>21</b>	Did you receive the services from other rehabilitation programs?			
<input type="checkbox"/>	Yes		<input type="checkbox"/>	
			No	
<b>22</b>	If yes, why you are seeking services from other institutions?			
<input type="checkbox"/>	Less expensive	<input type="checkbox"/>	More services	<input type="checkbox"/>
				Better quality
<input type="checkbox"/>	Sufficient professionals	<input type="checkbox"/>	Encourage recovery process	<input type="checkbox"/>
				Without any justify
<input type="checkbox"/>	All that apply		<input type="checkbox"/>	
			Other.....	
<b>23</b>	Do you feel that the physiotherapist has spent enough time with you?			
<input type="checkbox"/>	Yes		<input type="checkbox"/>	
			No	
<b>24</b>	The number of visits per week .....			
<b>25</b>	Average time of visit ..... minutes.			
<b>26</b>	Are visits regular ?			
<input type="checkbox"/>	Yes		<input type="checkbox"/>	
			No	
<b>27</b>	Is there a visit plan ?			
<input type="checkbox"/>	Yes		<input type="checkbox"/>	
			No	
<b>28</b>	Did the health provider commit to the visits plan?			
<input type="checkbox"/>	Yes	<input type="checkbox"/>	To some extent	<input type="checkbox"/>
				No
<b>29</b>	If no, how many he/she didn't commit? .....			
<b>30</b>	Did the health provider do assessment during the first visit?			
<input type="checkbox"/>	Yes		<input type="checkbox"/>	
			No	
<b>31</b>	The tools were used in assessment ?			
<input type="checkbox"/>	Manual muscle testing	<input type="checkbox"/>	Goniometer	<input type="checkbox"/>
				Tape measure
<input type="checkbox"/>	Special tests	<input type="checkbox"/>	All that apply	<input type="checkbox"/>
				Other.....
<b>32</b>	How you describe the physiotherapist approach?			
<input type="checkbox"/>	Good	<input type="checkbox"/>	Moderate	<input type="checkbox"/>
				Not acceptable
<b>33</b>	Was your privacy assured during the examination?			
<input type="checkbox"/>	Yes	<input type="checkbox"/>	To some extent	<input type="checkbox"/>
				No
<b>34</b>	Did you had the chance to express your complain to the provider?			
<input type="checkbox"/>	Yes	<input type="checkbox"/>	To some extent	<input type="checkbox"/>
				No
<b>35</b>	Did the health provider listen carefully to you ?			
<input type="checkbox"/>	Yes	<input type="checkbox"/>	To some extent	<input type="checkbox"/>
				No
<b>36</b>	Have you received answers to your questions?			
<input type="checkbox"/>	Yes	<input type="checkbox"/>	To some extent	<input type="checkbox"/>
				No
<b>37</b>	Have you received instruction ?			
<input type="checkbox"/>	Written	<input type="checkbox"/>	Verbal	<input type="checkbox"/>
			Mixed	<input type="checkbox"/>
				Not received

<b>38</b>	If you received instruction , Did you apply it as being told ?		
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No	
<b>39</b>	Have you been involved in your management plan?		
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No	
<b>40</b>	Have you received a suitable care?		
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No	
<b>41</b>	How you judge the physiotherapist attitudes during your conversation with him/her?		
<input type="checkbox"/> Very Good	<input type="checkbox"/> Neither good nor bad		
<input type="checkbox"/> Good	<input type="checkbox"/> Poor		
<b>42</b>	Do feel that the health provider treat you with respect during providing the services?		
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No	
<b>43</b>	Do you think that the health provider discriminate between the beneficiaries?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	
<b>44</b>	If yes, type of discrimination.....		
<b>45</b>	Did the health provider refer you to other institutions?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	
<b>46</b>	If yes, what was the reason for your referral .....		
<b>47</b>	Where were you referred		
<input type="checkbox"/> Governmental	<input type="checkbox"/> Local NGOs		
<input type="checkbox"/> International NGOs	<input type="checkbox"/> Private		
<b>48</b>	Did you face any problems when you were referred?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No		
<b>49</b>	If yes, what was the problem .....		
<b>50</b>	Do you feel true coordination from these organizations?		
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No	
<b>Perceived services quality (expectation and satisfaction )</b>			
<b>51</b>	Did the physiotherapy services received meet your expectation?		
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No	
<b>52.</b>	If No , How did you expect the outreach physiotherapy services?		
<input type="checkbox"/> Better	<input type="checkbox"/> worse		
<b>53</b>	Did the physiotherapy services meet your needs?		
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No	
<b>54</b>	If no, what was the missing service .....		
<b>55</b>	How satisfied you are about services received?		
<input type="checkbox"/> To high extent	<input type="checkbox"/> Moderate	<input type="checkbox"/> Not satisfied	
<b>Outcome</b>			
<b>56</b>	How you describe your health status after received the services?		
<input type="checkbox"/> Same	<input type="checkbox"/> Better	<input type="checkbox"/> Worse	
<b>57</b>	How you describe your health status now?		
<input type="checkbox"/> Same	<input type="checkbox"/> Better	<input type="checkbox"/> Worse	
<b>58</b>	How would you rate the continuity of physiotherapy services?		
<input type="checkbox"/> Good	<input type="checkbox"/> Poor	<input type="checkbox"/> Not needed	<input type="checkbox"/> Not available
<b>59</b>	Activities you can't do before received the PT services and do it after received the PT services (You Can select more than one choice )		

<input type="checkbox"/> Crawling	<input type="checkbox"/> Sitting	<input type="checkbox"/> transferring
<input type="checkbox"/> standing	<input type="checkbox"/> Walking	<input type="checkbox"/> Wearing clothes
<input type="checkbox"/> Eating	<input type="checkbox"/> Bathing	<input type="checkbox"/> Using toilet
<input type="checkbox"/> Home management	<input type="checkbox"/> All of the above	<input type="checkbox"/> None of the above
<input type="checkbox"/> Other.....		
<b>60</b>	Do you still able to do this activities? (answer just if Q59 answered )	
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No
<b>61</b>	Do you feel energetic after received the services?	
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No
<b>62</b>	Feeling energetic now	
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No
<b>63</b>	How you describe your interactions with others after received the services?	
<input type="checkbox"/> Good	<input type="checkbox"/> Moderate	<input type="checkbox"/> Not Acceptable
<b>64</b>	Do you feel that you are engaged with your family?	
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No
<b>65</b>	If Yes, is it attributed to the services you received?	
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
<b>66</b>	Do you feel that you are engaged with the community?	
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No
<b>67</b>	If Yes , is it attributed to the services you received?	
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No
<b>68</b>	Do you still need physiotherapy services?	
<input type="checkbox"/> Yes	<input type="checkbox"/> To some extent	<input type="checkbox"/> No
<b>69</b>	If Yes , What are the Physiotherapy services you need ?	
.....		
<b>70</b>	Other Comments	
.....		
.....		



Annex (4): Questionnaire for beneficiaries (Arabic version)

المحافظة :			
<input type="checkbox"/> الشمال	<input type="checkbox"/> غزة	<input type="checkbox"/> دير البلح	
<input type="checkbox"/> خان يونس	<input type="checkbox"/> رفح		
الرقم التسلسلي :	اسم المقابل :		
بيانات المستفيد من خدمة العلاج الطبيعي			
1	الجنس	<input type="checkbox"/> ذكر	<input type="checkbox"/> أنثى
2	العمر :	.....	
3	نوع البيت الذي تسكن فيه وقت تلقي الخدمة		
	<input type="checkbox"/> كرفان	<input type="checkbox"/> شقة	<input type="checkbox"/> بيت منفصل
4	في حال أنك تسكن في شقه ، في أي طابق ؟		
	<input type="checkbox"/> طابق أرضي	<input type="checkbox"/> تحتاج صعود الدرج	
5	(يسأل فقط لمن هو أكبر من 15 سنة) الحالة الاجتماعية قبل الإصابة		
	<input type="checkbox"/> أعزب	<input type="checkbox"/> متزوج	<input type="checkbox"/> أرمل
	<input type="checkbox"/> مطلق	<input type="checkbox"/> منفصل	
6	(يسأل فقط لمن هو أكبر من 15 سنة) الحالة الاجتماعية حالياً :		
	<input type="checkbox"/> أعزب	<input type="checkbox"/> متزوج	<input type="checkbox"/> أرمل
	<input type="checkbox"/> مطلق	<input type="checkbox"/> منفصل	
7	نوع العمل في وقت الإصابة .....		
8	نوع العمل بعد الإصابة .....		
9	المستوي التعليمي	<input type="checkbox"/> لا يقرأ ولا يكتب	<input type="checkbox"/> يقرأ ويكتب
		<input type="checkbox"/> ابتدائي	<input type="checkbox"/> إعدادي
		<input type="checkbox"/> ثانوي	<input type="checkbox"/> دبلوم
		<input type="checkbox"/> بكالوريوس	<input type="checkbox"/> دراسات عليا
10	الدخل الشهري للأسرة		
	<input type="checkbox"/> أقل من 1000 شيكل	<input type="checkbox"/> من 1000 - 3000 شيكل	<input type="checkbox"/> من 3000 - 5000 شيكل
	<input type="checkbox"/> من 5001 وما فوق	<input type="checkbox"/> أرفض الإجابة	
11	هل كنت تعاني من أي مشاكل صحية قبل الإصابة		
	<input type="checkbox"/> نعم	<input type="checkbox"/> لا	
12	في حال الإجابة نعم ، ما هي المشاكل الصحية التي تعاني منها قبل الإصابة		
.....			

طبيعة الإصابة			
13 ما هي طبيعة الإصابة			
<input type="checkbox"/> عظام	<input type="checkbox"/> أعصاب	<input type="checkbox"/> حروق	
<input type="checkbox"/> متعددة	<input type="checkbox"/> أخرى .....		
14 التشخيص .....			
15 متى تلقيت خدمة العلاج الطبيعي المنزلية بعد الإصابة ؟			
16 هل تعاني من مشاكل صحية أخرى غير الإصابة كنتيجة لإصابة الحرب ؟			
<input type="checkbox"/> نعم	<input type="checkbox"/> لا		
17 في حال نعم ، ما هي ؟			
.....			
جودة الخدمة المقدمة			
18 أين تلقيت الخدمة ؟ (غير منطوق)			
<input type="checkbox"/> في البيت	<input type="checkbox"/> في المركز	<input type="checkbox"/> في البيت والمركز	<input type="checkbox"/> لم أتلقي الخدمة
19 ما اسم المؤسسة التي تلقيت الخدمة من خلالها			
.....			
20 ما هي خدمات العلاج الطبيعي التي تلقيتها ؟ (بإمكانك اختيار أكثر من خدمة )			
<input type="checkbox"/> علاج يدوي	<input type="checkbox"/> علاج كهربائي	<input type="checkbox"/> كمادات باردة وساخنة	
<input type="checkbox"/> تمارين / تدريب على المشي	<input type="checkbox"/> تدريب العائلة	<input type="checkbox"/> أجهزة مساعدة	
<input type="checkbox"/> إرشادات	<input type="checkbox"/> لا شيء مما ذكر	<input type="checkbox"/> أخرى .....	
21 هل تلقيت خدمات علاج طبيعي منزلية من برامج تأهيلية أخرى ؟			
<input type="checkbox"/> نعم	<input type="checkbox"/> لا		
22 في حال نعم ، لماذا تلقيت خدمات العلاج الطبيعي من مؤسسات أخرى؟			
<input type="checkbox"/> أقل تكلفة	<input type="checkbox"/> تقدم خدمات أكثر	<input type="checkbox"/> جودة الخدمات أفضل	
<input type="checkbox"/> أداء أخصائي العلاج الطبيعي أفضل	<input type="checkbox"/> احتاج لعلاج مكثف	<input type="checkbox"/> بدون أي سبب	
<input type="checkbox"/> جميع ما ذكر	<input type="checkbox"/> أخرى .....		
23 هل تشعر بأن أخصائي العلاج الطبيعي كان يقضي في الجلسة وقت كافي معك؟			
<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا	
24 عدد الزيارات في الأسبوع .....			
25 معدل مدة الزيارة .....			
26 هل كانت الزيارات منتظمة			
<input type="checkbox"/> نعم	<input type="checkbox"/> لا		

27	هل تم إخبارك بمواعيد الزيارات		
	<input type="checkbox"/> نعم	<input type="checkbox"/> لا	<input type="checkbox"/> أحيانا
28	هل كان يلتزم أخصائي العلاج الطبيعي بمواعيد الزيارات؟		
	<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
29	في حال الإجابة لا ، كم مرة لم يلتزم بمواعيد الزيارة ؟ .....		
30	هل قام أخصائي العلاج الطبيعي بعمل تقييم لحالتك الصحية أثناء الزيارة الأولى ؟		
	<input type="checkbox"/> نعم	<input type="checkbox"/> لا	
31	ما الأدوات التي استخدمت أثناء التقييم ؟		
	<input type="checkbox"/> اختبار العضلات اليدوي	<input type="checkbox"/> الجنيوميتر لقياس المدى الحركي	<input type="checkbox"/> متر
	<input type="checkbox"/> اختبارات خاصة	<input type="checkbox"/> جميع ما ذكر	<input type="checkbox"/> أدوات لفحص الإحساس
	<input type="checkbox"/> أخرى ..... .....		
32	كيف تصف طريقه تفاعل أخصائي العلاج الطبيعي مع حالتك؟		
	<input type="checkbox"/> جيد	<input type="checkbox"/> متوسط	<input type="checkbox"/> غير مقبول
33	هل تم احترام خصوصيتك أثناء تقييم حالتك ؟		
	<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
34	هل كان لديك فرصه التعبير لأخصائي العلاج الطبيعي عن شكاوك الصحية ؟		
	<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
35	هل كان أخصائي العلاج الطبيعي يستمع لشكاوك الصحية جيدا ؟		
	<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
36	عندما كنت تسأل أخصائي العلاج الطبيعي بخصوص شكاوى معينة ، هل كنت تتلقي إجابة لسؤالك؟		
	<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
37	هل تلقيت إرشادات		
	<input type="checkbox"/> مكتوبة	<input type="checkbox"/> شفوية	<input type="checkbox"/> مكتوبة وشفوية
38	في حال تلقيت إرشادات ، هل قمت بتطبيقها ؟		
	<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
39	هل قام أخصائي العلاج الطبيعي بمشاركتك في الخطة العلاجية ؟		
	<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
40	هل تلقيت خدمة علاج طبيعي مناسبة لطبيعة حالتك ؟		
	<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
41	كيف تقييم أسلوب أخصائي العلاج الطبيعي أثناء حوارك معك ؟		
	<input type="checkbox"/> جيد جدا	<input type="checkbox"/> ليس جيد وليس سيء	

<input type="checkbox"/> جيد		<input type="checkbox"/> سيئ
42	هل كان أخصائي العلاج الطبيعي يعاملك باحترام أثناء تقديمه للخدمة ؟	
<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
43	هل تعتقد أن أخصائي العلاج الطبيعي يميز في التعامل بين المستفيدين من الخدمة ؟	
<input type="checkbox"/> نعم	<input type="checkbox"/> لا	<input type="checkbox"/> لا أعلم
44	في حال نعم ، ما هي طبيعة التمييز ؟ .....	
45	هل قام أخصائي العلاج الطبيعي بتحويلك لمؤسسات أخرى ؟	
<input type="checkbox"/> نعم	<input type="checkbox"/> لا	<input type="checkbox"/> لا أعلم
46	في حال نعم ، ماذا كان سبب التحويل ؟ .....	
47	إلى أي مؤسسة تم تحويلك ؟	
<input type="checkbox"/> حكومية	<input type="checkbox"/> مؤسسة غير حكومية محلية	
<input type="checkbox"/> مؤسسة غير حكومية دولية	<input type="checkbox"/> مؤسسة خاصة	
48	هل واجهت أي مشاكل عند التحويل ؟	
<input type="checkbox"/> نعم	<input type="checkbox"/> لا	
49	في حال الإجابة نعم ، ماذا كانت المشكلة ؟ ..... .....	
50	هل شعرت بتعاون واضح بين المؤسسة المحولة والمؤسسة المحول إليها ؟	
<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
توقع المستفيد من الخدمة ومدى الرضا		
51	هل كانت خدمة العلاج الطبيعي المنزلية كما توقعت أن تكون ؟	
<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
52	في حال الإجابة لا ، كيف توقعت أن تكون خدمة العلاج الطبيعي المنزلية ؟	
<input type="checkbox"/> أفضل	<input type="checkbox"/> أسوأ	
53	هل كانت خدمة العلاج الطبيعي التي تلقيتها ملبية لاحتياجك ؟	
<input type="checkbox"/> نعم	<input type="checkbox"/> إلى حد ما	<input type="checkbox"/> لا
54	في حال الإجابة لا ، ما هي الخدمة التي وددت أن تستفيد منها ولم تحصل عليها؟ .....	
55	ما مدي رضاك عن خدمة العلاج الطبيعي المنزلية التي تلقيتها؟	
<input type="checkbox"/> راضي جدا	<input type="checkbox"/> راضي نوعا ما	<input type="checkbox"/> غير راضي
النتائج		

56	كيف تصف حالتك الصحية بعد استفادتك من خدمة العلاج الطبيعي المنزلية؟	<input type="checkbox"/> نفس الشيء <input type="checkbox"/> أفضل <input type="checkbox"/> أسوأ	
57	كيف تصف حالتك الصحية الآن ؟	<input type="checkbox"/> نفس الشيء <input type="checkbox"/> أفضل <input type="checkbox"/> أسوأ	
58	ما مدى تقييمك لاستمرارية خدمة العلاج الطبيعي المنزلية ؟	<input type="checkbox"/> جيد <input type="checkbox"/> سيء <input type="checkbox"/> لا حاجة لها <input type="checkbox"/> غير متاحة	
59	ما هي الأنشطة التي كنت لا تستطيع القيام بفعلها قبل الاستفادة من خدمة العلاج الطبيعي المنزلية واستطعت فعلها بعد الاستفادة من الخدمة؟ (بإمكانك اختيار أكثر من إجابة)	<input type="checkbox"/> الزحف <input type="checkbox"/> الجلوس <input type="checkbox"/> التنقل <input type="checkbox"/> الوقوف <input type="checkbox"/> المشي <input type="checkbox"/> ارتداء الملابس <input type="checkbox"/> الأكل <input type="checkbox"/> الاستحمام <input type="checkbox"/> استخدام الحمام <input type="checkbox"/> تدبير الأنشطة المنزلية <input type="checkbox"/> جميع ما ذكر <input type="checkbox"/> لا شيء مما ذكر	
<input type="checkbox"/> أخري .....			
60	(يسأل فقط في حال وجود إجابة على سؤال 59) هل ما زلت تستطيع القيام بهذه الأنشطة ؟	<input type="checkbox"/> نعم <input type="checkbox"/> إلى حد ما <input type="checkbox"/> لا	
61	هل شعرت بالحيوية والنشاط بعد استفادتك من خدمة العلاج الطبيعي المنزلية ؟	<input type="checkbox"/> نعم <input type="checkbox"/> إلى حد ما <input type="checkbox"/> لا	
62	هل تشعر بالحيوية والنشاط الآن ؟	<input type="checkbox"/> نعم <input type="checkbox"/> إلى حد ما <input type="checkbox"/> لا	
63	كيف تصف تفاعلك مع الآخرين بعد استفادتك من خدمة العلاج الطبيعي المنزلية ؟	<input type="checkbox"/> جيد <input type="checkbox"/> متوسط <input type="checkbox"/> غير مقبول	
64	هل تشعر أنك اندمجت مع عائلتك؟	<input type="checkbox"/> نعم <input type="checkbox"/> إلى حد ما <input type="checkbox"/> لا	
65	في حال الإجابة نعم ، هل السبب هو استفادتك من خدمة العلاج الطبيعي المنزلية ؟	<input type="checkbox"/> نعم <input type="checkbox"/> إلى حد ما <input type="checkbox"/> لا	
66	هل تشعر أنك اندمجت مع المجتمع ؟	<input type="checkbox"/> نعم <input type="checkbox"/> إلى حد ما <input type="checkbox"/> لا	
67	في حال الإجابة نعم ، هل السبب هو استفادتك من خدمة العلاج الطبيعي المنزلية؟	<input type="checkbox"/> نعم <input type="checkbox"/> إلى حد ما <input type="checkbox"/> لا	
68	هل ما زلت تحتاج لخدمات العلاج الطبيعي المنزلية ؟	<input type="checkbox"/> نعم <input type="checkbox"/> إلى حد ما <input type="checkbox"/> لا	
69	في حال الإجابة نعم ، ما هي الخدمات التي تحتاجها ؟		

.....	
ملاحظات أخرى	70
.....	
.....	

شكراً لحسن تعاونكم

### Annex (5): Abstraction Checklist of Medical Records

	Item	Completely filled	Partially filled	Not filled
<b>General data</b>				
1	Personal information			
2	Past history			
3	Present history			
4	Diagnosis			
<b>Examination data</b>				
5	Investigations			
6	Muscle power test			
7	ROM test			
8	Sensation test			
9	Reflexes			
10	Special test			
<b>Planning for treatment</b>				
11	Aim of treatment			
12	Treatment plan			
13	Follow up sheet by date and time			
14	Family training sheet			
15	Discharge strategy			
16	Physiotherapist signature			

## **Annex (6) Focus group themes and questions**

### **Theme1:Appropriatness and responsiveness of outreach physiotherapy services**

- Please tell me about your experience with the project, what was the objectives of the project?
- How far the program was needed and what needs it has fulfilled?

### **Theme 2 : Quality of outreach physiotherapy services :**

- Typically what services you provided at home?
- How far you involve the family in the care? What about training the family and involving them?
- Tell me about the processes of your work, , frequency of visits, regularity of visits, mean of sessions provided, number of visits per week , commitment to the visit plan , session duration , transportation

### **Theme3: Characteristics of services provider**

- **Knowledge**
  - ✓ Let us talk about the protocols you used in the management of cases, to what extent you followed certain protocols, what are the sources of these protocols, how suitable these protocols, what challenges you faced in applying these protocols,
  - ✓ Tell me about the preparation and training you received prior to your engagement in the project? Adequacy, usefulness,
- **Technical skills**
  - ✓ Which approach of care you follow? What about case management and management plan?
- **Communication skills**
  - ✓ how you approach people?

### **Theme 4: Impact of outreach physiotherapy services on beneficiaries**

- What impact the program has on beneficiaries, give example of positive and negative outcomes

### **Theme5:Strengthening point and area for development in outreach physiotherapy services**

- Strengthening and weakness points

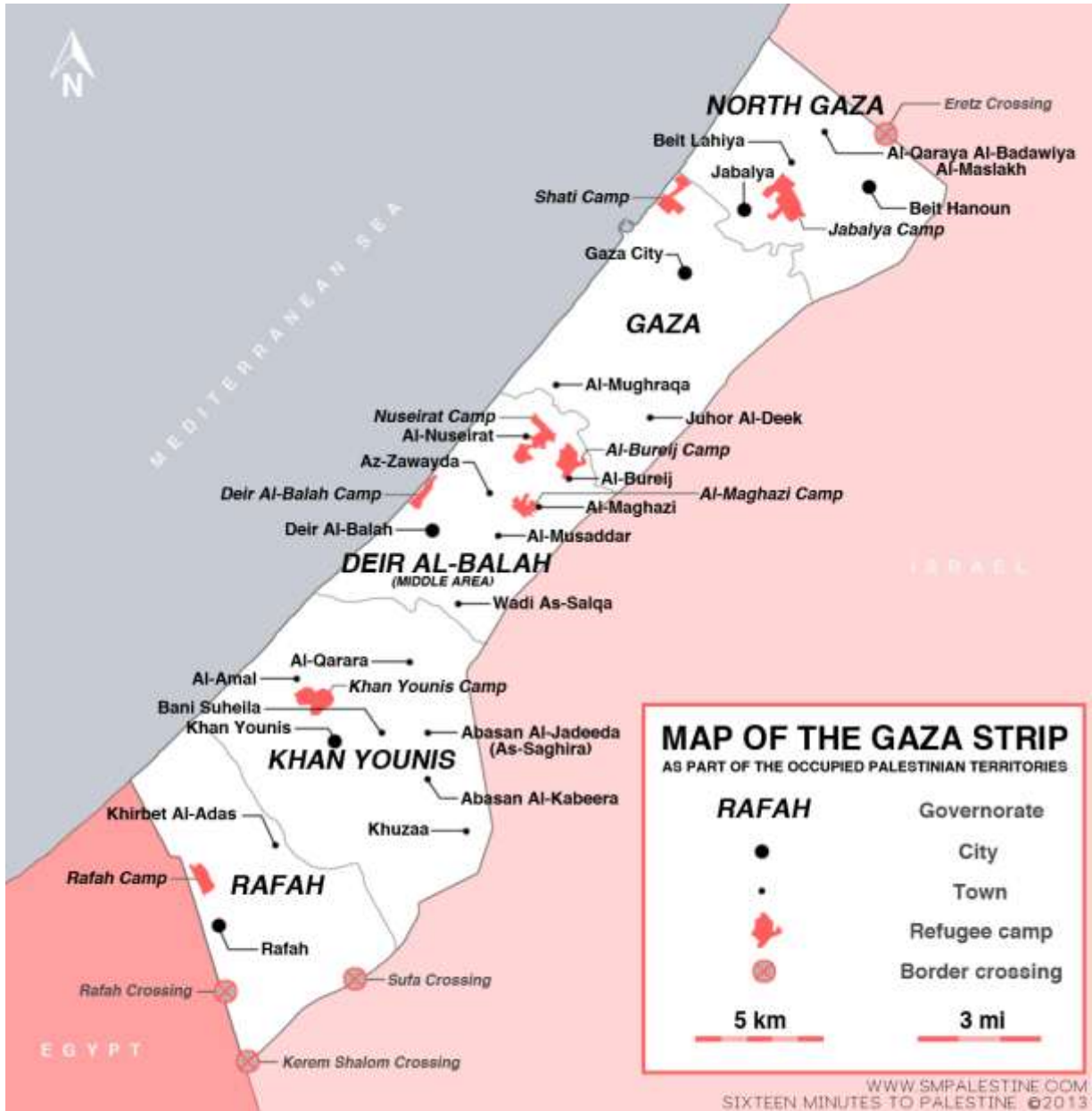


- ✓ What works well and what didn't work well, what are the strength and weaknesses in the program in the program?
- **Challenges**
  - ✓ What are the main bottle necks you faced at your work in this project? Reflect of logistics, equipment, work load, support .

**Annex (7): List of experts and professionals who validated the questionnaire**

Dr. Yehia Abed	Al Quds University
Dr. AymanAlhalabi	Ministry of Health
Mr. Adnan Naser	Al-Azhar University- Gaza
Dr. Alia Alqeshawi	Ministry of Health
Dr. Bassam Zaqout	Palestinian Medical Relief Society
HaneenAlsamak	Save the Children
Huda Anan	WHO – Gaza
Mr. Mustafa Abed	Palestinian Medical Relief Society
Mr. Mahmoud Himaïd	University College of Applied Sciences

Annex (8): Map of the Gaza Strip



Resource: (Kishawi, 2013). Map of Gaza Strip.

**Annex (9): Distribution of study sample by governorate**

<b>Governorate</b>	<b>Number</b>	<b>Percent</b>
<b>Gaza</b>	65	35.1
<b>Khanyounis</b>	65	35.1
<b>Rafah</b>	55	29.7
<b>Total</b>	<b>185</b>	<b>100.0</b>

## عنوان الدراسة: تقييم برامج خدمات العلاج الطبيعي المنزلي لذوي الإعاقات الناتجة عن حرب 2014 على قطاع غزة.

إعداد: نادية رفيق الفرا

إشراف: د. بسام أبو حمد

### ملخص الدراسة

هدفت الدراسة الحالية إلى تقييم مدى فاعلية برامج خدمات العلاج الطبيعي المقدمة في المنازل لذوي الإعاقة الناتجة عن إصابات الحرب على غزة في صيف 2014. وقد تكونت عينة الدراسة من 185 فرداً من محافظات غزة وخانيونس ورفح (130 ذكور و 55 إناث)، 158 ملف طبي، و 14 أخصائي علاج طبيعي من مقدمي الخدمة المنزلية. لتحقيق أهداف الدراسة استخدمت الباحثة استبانة أعدت خصيصاً لمتلقي الخدمة، كما تم استخدام الملفات الطبية لمتلقي الخدمة، وتم إجراء مناقشة مستفيضة ضمن مجموعتين بؤريتين. لتحليل البيانات تم استخدام برنامج الإحصاء (SPSS)، واستخدمت الباحثة التكرارات، النسب المئوية، اختبار (ت)، واختبار تحليل التباين الأحادي.

أظهرت الدراسة النتائج التالية:

- بلغ متوسط العمر لدى متلقي الخدمة 24.49 سنة، وقد كانت نسبة 35.1% من غزة، 35.1% من خانيونس، 29.7% من رفح، وبلغت نسبة المتزوجين 43.3%.
- أدت الإصابة وما نتج عنها من إعاقة إلى فقدان الوظيفة أو العمل لدى عدد كبير منهم، حيث بلغت نسبة العاملين قبل الإصابة 32.4% وانخفضت النسبة إلى 14.5% بعد الإصابة، وبالتالي فقد بلغت نسبة ذوي الدخل المحدود أقل من 1000 شيكل 74.6%.
- كما بينت النتائج التنوع في الإصابة حيث بلغت نسبة إصابات العظام 67%، 17.3% إصابات عصبية، و 9.7% إصابات متعددة، كما تلقى 86.5% علاج يدوي، 69.7% تلقوا استشارات طبية، 37.8% تلقوا تدريب عائلي، 29.7% تلقوا أدوات مساعدة. كما أن أكثر من نصف المستفيدين تلقوا الخدمة لفترة 4 - 7 أسابيع، في حين أن نصف المستفيدين تلقوا زيارتين أسبوعياً، وقد استغرقت كل زيارة 37 دقيقة في المتوسط.

- أفاد 76.2% من متلقي الخدمة بأن إخصائي العلاج الطبيعي يضع خطة علاجية لكل زيارة، وأفاد 78.9% من متلقي الخدمة بالتزام أخصائي العلاج الطبيعي بالخطة العلاجية الموضوعة.
- أفاد الغالبية العظمى (95.7%) من متلقي الخدمة بقيام أخصائي العلاج الطبيعي بإجراء فحص شامل لمتلقي الخدمة في الزيارة البيتية الأولى، كما أن 68.6% تلقوا تعليمات لفظية لها علاقة بالخطة العلاجية، و67.8% منهم اتبعوا التعليمات بدقة.
- وقد بين 97.3% من متلقي الخدمة أن أخصائي العلاج الطبيعي يحافظ على خصوصيتهم أثناء الجلسات العلاجية، 89.2% أتيحت لهم الفرصة للتعبير عن استفساراتهم، 89.2% قالوا بأن أخصائي العلاج الطبيعي يستمع لاستفساراتهم بشكل جدي، و73% تلقوا إجابات حول استفساراتهم.
- بينت النتائج أيضاً أن 37.8% من متلقي الخدمة شاركوا في وضع الخطة العلاجية، و67% يرون بأنهم تلقوا عناية وخدمة مناسبة لإصابتهم.
- أفاد 79.5% من متلقي الخدمة بأن اتجاهات أخصائي العلاج الطبيعي نحوهم كانت جيدة، 81.6% كان حكمهم على أخصائي العلاج الطبيعي بأنه جيد، و98.4% يرون بأن أخصائي العلاج الطبيعي يعاملهم باحترام.
- يرى 57.8% من متلقي الخدمة أن الخدمة التي تلقوها لبت توقعاتهم بدرجة عالية، كما أن 56.2% كانوا راضين عن الخدمة التي تلقوها بدرجة عالية في حين أن 33.5% كانوا راضين بدرجة متوسطة، ولم تظهر النتائج وجود فروق ذات دلالة إحصائية في مستوى الرضا عن الخدمة المقدمة لهم تعزى لكل من الجنس، العمر، الدخل الشهري، ومكان الإقامة.
- بالنسبة لمخرجات الجلسات العلاجية فقد أفاد 53.5% من متلقي الخدمة بأنهم أصبحوا قادرين على المشي، 44.9% أصبحوا قادرين على الوقوف لوحدهم، 41.9% أصبحوا قادرين على التنقل من مكان لآخر، 27.6% قادرين على لبس ملابسهم، 25.4% قادرين على الاستحمام بدون مساعدة، و22.2% قادرين على استخدام التواليت.
- بالنسبة للملفات الطبية فقد تبين أن 68.9% من الملفات كانت مسجلة فيها البيانات الشخصية بشكل كامل، التاريخ المرضي كان مسجل في 35.8% من الملفات، التشخيص الطبي كان مسجل في 69.6% من

الملفات، الفحوصات كانت مسجلة في 31.1% من الملفات، اختبار قوة العضلات مسجل في 50.7% من الملفات، اختبار الإحساس مسجل في 54.7% من الملفات، فحص ردود الفعل مسجل في 36.5% من الملفات، الهدف من البرنامج العلاجي مسجل في 68.2% من الملفات، الخطة العلاجية مسجلة في 66.2% من الملفات، متابعة التطور العلاجي مسجلة في 87.2% من الملفات، تدريب أفراد العائلة مسجل فقط في 1.3% من الملفات، وتوقيع أخصائي العلاج الطبيعي مسجل في 55.1% من الملفات.

- بالنسبة للبيانات المستخلصة من المجموعات البؤرية فقد أظهرت بعض نقاط القوة في هذه البرامج والتي تمثلت في الوصول إلى المصابين ذوي الإعاقة وتقديم العلاج لهم في بيوتهم وهذا وفر الكثير من المال والجهد عليهم، تقديم خدمة علاجية متنوعة تراعي احتياجات كل مصاب، تفحص البيئة البيئية وإدخال التغيرات الممكنة للتناسب مع قدرات المصاب، في حين أن نقاط الضعف تمثلت في ازدواجية تلقي الخدمة المنزلية حيث أن بعض المصابين يتلقى خدمة العلاج الطبيعي المنزلي من أكثر من جهة، عدم إشراك متلقي الخدمة في تصميم الخطة العلاجية، عدم توفير المؤسسة مواصلات لتسهيل عليهم عملية التنقل من بيت لآخر، بالإضافة إلى عدم توفر قاعدة بيانات دقيقة تخص المصابين. في الإجمال فقد أظهرت الدراسة أهمية برامج العلاج المنزلي بهدف استمرارية العلاج للمصابين والتقليل من المضاعفات الناتجة عن الإصابة، كما أن مثل هذه البرامج وفرت الكثير من الجهد والمال على المصابين.