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Clients Satisfaction with Out-patient Physiotherapy Services  
Provided by the Jerusalem Center  
For Disabled Children

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Clients Satisfaction with Out-patient Physiotherapy Services  
Provided by the Jerusalem Center  
For Disabled Children

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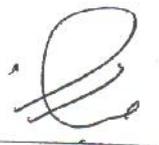
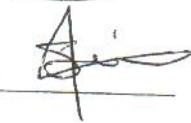
### Thesis Approval

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Provided by the Jerusalem Center  
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Jerusalem – Palestine

## ***Dedication***

*To my parents, my brothers and sisters  
Who strongly supported me through my study*

*To my wife who always offered me  
spiritual and emotional support*

*To my lovely son  
Hanna*

*With love and gratitude*

*George D. Majaj*

## **Declaration**

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

Signed:

*George Dauod Farid Majaj*

*12/7/2006*

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## *Abstract*

This is a health facility-based study that is a benchmark in the field of physiotherapy.

**Background and purpose:** Client satisfaction is a significant measure of quality of care. It gives information on providers' success and meeting those clients' values and expectations. Patient satisfaction has not been closely monitored in physiotherapy, and limited research evidence exists in this area. The purpose of the study was to assess the level of satisfaction among clients attending the Jerusalem Centre for Disabled Children to receive out patient physiotherapy services, and gain insight in factors associated with this satisfaction.

**Methods:** The study was conducted at the out patient physiotherapy department in Jerusalem Centre for Disabled Children as a national referral and resource centre in rehabilitation. A cross sectional design was used. Data were collected between (August - November 2005). A total of 104 participants, with a response rate 94.5% were achieved. A standardized structural questionnaire based on Goldstein's (2000) 11 domains of satisfaction with out patient physiotherapy was developed and used in this study. Descriptive statistics, advanced statistical analyses and estimates of reliability obtained with the instrument were computed.

**Main results:** Patients in this study expressed high level of satisfaction with JCDC out-patient physiotherapy services (88%) in general. The characteristics of respondents played an important role regarding the level of clients' satisfaction. Therefore, considering these characteristics when providing care to the clients are very important to improve quality of care at the centre. In particular results pointed out that there were significant differences between satisfaction level and the age of participants, gender, educational level and knowledge of the institution.

**Conclusion:** The JCDC is in urgent need to maintain and improve quality of care and consequently clients' satisfaction to confront significant recent decline in the number of clients.

## ملخص الدراسة

رضى المنتفعين من خدمات العلاج الطبيعي الخارجي المقدم في مؤسسة الاميرة بسمة للاولاد المعاقين في القدس

ان رضى المنتفعين يعتبر من المفاهيم الاساسية لتقييم جودة الخدمات الصحية، و كذلك مؤشر مهم لقياس عملية تطوير الخدمات الصحية. ان هدف هذه الدراسة هو تقدير مستوى رضى المنتفعين من خدمات العلاج الطبيعي الخارجي المقدم في مؤسسة الاميرة بسمة للاولاد المعاقين في القدس. و ايضا تحديد ابعاد الرضى وعلاقته ببعض المتغيرات التي تؤثر على الرضى بشكل عام. بالاضافة الى ان النتائج قد تساعد في اعطاء فرص لتحسين جودة الخدمات المقدمة.

لقد تم تطوير الاستبيان بناء على دراسة جولدشتاين (2000) لتتناسب مع خصائص الخدمة المقدمة. تم جمع المعلومات من خلال تعبئة الاستبيان بعد تلقي خدمة العلاج الطبيعي الخارجي في مؤسسة الاميرة بسمة للاولاد المعاقين في الفترة ما بين (اب - تشرين ثاني 2005م). حيث بلغ حجم العينة 104 اشخاص ممن تلقوا خدمات العلاج الطبيعي الخارجي و كانت نسبة الاستجابة %94.5. وقد تم استخدام البرنامج الاحصائي SPSS في ادخال النتائج و تحليلها.

لقد سجلت الدراسة نسبة رضى %88 وهي تعتبر نسبة مرتفعة لرضى المنتفعين من خدمات العلاج الطبيعي الخارجي، وتتلخص نتائج الدراسة بان العمر، الجنس، مستوى التعليم وكيفية المعرفة عن المؤسسة كان لها أثر كبير على درجة الرضى وبدلالة احصائية واضحة .

كما أظهرت نتائج الدراسة أن المتغيرات الديموغرافية وخصائص المنتفعين مثل مستوى التعليم ، وجود تأمين صحي تؤثر بشكل قوي على نسبة الرضى .

كما أن هذه الدراسة توفر معلومات هامة تمكن صانعي القرار الإخذ باعتبارها من أجل تطوير جودة الخدمات وزيادة رضى المنتفعين عن الرعاية المقدمة لهم .

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## **List of abbreviations**

GCs	Generalization Coefficient
GS	Gaza Strip
ISO	International Organization for Standardization
JCDC	The Jerusalem Centre for Disabled Children
MOH	Ministry of Health
NGOs	Non- Governmental Organizations
NII	National Insurance Institute
PHC	Primary Health Care
PNA	Palestinian National Authority
PSI	Patient Satisfaction Index
SHCQ	Satisfaction with Hospital Care Questionnaire
UNRWA	United Nations Relief Working Agency
WB	West Bank

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# CHAPTER ONE

## Introduction

### 1.1 Introduction

“The good health of nations is a key to human development and economic growth; therefore, it is important to analyze health systems’ performance and to share the knowledge with governments and the international community” (Brundtland, 2001).

There is a growing interest in improving the performance of health systems in many countries. “To move towards higher quality care, more and better information is commonly required on existing provision, on the interventions offered and on major constraints on service implementation” (Blazevska et al, 2004). The increasing cost of health services and the need for better use of available resources is a major concern for health care providers.

Consequently, it is evident that there is a need to measure the efficiency of health care to determine if proper use of available resources is being made. According to Fitzpatrick (1991) “patient satisfaction is an important and widely accepted measure of care efficiency.” "Patient satisfaction is now a critical variable in any calculation of quality or value and therefore in assessment of corporate individual accountability". It is a legitimate and important measure of quality of care (Fitzpatrick, 1991).

Client satisfaction is an elusive phenomenon widely sought after and written about in a multitude of settings. The literature identifies variables and concepts that apply to patient satisfaction. Variables related to patient satisfaction usually highlight and address the quality of medical services, where patients’ perceptions are now considered an important gauge of quality. “This means that health care providers need to continuously implement effective ways to offer quality service to clients within resources’ constraints” (Balestracci & Barlow, 1996).

Patient satisfaction and health outcomes, along with the cost efficiency are among the non-invasive indicators of health care value, or organizational presentation and organizational development. Donabedian (1980) stated that “Client satisfaction is significant as a measure

of quality of care because it gives information on providers' success and meeting those clients' values and expectations, which are matters on which the client is the ultimate authority." Shepherd (1993) pointed out that "Consumer satisfaction is generally defined as the consumers' view of services received and the result of treatment". It has been used by program evaluators to enhance care providers' ability to render services that meet consumer needs. "The measurement of satisfaction is therefore an important tool for research, administration and planning" (Donabedian, 1980).

Measuring client satisfaction has also become an integral part of health care facility management strategies across the globe. As the expectations of clients' increases over time, the quality of the service has to keep on improving to maintain a level of satisfaction (Press, 2002).

As consumers become more educated about health care as competition increases, it becomes critical to measure the satisfaction level of patients and other clients on a daily basis. Every encounter with health service is an opportunity to enhance the quality of care and service at the health care centers. Patient satisfaction is an integral part of healthcare, and often the key to a successful health care organization. "Numerous studies indicate that patients are satisfied when the recovery process is fast and effective. This leads to goodwill for the organization, positive word-of-mouth promotion, and access of more clients to the health care institute" (Husseini, 2004).

## **1.2 Problem statement and significance of study**

It is believed that the health sector is increasingly investing in rehabilitation and physiotherapy services therefore, improvement of the quality of physiotherapy services is essential to achieve effectiveness and efficiency of services provided.

To start with improving the quality of the physiotherapy services, a baseline scientific study is required, as patient satisfaction is a key indicator of assessing and evaluating the quality of healthcare services. "Patient satisfaction has been adopted as an indicator of health care quality by provider institution not only to monitor and improve performance, but also to include patient views in the audit process" (Sitzia & Wood, 1997).

As JCDC, in the last years” faced two major drops in the number of patients admitted to the out patient physiotherapy clinic in the year 2000 after the second Intifada and 2005 (Fig. 1.1). This can be attributed to several reasons: the prevailing political situation, especially after the closer of the Annexation Separation Wall; which had its impact on all the clients attending the center fro the West Bank, and the increasing competition with Israeli institutions in Jerusalem and other Arab centers in the area providing the same service; and the decreased number of referred patients from PNA territories. Moreover the institution is facing reduction of funding and donation since the donors have new polices and rules to fund projects in Jerusalem (Majaj, 2005). As a result of this situation JCDC is under the pressure to seek better services and options that would increase the demand for its services, and consequently would contribute to the increase of the purchasing of its services especially by Israeli insurance companies, as well as attracting more patients especially those receiving care from Israeli institutions. “Certainly, the key factor should be improving the quality of health services provided by the center” (Jafari & Hamdan, 2005).

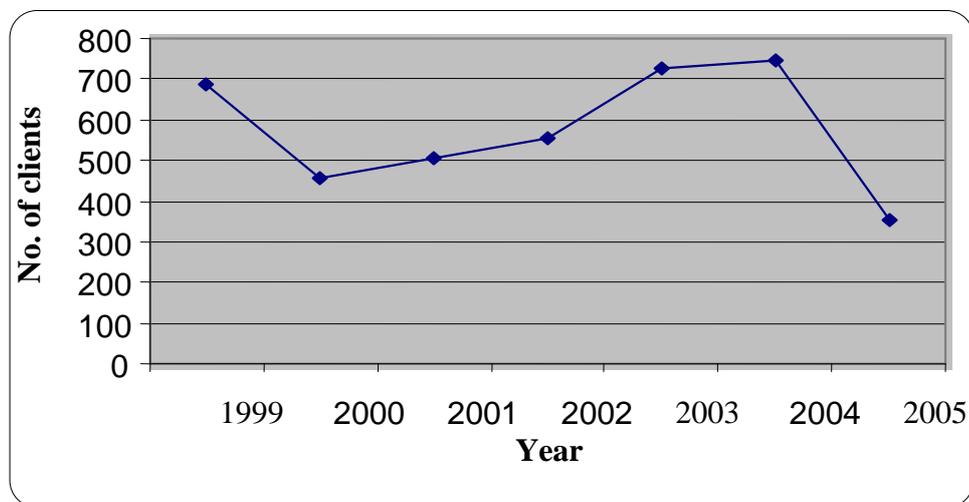


Fig. (1.1): Number of patients admitted to out-patient physiotherapy clinic by year

Patient satisfaction measurements is a good indicator to asses the quality of services. Therefore; it is important to identify the level of patient satisfaction of services provided by the JCDC and also to focus on main factors influencing patient satisfaction. This is becoming even more important especially at a time when JCDC is now in the final stage of

implementing the ISO 9001:2000 aiming at improving the quality of services, and patient satisfaction assessment is a good indicator to assess the quality of service.

Also there is a lack of research on clients' satisfaction with physiotherapy services in Palestine. Therefore; this study is to be considered as a benchmark in the field of physiotherapy.

The researcher, being one member of the center, became interested in studying the patient satisfaction issue in order to help JCDC in assessing clients' satisfaction with physiotherapy services that reflects the quality of services to support decision makers with information for future strategic planning process.

### **1.3 Justification of the study**

Consumer participation is increasingly being linked with improvement in the quality of health care and improved health outcomes. There is an increasing impetus for shared decision making and person centered care. Person centered care has become a central concept in health care as a response to:

- ✓ A general trend towards increasing attention to social inclusiveness and the needs of the customer.
- ✓ The rapidly increasing cost of health care and imperative for effectiveness.
- ✓ The focus on improvement of processes and outcomes of care.
- ✓ Increased access of clients to information about health care treatments and options (Lutz & Bowers, 2000).

As the techniques to measure the quality of healthcare proliferate and improve, health professionals are beginning to accept that clients and their families hold unique advantage points as expert witnesses of care, and that they should plan their services to reflect the needs of clients (Delbanco, 1996). "Patient satisfaction is now a critical variable in any calculation of quality or value and therefore in the assessment of corporate / individual accountability. It is a legitimate and important measure of quality care (Doherty, 2003).

"Patients are rightly becoming more involved in their own health care and are being encouraged to do so. The movement to include patients' evaluations of care is growing as

more providers / organizations realize that the measurement of patient satisfaction is a cost effective, non-evasive indicator of quality of care. Giving the patients an opportunity to voice their opinions about the care they receive can be seen as a part of a broader commitment to public and patient participation in healthcare service planning and delivery” (Doherty, 2003).

Measures of satisfaction can be collected in a wide variety of settings, are easy to collect, inexpensive and understandable to the lay population. “Instruments ranging from home-made tests that have been thrown together, to lengthy, psychometrically sophisticated devices, satisfaction is often used as a primary indicator of service outcomes” (Lunnen & Ogles, 1997). It has been on the basis of a presumed influence of satisfaction upon behavior that much of the research on satisfaction with customers in general and health consumers, in particular, has been promoted. The assumption has been that improvement in satisfaction will be reflected through treatment compliance, higher quality of services, and better outcomes. Conversely, lack of satisfaction can adversely affect the therapeutic alliance, or become a lightning rod for system reform. Therefore, changes in satisfaction could be reflected through increased effectiveness of services and improved profit-and-loss statements (Champell, 1999). The increasing cost of the health services and the need for better use of available resources is a concern for health care providers.

#### **1.4 Context of the Study**

The City of Jerusalem established itself around a reputation of being the “medical capital” of the Palestinian health care system. Indeed, and to this day, the City of Jerusalem takes the pride of having large hospitals that provide a significant level of hospital services to patients from the West Bank and the Gaza Strip.

The following provide health care for East Jerusalem:

1. UNRWA: This sector is mandated to serve the Palestinian refugee population. It is the only organization that provides relatively comprehensive (PHC) to refugees living in East Jerusalem. It runs three clinics in the city.

2. The Private Sector: This sector is taking on a more prominent role in regard to the Israeli insurance system, private clinics, laboratories, pharmacies and small maternity hospitals. The Israeli Sick Funds are private sector institutions that either run their own clinics or establish contracted agreements with existing providers or a combination of both. There are currently (46) centers distributed in the East Jerusalem area, enlisted with four different Sick Funds. “Clalit” is the largest of these funds, followed by “Leumit”, “Macabe” and “Meuhedet”, consequently.

3. The NGOs Sector: This sector is divided into two main sectors:

First: PHC services to the Arab population and mainly consist of the following organizations:

- Union of Palestinian Medical Relief Committees (UPMRC): runs (4) clinics in the Jerusalem area.
- Union of Health Work Committees (UHCW): runs (2) health centers.
- Arab Health Care Centre (AHC): provides non-profit services, and operates (3) branches located in different sites in Jerusalem.

Second: Charitable Societies:

The non-governmental charity hospitals play a major role in supporting the Palestinian health care system and provide a main referral base for the Palestinian Ministry of Health and UNRWA. Only six non-profit and non-governmental hospitals exist in East Jerusalem (EJ). They include three general hospitals (Makassed, Augusta Victoria, and St. Joseph’s hospitals) providing secondary and tertiary services. The other three are specialised hospitals: St. John’s ophthalmic hospital, Red Crescent Maternity hospital, and Princess Basma Centre for Disabled Children (Jafari & Hamdan, 2005).

The hospitals provide the health system with general medical departments of high levels of quality and competency. Many hospitals provide specialty services that are not available elsewhere in Palestine, such as ophthalmology, cardiac surgery, neuro-surgery and urology, rehabilitation and prosthetics. (Rabadi & Silwady, 2002).

After the Israeli occupation in June 1967, the National Insurance Institute (NII) worked fast to extend its presence in East Jerusalem. By January 1968, the (NII) began its operations replacing many of the functions of the Jordanian welfare system in the city (The Israeli Government, 2005). At the same time, Israel introduced a comprehensive health insurance services to cover up to 45% of the Palestinians in East Jerusalem.

The level of health insurance coverage for the Palestinian population has increased particularly after the Israeli government's decision in January 1995 that made the health insurance mandatory and included the health insurance within the National Insurance Scheme. These benefits include: "income maintenance", "wage substitution", "children allowances", and "rehabilitation" (International Cooperative Information Centre, 2005).

A major proportion of patients is from the West Bank, thus the health care centers in East Jerusalem are an integral and indispensable part of the overall West Bank health system and the sole provider of specialized medical treatment. The building of the Annexation Separation Wall has had a detrimental effect on access, both physically and psychologically, for the fact that medical staff as well as patients often faces difficulties reaching East Jerusalem (The Israeli Government, 2005).

The Jerusalem Forum:

In 1997, the visionary leader of Jerusalem, the late Faisal Hussein, foresaw the need to organize the work of the hospitals into a professional forum. Thus the East Jerusalem Hospitals Forum was established and coordinated by Dr. Rafiq Hussein. The mission of the forum was to create complementary and joint planning that will promote collective excellence for the hospitals in Jerusalem. Convinced of this local initiative, the European Union (EU) stepped in later to offer a helping hand and further support the work of the forum. The collaborative work of the forum was and continues to be supported by the (EU) through the Welfare Association as the local partner. In 2005, the hospitals signed a resolution forming the East Jerusalem Hospitals Network serving as a voluntary network that will assist and promote all hospitals to achieve excellence in their future strategic plans. Aside from the strategic collective planning that the network has been engaged in, the hospitals have collectively enrolled in an International Organization of Standardization (ISO) certification process that aims at improving the quality of the hospitals, clinical and

non-clinical processes, out of a commitment to maintain the highest possible level of quality care to patients (Nasser, 2006).

## **1.5 History of JCDC**

JCDC was established in 1965 as a home for the physically disabled children, mainly those suffering from Polio – Paralysis. It was run by The Lutheran World Federation for ten years, then came under a charitable organization licensed in Jordan (No. J “131”), in Palestine and in Israel (No. 58-024-070-3).

It is worth noting that the Centre was entrusted under the Arab Anglican Episcopal church in June 2000.

Changes and developments started in the early eighties to go parallel with the needs and expectations of the disabled community. In 1987 a mainstream school was started where children with special needs are included along with normal bodied children.

In 1993, JCDC was identified as one of the three National Referral Centres for the growing “Community Based Rehabilitation” (CBR) structure in Palestine.

In 1996, an agreement was signed between the three national rehabilitation centres (Bethlehem Arab Society in Beit Jala, Patients’ Friends society “Abu Rayya Rehabilitation Centre” in Rammallah, and The Jerusalem Princess Basma Centre for Disabled Children, in Jerusalem) and the Palestinian Ministry of Health, defining geographical work areas and services provided. JCDC would provide services to children with all sorts of disabilities and their families from East Jerusalem, the central and northern areas of the West Bank, through the Centre itself and the outreach clinic in Rammallah.

Beginning 1999 the provision of highly specialized services for the hearing impaired children of East Jerusalem and training opportunities for the disabled adults of East Jerusalem was started by a team of experts.

Since its establishment until the present date, JCDC played a unique role in developing the services provided to the children with special needs and their families in order to meet their

right to inclusion within their communities. The Centre's role is now expanding to become the advocate for those children and their families.

Services provided by JCDC and beneficiaries can be summarized as follows:

*i) Children with special needs:* Treatment / rehabilitation services to the children who have special needs, mainly physically disabled children and hearing impaired, ages (0-14) years.

About (140-180) children per year are referred to the Centre from the central and northern parts of Palestine while a total of (40-60) children per year are referred from East Jerusalem. Every child spends a period of (1-3) months. He/she is admitted with his / her mother. The treatment / rehabilitation program for every child is accompanied by a specialized program to ensure his/her empowerment and partnership in the whole process, with the aim of creating a local community of empowered mothers, thus advocating for their rights and the rights of their children to complete inclusion within the community.

*ii) Regular school children:* A total number of (403) students from East Jerusalem ages (3-14) years are receiving regular pre-school and mainstream education within an inclusive setting; (70) of them are hearing impaired and (32) are physically disabled. This coincides with the JCDC vision of integration, advocating the JCDC policy of total integration of all children with special needs within their own communities.

*iii) Population from different age groups:* About (500-550) cases per year receive physiotherapy / hydrotherapy treatments at the Out-Patients Physiotherapy Unit.

A total of (450-500) cases per year receive prosthetic / orthotic devices at the orthopaedic manufacturing unit.

*iv) Young adults with special needs:* A total of (21) young adults with special needs, males and females, ages (18+) years participate as trainees at the vocational training sheltered workshop. These are referred from the Israeli Social Welfare Office in Jerusalem with the aim of making them active members of their communities (Yasmineh, 2005).

## **1.6 The aim of the study**

- ✓ The aim of the study is to assess the level of satisfaction among clients attending JCDC out-patient physiotherapy services.

## **1.7 Specific objectives**

1. To assess the overall level of clients satisfaction with out-patient physiotherapy services provided by JCDC.
2. To asses main factors influencing the client satisfaction with JCDC out-patient service.
3. To assess whether there is a difference in the level of clients' satisfaction with JCDC out-patient service according to the patient's characteristics.
4. To suggest recommendations to decision makers and professionals for adopting creative ways to improve clients satisfaction and quality of care at JCDC.

## **1.8 Research Questions**

1. What is the overall level of clients' satisfaction with JCDC out-patient physiotherapy service?
2. What is level of satisfaction with JCDC out-patient physiotherapy service in relation to patient's characteristics?
3. Are there significant differences in the level of clients' satisfaction with JCDC out-patient physiotherapy service in relation to patient's characteristics?

## **1.9 Assumptions**

The following were the assumptions of the study:

- ✓ Sufficient number of clients will participate and the response rate will be high.
- ✓ Political situation will not affect the study and the researcher will complete the study on time.
- ✓ Questionnaire used to measure patient satisfaction yields reliable and valid numbers.

## **1.10 Limitations**

The following is the limitation of the study:

- ✓ Service limitations. The study was conducted in one unit of JCDC, at the out-patient physiotherapy service. Therefore generalization cannot be made based on the results of the study.

## **1.11 Summary**

This study was aimed to assess the level of satisfaction among clients attending JCDC to receive physiotherapy services. Information was gathered for the purpose of identifying potential deficiencies and factors that would influence the client satisfaction of services provided by the center. This chapter gives an introductory overview of the whole study setup.

## **CHAPTER TWO**

### **Review of Literature**

#### **2.1 Introduction**

This chapter presents a review of literature. The literature review includes theoretical models related to the concept of clients' satisfaction within health care services. The aim is to gain background knowledge about the topic. The literature review has enabled the investigator to establish the conceptual framework of the study.

#### **2.2 Theories of satisfaction**

Over the years, researchers have gathered substantiate evidence and developed various theories of patient satisfaction. Such theories visualize patient satisfaction from different angles. Following are some theories of patient satisfaction that illustrate the association of patient satisfaction with other variables such as treatment outcomes, health care environment,....etc.

##### **2.2.1 Performance Theory**

According to this theory, patient satisfaction is not affected by prior patient expectations at all. Actual performance and the treatment outcome effectively affect patient satisfaction. Actual performance will overwhelm any psychological response tendencies related to expectations (Oliver & DeSabro, 1998). Higher patient satisfaction can be expected to result in a better clinical outcome and lower patient satisfaction is associated with poor clinical outcomes. Basically what the theory means is, though patients have expectations, level of patient satisfaction is influenced highly by the quality of care provided and the outcomes of the care. Patients pretreatment expectations cannot inhibit the level of patient satisfaction, as it is overcome by the high quality care offered and a superior treatment outcome (Oliver & DeSabro, 1998).

### **2.2.2 Fulfillment Theory**

Fulfillment theory views patient satisfaction in a somewhat different way from performance theory. This theory contends that patient satisfaction is the difference between actual outcome and some other ideal or other desired outcomes (Linder-Pelz, 1982). This theory hypothesizes that satisfaction would vary positively with the extent to which perceived outcomes concurred with the pretreatment expectations. The patients' perception of whether the outcome of a treatment was good or bad was based on the expectations the patient had before treatment and would influence the patient satisfaction. This means that there would be positive satisfaction if the treatment outcome matched with the pretreatment expectations of the patient (Linder-Pelz, 1982).

### **2.2.3 Expectancy-Disconfirmation Theory**

Not very different from the fulfillment theory, the expectancy-disconfirmation theory contends that patients form expectations of their treatment outcomes even before the treatment. It proposes that the consumer compares his or her perception about a product or a service against a pre-purchase comparison level or standard. In a health care setting, patients tend to compare the actual outcomes with that of the perceived outcomes. It proposes that if one's expectations are higher, the less likely that service could meet or exceed them, and the result would be reduced satisfaction or dissatisfaction. On the contrary, the higher the perceived level of performance, the more likely the expectations would be exceeded, resulting in increased satisfaction (Oliver & DeSabro, 1998).

### **2.2.4 Social-Equity Theory**

This theory is different from the other three theories. If a patient perceives that his/her treatment outcome is comparatively and fairly the same when compared to that of his/her counterparts, then he/she is supposed to be satisfied. Individuals compare their gains with those of other consumers and with those of the service provider. Patients tend to compare their treatment results with those undergoing the same treatment procedures for a similar condition in the same health care setting or any other health care setting. If the other patient had acquired better treatment services and the outcome in that patient is found superior to

that of the first patient, the first patients more likely get dissatisfied (Newsome & Wright, 1999).

### **2.2.5 Primary Provider Theory**

The Primary Provider Theory contends that patient satisfaction occurs at the nexus of provider power and patient expectations (Aragon, 2003). It is principally the function of an underlying network of interrelated satisfaction constructs - satisfaction with the primary provider, the amount of time a patient has to wait for the provider, and satisfaction with the provider's assistant. According to this theory primary providers offer the greatest clinical utility to patients. The theory is mainly operated by patient centered measures exclusively, where only patients judge the quality for service and other judgments are totally irrelevant. So this theory concludes that patients' level of satisfaction is inherently influenced by the primary care provider (Aragon, 2003).

### **2.3 Clients satisfaction global studies**

Research on patient satisfaction with medical care can be traced back to the late 1960s. At first, research was focused on patient satisfaction as a condition to be satisfied in order to reach desirable clinical outcomes, such as appointment keeping or compliance with recommended treatment. Gradually, interest shifted to patient satisfaction as the dependent variable (Hendricks et al, 2002). "Patients' views became an important tool in the process of monitoring and improving quality of health care services. Also, hospitals increasingly came to adopt a patient-centered attitude" (Hendricks, Oort, Vrielink, Smets, 2002).

At the Academic Medical Center in Amsterdam, the Satisfaction with Hospital Care Questionnaire (SHCQ) was used. A study was conducted by Hendricks, et al (2002), where SHCQ served two measurement purposes: (1) Measuring patient satisfaction; (2) Establishing hospital care quality. The goal of this study was to determine the reliability of SHCQ for both measurement purposes as a supplement to previous findings concerning internal consistency and test and re-test reliability. In addition, the study examined the validity of the SHCQ for measuring quality of hospital care, as yet relatively little is known about the validity of patients' evaluations of hospital care.

The sample study included (275) patients and (83) staff members of (4) hospital wards completed the (57) items SHCQ addressing (13) aspects of care. Staff members completed the SHCQ from the patients' perspective. The data was analyzed within the framework of generalization theory. Generalization Coefficient (GCs) and standard errors of measurement were the main outcome measures. The result of this study was that GCs indicated differentiation among patients as to satisfaction among patients; as to satisfaction with different overall levels of satisfaction, (SHCQ mean scores) were high (0.90). GCs indicating differentiation among patients as to satisfaction with aspects of care, SHCG were generally satisfactory (0.75).

Patient satisfaction studies are regarded as the most important tool for evaluation of health care institutions. Jupital and Rosenthal (2003) carried out a cross-sectional study to determine the relation between patients' level of satisfaction and their age. A sample of (64,900), randomly selected from medical and surgical patients from (31) hospitals in large Midwestern, metropolitan area. Patients rated their satisfaction with hospitals' services on five aspects: (1) physician care, (2) nursing care, (3) information provided, (4) discharge instructions and (5) coordination of care. The study revealed that the patient satisfaction with services increased with age until age 65 to 80 and then declined. It was also revealed that although better health was associated with greater satisfaction across all age ranges, the relationship between age and satisfaction was modified somewhat by health status. The researcher concluded that health status and age should be taken into account when interpreting patients' satisfaction data.

Ahmed and Al-Asad (2003) investigated patients' satisfaction with nursing care in a teaching hospital in Jordan. Two hundred and sixty six patients participated from medical, surgical and gynecological wards. The researchers found that patients in surgical wards had lower levels of satisfaction than patients in the other wards. Moreover, it was found that the gender, educational level and having other diseases were significant predictors for patients' satisfaction with nursing care.

Some researchers assessed patients' satisfaction in out-patient and in-patient settings, such as Goupy, Gires and Massicot (1996) who measured patient satisfaction in (8) hospitals in France, and compared the results from the year 1989 to the year 1995 for in-patient care; the study showed high satisfaction with care received from physicians and nurses (77% and

82% of patients were “very satisfied”). Good satisfaction with cleanliness and comfort (64% and 55%), and moderate satisfaction for quietness, for time schedule, and for the quality of meals (47%, 47%, 37%). Also, it was reported for out-patient care. The study confirmed high satisfaction with the information given and the time spent by physicians and kindness of persons (73%, 69%, 71%) of patients were very satisfied, and moderate satisfaction with comfort and waiting time (39% , 31%). Time comparisons for six years interval showed decrease of satisfaction (1% - 3%) except for nursing care and cleanliness. The possible explanation could be increased patients’ demand and expectations (Al-Hindi, 2002).

Studies that took place in out-patient departments, usually used tools such as subjects measure appointment system, reception office waiting time, and privacy of the patient. Lieberman and Wysenbeck (1996) investigated clinical variables related to patient satisfaction in the out-patient clinic. Sixteen clinics were investigated, according to frequency of visits. The investigations assessed each clinic at three occasions, on different days per week and different hours per day. Variables that were assessed were: (1) waiting time, (2) clinic secretary, (3) reception office, (4) medical and nursing quality as perceived by the patients and the clinic’s physical facilities, (public areas, rest rooms etc.).

There were significant differences from “satisfied” and “unsatisfied” patients on the univariate analysis of the variables. On multiple regression, variables significantly related to patients’ satisfaction in descending order of statistical significance were: (1) clinical secretary, (2) waiting time, (3) medical and nursing quality, and (4) reception office, while the clinic’s physical facilities were not significantly identified by a cross-sectional study conducted by Simic et al (1996) to assess the level of patients’ satisfaction in a hospital in Belgrade.

Simic et al, (1996) study involved (289) patients discharged from hospital wards during two weeks period. A self administered questionnaire included (44) questions was distributed as a postal survey. The overall response rate was (64.4%). The results showed a very high, general satisfaction level of (40.6%) very satisfied, and (51.3%) mostly satisfied. In the multiple regression model with general satisfaction as the dependent variable, the significant predictors were patients’ hospital work organization assessment, hospital food quality, health status improvement after hospitalization, human relationships and

cooperation with nurses, existence of permanent hospital nurse and out hospital GP, number of patients' family members. These seven predictors explain 28% total variability of the general satisfaction level.

A study on patient satisfaction in relation to age, health status and other background factors, a model for comparisons of care units was conducted by Rahmqvist at the Center of Medical Technology in Sweden (2001). The objective of this study was to analyze the relationship between patient satisfaction and background factors such as age, gender, health status and pain. In addition, to use background factors and to create biased ranking in comparison of patient satisfaction between medical specialties. Of the background factors that were tested, patient age had the greatest explanatory value regarding the Patient Satisfaction Index (PSI), closely followed by experiencing anxiety during admission. With regard to variation in the PSI, about 20% could be explained by the background factors taken as a whole. Gender did not correlate with the PSI, although males were somewhat more satisfied than females. PSI scores differed among medical specialties and interestingly, when age and other background factors were controlled for, the picture changed regarding the medical specialty that received the best PSI score (Rahmqvist, 2001).

Another study about the socio-economic status and dissatisfaction among Health Maintenance Organization (HMO) enrollees was conducted by Carlson, Blustein, Fiorentino, Prestianni, (2002). The objective of the study was to determine whether socio-economic status is associated with enrollee's dissatisfaction. Other factors known to influence satisfaction (age, gender, health status, extent of plan choice, and payment for plan) were also ascertained. Socio-economically advantaged enrollees were more likely to give low rating to their health plans. In a multivariate logistics regression, those with incomes exceeding USD 100,000 had 1.65 times the odds of being dissatisfied.

Among New Jersey HMO's enrollees, higher socio-economic status (SES) is associated with greater dissatisfaction. Although based on cross-sectional data, and thus preliminary, the evidence presented also suggests the SES dissatisfaction relationship varies as a function of duration of enrollment.

## 2.4 Client satisfaction local studies

There has been little research conducted in Palestine on clients' satisfaction with health care services. This study is considered the first in Palestine focusing on physiotherapy service. Massoud (1994) reported that there is general dissatisfaction among the public and the professionals regarding the quality of healthcare in Palestine.

Mousa (2000) investigated the level of clients' satisfaction with family planning services in Gaza Strip in Palestine; The researcher used an administered questionnaire. A sample of (377) women attending family planning clinics were randomly interviewed at UNRWA and MOH clinics in Gaza Strip by using systematic sampling technique. The response rate of clients attending (UNRWA) clinics was 96.5%, while the response rate of clients attending MOH clinics was 79.6%. The researcher identified five dimensions of clients' satisfaction, attitude and perception, information and interaction, interpersonal relationships, mechanism of care and delivery of care. The overall satisfaction level of the family planning service provided by two major providers (MOH & UNRWA) was 72%. Clients attending UNRWA clinics were more satisfied with the services they received than those attending MOH clinics. Whilst a high satisfaction level was found with the information and counseling process of (89%), the least satisfaction level was with the process of communication and interaction (54%). Moreover, the findings reported that the youngest clients were more satisfied with the services they received than the older age group; highly educated clients showed a higher level of dissatisfaction than clients with a lower level of education; clients living inside refugee camps were more satisfied with family planning services than clients living outside refugee camps.

The study pointed out that the voices and views of clients are essential, but often a neglected aspect in initiatives to determine areas of services, where if improved, could increase the level of satisfaction. These kinds of improvements will be necessary if service providers hope to become sustainable and to help clients meet their family planning needs (Mousa, 2000).

Another study was conducted by Cockcraft, (1998) upon request of WB and GS Country Department for the benefit of the Palestinian National Authority (PNA), trying to assist them in development programs. The study aimed at evaluating the present health care services, in order to have recommendations for decision makers about the effectiveness and

efficiency of service. The study included 2,988 households, with 17,141 persons (65% were non-refugees, 91% household were men, 35% households were registered refugees, while 2% were non registered refugees).

The sample consisted of 25 sites of 100-120 households per site. The results about satisfaction with health care services showed that 43% of the households in WB and 57% of households in GS believed that services are “good” or “very good”. The main perceived problem with health services, in 37% of households, was lack of required medications, which may be due to inappropriate expectations of treatment, or perhaps due to diversion of supplies.

A study was conducted in Gaza Strip by Al Hindi, (2002) to assess the level of satisfaction with radiology services in Gaza. The study was conducted at two major radiology centers (Al Shifa governmental hospital and Gaza private diagnostic center). The researcher used a cross-sectional design with a systematic randomized sample; a total of (410) clients were approached. The response rate was 78.04%.

The study explored seven dimensions of satisfaction with radiology services: organizational culture, continuity and affordability, availability, interaction and communication, attitude and perception, comfort and privacy and approach of care. The study findings showed a relatively high degree of satisfaction with radiology services (82.5%).

The study concluded that the type of institution and organizational variables, including the number of visits, waiting time and procedure time reflect a significant impact on the level of satisfaction. On the other hand, age, gender residency place and occupation of respondents showed no significant impact on the level of clients’ satisfaction with radiology services (Al Hindi, 2004).

Another study was conducted in Gaza Strip by Abu-Saileek, (2004) that explored the clients’ satisfaction with nursing care provided at selected public hospitals in Gaza Strip. The study assessed the level of clients’ satisfaction with nursing care in the two major and largest public hospitals in the southern part of Gaza Strip, “European Gaza Hospital” and “Nasser Hospital” in Khan Younis City. The researcher used a cross-sectional design with a systematic randomized sample; total of (427) clients were included. The response rate was 93.6%.

The researcher explored six dimensions of satisfaction with nursing care; information and interaction, availability / attentiveness and openness, comfort and environment, nurses skills and professionalism, organizational culture, counseling and advising. The study findings showed that there is significant relationship between the service provider and the satisfaction level, which reached 70.1% in both hospitals. The clients in the “European Gaza Hospital” reported a higher level of satisfaction which reached 84.2% than the clients in “Nasser Hospital”, which reached 61.7%.

The study concluded that the demographics and socio-economic variables, including the age, the place of living, marital status, income and the education level had a great impact on the level of satisfaction. The study also, concluded that the type of institution and organizational variables, including the payment of medical care, referral source, previous hospitalization in other hospitals, admission days, medical diagnosis groups, and the choice of the same hospital in the future, reflect a significant impact on the level of satisfaction. On the other hand, gender and the ward showed no significant impact on the level of clients’ satisfaction with nursing care (Abu-Saileek, 2004).

A unique study by Husseini, (2004) was performed in East Jerusalem to assess the perception of satisfaction of Palestinians in East Jerusalem (clients’ and professional service providers) of health services offered by Israeli Health Insurance through one of the major Israeli Sick Funds “Clalit”. A cross-sectional design was used with a sample of (210) subjects selected from clients visiting the primary health care clinic of Kupat Cholim “Clalit”. All Arab health professionals (physicians and nurses) working in these centers were also targeted. This study concluded that the highest satisfaction level was with physician care received, followed by nursing care. Moreover clients and professionals expect some services to be offered if the Palestinian National Authority is given authority over health care in East Jerusalem (Husseini, 2004).

## **2.5 Factors influencing satisfaction**

When including clients satisfaction mechanism in health care systems, the option should take into account the capacity of users to understand what is being asked of them to communicate their options and feelings effectively.

Important factors influencing patients in this regard include literacy levels, intellectual and physical / sensory disability level and difficulties with language proficiency or ethnic and cultural diversity. Social elements within our society must be considered as they can very often dictate whether the consumer will provide feed back and express their satisfaction or otherwise, e.g. financial status, educational status, demographics (urban / rural) and technology (Doherty, 2003).

Based on the literature review, factors influencing patient satisfaction can be summarized as follows:

1. Age: “Older respondents generally record higher satisfaction levels” (Owens and Batchelor, 1996).
2. Prior experience of satisfaction: (Crow et al, 2003) identified that satisfaction is linked to prior satisfaction with health care and granting patients’ desires, e.g. for medical examination, tests.
3. Patient / professional relationship: There is consistent evidence across settings that the most important health service factor affecting satisfaction is the patient/practitioner relationship, including information sharing and technical competence of health professionals (Crow et al, 2003).
4. Magnitude illness: Some studies have found that sicker patients and those experiencing psychological stress are less satisfied (Hall and Milbourne, 1998; and Cleary et al, 1992). “Patients with failing health or chronic illness are less satisfied” (Kirk 1993).
5. Patient expectation: Meeting patient expectation is assumed to play a role in the process by which an outcome can be said to be satisfactory or unsatisfactory. “Expectations are an important influence on the clients’ overall measurement of satisfaction with a health care experience. Client satisfaction is influenced by the degree to which care fulfils expectation” (Mahon, 1996). Some literature however, suggests that “a link between satisfaction and fulfillment of patients’ / clients’ expectations is not necessarily the case, since it is possible that the patients’

evaluation of service may be largely independent of actual care received” (Williams, 1994).

6. Choice of service provider: “Choice of service provider is associated with higher satisfaction” (Crow et al, 2003). “Care provided under fee-for-service arrangements generates greater satisfaction than that delivered with pre-paid schemes. Gate keeping organizations, where clients have little or no choice in their treatment or are assigned treatment, score relatively poor on satisfaction” (Crow et al, 2003).
7. Gender, ethnicity, and socio-economic status: “Evidence about the effect of gender, ethnicity and socio-economic status is equivocal due to the small amount of literature available on each” (McGee, 1998, Crowe et al, 1995). “Low income decreases access to care and mainly increase skepticism with the health care system” (Lansky, 1995). However “it is generally been found that patient gender does not affect satisfaction” (Sitz & Wood, 1997).
8. Communication: “Effective communication will increase satisfaction” (Messener, 1996).
9. Educational level: “Education empowers people with a greater sense of control and understanding of health and illness, so patients who receive adequate education have shorter hospital stays, experience fewer complications and less distress, and are more satisfied with their health care experience” (Padberg,R.M., Padberg L.F. 1990).
10. Accessibility to needed services: “Patients who have difficulty with accessibility are less satisfied” (Padberg and Padberg, 1990, Schiff, Goldberg and Ansell, 1992).
11. Reasonable waiting time: “Excessive waiting is perhaps the greatest irritation and dissatisfaction” (Scott, 1992).
12. Coping mechanism: “Poor coping skills hinder potential for physical, psychological and spiritual healing” (Messener, 1996).

## **2.6 Summary**

This chapter covered a review of some literature with theoretical and empirical backgrounds. The literature review included patient satisfaction theories and studies. Theoretical literature reflects factors which can affect clients' satisfaction. The researcher in this study designed the study questionnaire based on these theoretical basis and relevant research.

## **CHAPTER THREE**

### **Conceptual Framework**

#### **3.1 Introduction**

This chapter covers the conceptual framework of the study. The framework was developed after reviewing background information of previous studies. The review of literature helped in selecting and developing definitions of major variables: dependent and independent.

#### **3.2 Patient satisfaction concept**

The importance of patient satisfaction has a long history of debate, beginning over two millenniums ago in ancient Rome. Plato suggested in “The Statesman” that since the doctor “cuts up, and orders us to bring him money ... as if he were exacting tribute ... he should be put under rigid control”, and this could be done by calling an assembly of the people and inviting opinions about disease and how drugs and surgical instruments should be applied to patients. Further, he proposed that the people “elect out physicians from among our number for one year term, and severely penalize them if they fail to carry out the letter of the law” (Campbell, 1999).

In spite of the high demand for satisfaction measures, health care researchers have been unable to reach consensus about a definition of satisfaction. Many researchers provided no conceptual definition of satisfaction. For example, Kasper and Riley (1992) used satisfaction to compare the quality of care offered by health maintenance organizations with fee-for-service care in the geographical area, but did not define satisfaction. “Knaus, Felten, Burton, Fobes and Davis (1997) used satisfaction as an outcome measure to evaluate the effectiveness of nurse practitioners in an acute care setting, but did not define satisfaction” (White, 1998).

No one standard definition of satisfaction was observed in the literature due to the fact that patient satisfaction is a multi-dimensional concept that is difficult to be accurately defined and measured (Andersen, Maloney and Bread, 1998; Schomer and Kucukarslan, 1997;

Staniszewska and Ahmed, 1999). Staniszewska and Ahmed (1999) emphasized this saying, “that firstly it is important to define and understand satisfaction and expectation, then, theoretical modeling and valid instrument can be established”.

Satisfaction, like many other psychological concepts, is easy to understand but hard to define. The concept of satisfaction overlaps with other similar themes, such as happiness, contentment and quality of life. “Satisfaction is not some pre-existing phenomenon waiting to be measured, but is a judgment people form over time as they reflect on their experience. A simple and practical definition of satisfaction would be the degree to which desired goals have been achieved” (Doherty, 2003).

Patient satisfaction is an attitude, a person’s general orientation towards a total experience of healthcare. “Satisfaction comprises both cognitive and emotional facts and relates to previous experiences, expectations and social networks” (Keegan et al 2002). Meredith and Wood (1995) described patient satisfaction as “emergent and fluid”. It also has been described as “a particularly passive form of establishing consumers’ views” (McIvor, 1992). “Satisfaction is achieved when the patient’s / client’s perception of the quality of care and services that they receive in a healthcare setting has been positive, satisfying and meets their expectations” (Doherty, 2003).

“According to Ware, Snyder, Wright and Davis (1983), patient satisfaction is a multi-dimensional construction with eight dimensions that correspond to the major characteristics of providers and services. These dimensions are interpersonal manner, technical quality of care, accessibility / conveniences, finance, efficiency / outcomes, continuity of care, physical environment and availability of medical resources. They also argue that satisfaction ratings are both a measure of care and a reflection of the respondents, and that they reflect three variables; the personal preferences of patients, the patients’ expectations and the realities of care received” (Imam, 2002).

The importance of defining satisfaction was stressed by Linder-Pelz who stated that “we need to understand the concept of satisfaction before we can really explain why certain factors cause it and others caused by it” (Al-Hindi, 2002). Andersen, Maloney and Bread (1998) defined patient satisfaction as “the degree of congruence between patient expectations of care and their perception of care that is actually received”. Juran in this

regard stated that customer satisfaction “is a result achieved when services’ features respond to customer needs”.

Oliver defined satisfaction as “the consumer’s cognitive evaluation of, and emotional reaction to his/her perception of whether the characteristic met his/her expectations” (White, et al, 1999).

However, customer satisfaction does not only mean satisfying the needs and the reasonable expectation of customers, but also having an attitude that puts the needs of the customer first. Therefore, “customer satisfaction is considered to be the heart of Total Quality Management” (Evans & Lindsey, 1999).

What could be understood from the theories stated before, is that patients’ level of satisfaction is influenced by different factors like quality care, treatment outcomes, provider power, waiting time, equality in treatment, and staff members. Some selected factors mentioned in these theories together with various other influencing factors were integrated in the patient satisfaction instrument. The first three theories, Performance theory, Expectancy-Disconfirmation theory and Fulfillment theory mainly focus on the treatment outcome in a patient, irrespective of patient’s prior expectations. Social equity theory talks about patients being treated equally. According to Primary Provider Theory, patient satisfaction is influenced by the primary provider, waiting time, and the staff assisting the provider

Patient satisfaction is a vague and a multifaceted phenomenon. It is the degree of congruency between patients expectations of the ideal care and their perception of actual care received. However, several researchers posited that patient satisfaction is a multidimensional concept (Goldstein, 2000). Although there is no golden standard for measuring patient satisfaction, recent research by Nelson is helpful in determining the areas that define patient satisfaction. Based on this frame work he concluded that access, administrative technical management, clinical technical management, interpersonal management and continuity of care are the domains that define patient satisfaction, (Goldstein, 2000). As illustrated in table (3.1), a total of 11 domains of patient satisfaction are listed. Ten of these domains represent Goldstein’s domains and the other one is

additional domain of patient satisfaction (accommodation) that would be adaptable for the study context.

Table (3.1): Domains of patient satisfaction

No.	Satisfaction Domains	No. of related question	Content of question
1.	Treatment	Q1	Satisfied with treatment by physiotherapist
		Q 2	Physiotherapist understand my problem and condition
		Q3	Satisfied with overall quality of physiotherapy care
		Q4	Instruction by physiotherapist were helpful
2.	Privacy	Q5	Privacy was respected
3.	Convenience of location	Q6	Convenient location
		Q7	Parking available
4.	Accommodation	Q19	The centre is quite clean
		Q20	There are signs leading to the service places
5.	Cost	Q8	Cost was reasonable
		Q9	If I had to, I would pay for these physiotherapy services my self
6.	Ease of scheduling	Q10	Scheduling appointments at convenient times
7.	Scheduling	Q11	First visit scheduled quickly
		Q12	Subsequent visits scheduled easily
8.	Waiting time	Q13	Seen promptly
9.	Courteousness of physiotherapist	Q14	Physiotherapist was courteous and professional
10.	Courteousness of staff	Q15	Staff was courteous
11.	Overall satisfaction	Q16	Would recommend to family and friends
		Q17	Would return to this facility for physiotherapy in the future
		Q18	Overall satisfaction with the physiotherapy experience

Patients' opinions of services in each domain were measured using 5-point Likert type scale that ranged from "strongly agree" to "strongly disagree". In addition to the items designed to assess patient satisfaction, 7 additional items were included to gather the following information: (1) residency place, (2) educational level, (3) marital status, (4) the current job, (5) the insurance coverage, (6) the insurance company and (7) who cover the expense. These descriptive Variables were included as the independent variables to be used in conducting inferential statistical analysis to determine whether they exerted differential effects on the ratings of patient satisfaction.

### **3.3 Factors affecting clients' satisfaction**

The patient satisfaction survey instrument that has been used, contains a sum of (33) questions (Annex 1). The first (13) questions set the background of the study; these variables were included to determine whether they exerted differential effects on the rating of patients' satisfaction. Questions from (14 – 33) are typically answered by use of 5-point Likert type scale that allows respondents to communicate different levels of agreement.

### **3.4 Summary**

This chapter presented the conceptual frame work developed by the researcher. The patient satisfaction frame work is based upon and synthesized from several independent variables, based on the study by Goldstein (2000).

## **CHAPTER FOUR**

### **Methodology**

#### **4.1 Introduction**

This chapter covers the research design, the population targeted and the sample used in the study. It also presents the ethical considerations related to the study, pilot testing, data collection and methods of analysis.

#### **4.2 Research design**

A cross-sectional design was used to identify clients' satisfaction level with JCDC out patient physiotherapy services in relation to different selected independent variables (e.g. age, gender, place of residency... etc.). "Cross-sectional design is usually used to assess the level of satisfaction of a group of clients at various stages of receiving the service" (Burns & Grove, 1997).

#### **4.3 Population and sample**

The study was held at the out-patient physiotherapy clinic of JCDC as a National Referral Centre for rehabilitation services. All clients attending to receive out-patient physiotherapy service are actually targets for the study. The study population chosen for this research is the clients admitted to the out-patient physiotherapy clinic at JCDC, and received sessions during the implementation of the study. The physiotherapy clinic receives monthly about (30-35) new clients, some with different insurance schemes and others without any insurance coverage.

The researcher estimated a sample of (110) clients to cover about (20 – 30%) of total patients annually (Fig. 1.1), and decided that a period of 4 months from (August – November 2005) to be the period of implementation of the study; taking into consideration that there is no difference in patients' characteristics and type of injury or any other issues that would affect the study results. The number of patients attending the out patient

physiotherapy unit reached (308) by the end of October; a noticeable decrease in number of patients where it was (413) in the same period in 2004 (Majaj, 2005).

#### **4.4 Methods of the study**

A quantitative approach in a form of standardized structural questionnaire was used in the study. “Quantitative approach develops solid base data, gives objective view recording facts in order to understand them; it also detaches the investigator from facts to prevent bias” (Carr, 1994).

#### **4.5 Instrument**

The clients were interviewed by a structured questionnaire (Annex 1), using 5 point likert scale that ranged from “strongly agree to “strongly disagree” was recommended by professionals and researchers with background and knowledge of client satisfaction. The consumers’ questionnaire was constructed after reviewing several tools related to the out-patient physiotherapy satisfaction and modified for applicability to the local situation. The researcher used the 11 hypothesized domains of patient satisfaction cited by Goldestin, (2000) as a guide in the generation of the items in the instrument. The study tool included independent variable “patient characteristics” (i.e. age, gender...etc.). These factors were based on relevant studies and literature review (Williams, 1994, Messener, 1996 & Crow et al, 2003).

For the purpose of the study, clients’ dissatisfaction was operationally defined as a “disagreement”, and satisfaction was defined for “agreement” and for no response to an asked statement, “not sure” was defined.

#### **4.6 Pilot testing**

The pre-test of the questionnaire points out weaknesses in wording and test validity of the questions by measuring the respondents’ extent of familiarity with the concepts and the problems (Backstorm and Hursch Cesar, 1981).

The questionnaire was administered to 10 clients for pre-testing purposes. This pilot testing was done on July 2005. The data obtained was analyzed and unclear or ambiguous questions were deleted or altered.

#### **4.7 Data collection**

Re-phrasal and deletion of ambiguous questions were performed following the pilot test. Clients were given full explanation about the study and its purpose, and were given the self-administered questionnaire to be filled and returned. After collecting data, total of (104) responses were achieved. The response rate was (94.5%). The questionnaire was administered to the clients by the receptionist of the physiotherapy clinic. The questionnaire was kept in the second waiting room to assure privacy and reduce bias to the clinic then it was dropped by the patient in a closed box in the waiting room. The questionnaire was administered to the clients after receiving the third session as to have at least the opportunity to gain knowledge about the centre and the service.

#### **4.8 Data analysis**

The researcher numerically coded the data to prepare it for statistical analysis using Statistical Package for Social Sciences (SPSS). The researcher then entered the data into the computer program for statistical analysis.

The researcher analyzed the data after several consultations with the supervisor. So, frequency tables were conducted for the study variables. Means and standard deviations were computed for each of the satisfaction domains. Then, inferential statistical analyses were conducted to explore the potential relationships between dependent and independent variables. Therefore, an independent t-test and one way ANOVA tests were carried out to investigate the relationships between the independent study variables with the total sub-scores of the satisfaction level.

#### **4.9 Ethical considerations**

Ethical approval to carry out the study was obtained from the institution. A permission letter was sent to the General Director of JCDC (Annex 2 ), and a positive response was communicated to start the study (Annex 3 ).

A verbal explanation of the objectives of the study was given to each participant, as well as the time needed to complete the questionnaire. The concerned clientele participated voluntarily and with a full right to withdraw from the study at any time. The subjects were assured that the information they provided during their participation was to be handled in total confidentiality and anonymity. Each participant was assured that his / her participation would by no means influence the care he / she will receive (Annex 4 ).

#### **4.10 Psychometric of the questionnaire**

“Quantitative approach develops solid base data, provides wide coverage and is characterized by a high degree of numerically tested validity and reliability” (Carr, 1994). In this study the researcher tested content validity. Moreover, the reliability was tested.

##### **Validity:**

An assessment of validity was made in terms of content. Content validity is defined as “the extent to which a test reflects the variable it seeks to measure” (Holm & Liewehyn, 1986). The content validity was conducted before data collection and measured in the form of expert estimates of relevance, clarity and completeness. In order to validate the instrument of this study, the researcher sent the instrument to several experts in the physiotherapy field, the manager of the institution and to another institution providing the same service, as well as to academics in the physiotherapy field and to estimate the relevance, clarity and completeness of each item. As a result, some questions were modified, others were omitted and the rest showed relevance and adequacy.

**Reliability:**

“The technique of measuring variables must be reliable, as this reflects the extent to which an operational definition questionnaire, test, interview schedule or other instrument is stable and consistent” (Mark, 1996). So, a measure is reliable if it gives the same result each time the situation or the factor is measured.

In this study, the statistical test used for the internal consistency was Cronbach’s Alpha co-efficient, “which measures the internal consistency of measurements obtained with an instrument”. The internal consistency or homogeneity is a measure of the extent to which items assess the same characteristics” (Godlstein et al, 2000). “This type of reliability was chosen because it has been used to assess the reliability of measurements obtained with other patient satisfaction studies” (Carey, 1993).

The Cronbach Alpha co-efficient computed for the instrument was 0,865. Reliability estimates ranged from (.855 to .869) (Table 4.1). “Test developers typically strive for an instrument with a co-efficient reliability in the range of (.80 to .90) (Goldstein et al, 2000), which means that this instrument is reliable.

**4.11 Summary**

This chapter presents an overview of the methodology which was used in this research. It provided justification for the study design and description of the study setting and sample, the pilot testing of the questionnaire and how data were collected and analyzed. Data analysis were carried out using the statistical computer program SPSS.

Table 4.1: Reliability estimates

<b>No.</b>	<b>Domains of satisfaction</b>	<b>Cronbach's Alpha if Item Deleted</b>
<b>1</b>	<b>Treatment</b>	
	Satisfied with treatment by physiotherapist	<i>.857</i>
	Physiotherapist understand my problem and condition	<i>.856</i>
	Satisfied with overall quality of physiotherapy care	<i>.857</i>
	Instruction by physiotherapist were helpful	<i>.858</i>
<b>2</b>	<b>Privacy</b>	
	Privacy was respected	<i>.856</i>
<b>3</b>	<b>Convenience of location</b>	
	Convenient location	<i>.866</i>
	Parking available	<i>.869</i>
<b>4</b>	<b>Accommodation</b>	
	The centre is quite clean	<i>.864</i>
	There are signs leading to the service places	<i>.869</i>
<b>5</b>	<b>Cost</b>	
	Cost was reasonable	<i>.864</i>
	If I had to, I would pay for these physiotherapy services my self	<i>.864</i>
<b>6</b>	<b>Ease of scheduling</b>	
	Scheduling appointments at convenient times	<i>.855</i>
<b>7</b>	<b>Scheduling</b>	
	First visit scheduled quickly	<i>.857</i>
	Subsequent visits scheduled easily	<i>.855</i>
<b>8</b>	<b>Waiting time</b>	
	Seen promptly	<i>.858</i>
<b>9</b>	<b>Courteousness of physiotherapist</b>	
	Physiotherapist was courteous and professional	<i>.862</i>
<b>10</b>	<b>Courteousness of staff</b>	
	Staff was courteous	<i>.858</i>
<b>11</b>	<b>Overall satisfaction</b>	
	Would recommend to family and friends	<i>.860</i>
	Would return to this facility for physiotherapy in the future	<i>.858</i>
	Overall satisfaction with the physiotherapy experience	<i>.855</i>

## **CHAPTER FIVE**

### **Results**

#### **5.1 Introduction**

This chapter presents the results of the statistical analysis of the data. Descriptive analysis presents the characteristics of the respondents at JCDC. In addition, the analysis of the factors identifying the main dimensions of clients' satisfaction with out-patient physical therapy services at JCDC. Finally, the relationship between selected variables and general satisfaction scores, together with sub-scales, were explored by using different analytical tests.

#### **5.2 Presentation of the results**

Upon receiving the collected data, the researcher numerically coded the data to prepare it for the statistical analysis through SPSS. The presentation of data highlighted clients' satisfaction depending on the relation of clients' independent "patient characteristics" factors with dependent factors that are related to general satisfaction and the component of satisfaction.

##### **5.2.1 Sample characteristics:**

One hundred and four clients were approached and gave their consent to participate in the study. The response rate was (94.5%). All participants were clients attending JCDC to receive physiotherapy services at the out-patient physiotherapy unit.

##### **1. Gender:**

Both genders were represented in the sample. Fifty three respondents were females (51%), and fifty one respondents were males (49%) (Fig. 5.1).

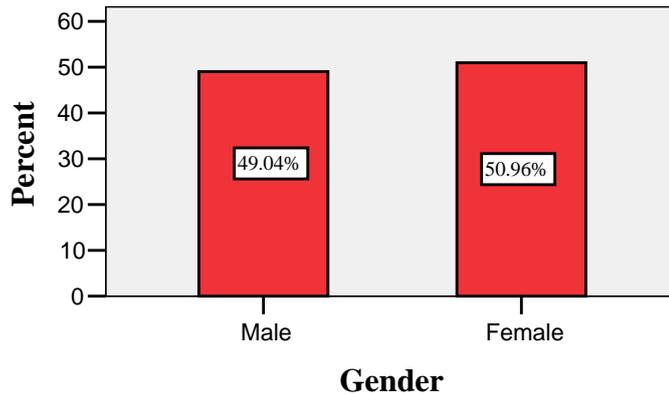


Fig. (5.1): Distribution of clients by gender

## 2. Marital Status:

Seventy three respondents were married (70.2%), twenty four respondents (23.1%) were single and six respondents were widowed (5.8%), while the other one respondent (1%) was divorced. (Fig. 5. 2).

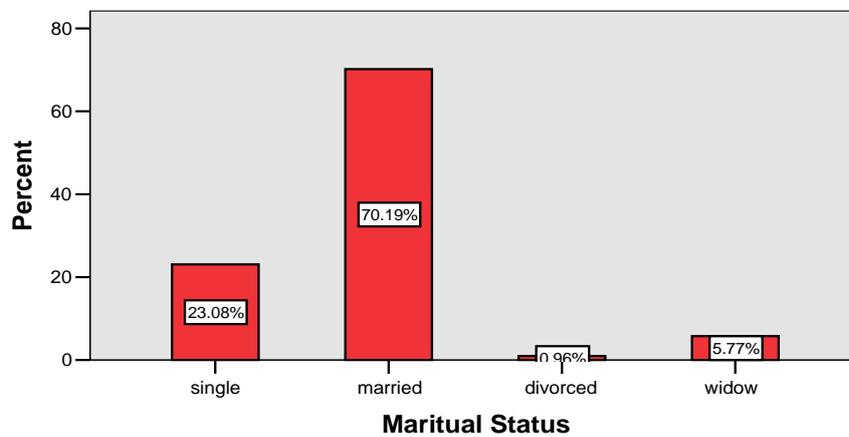


Fig. (5.2): Distribution of clients by marital status

## 3. Educational Attainment:

Thirty seven respondents (35.9%) had diplomas and higher degrees and similarly had completed the secondary level. Twenty four respondents (21.4%) were ranging from illiterate to completing the elementary level and eight respondents (6.8%) completed the

preparatory level. Which means that (71.8%) of clients have an education level of secondary school and above while six clients were illiterate (Fig. 5.3).

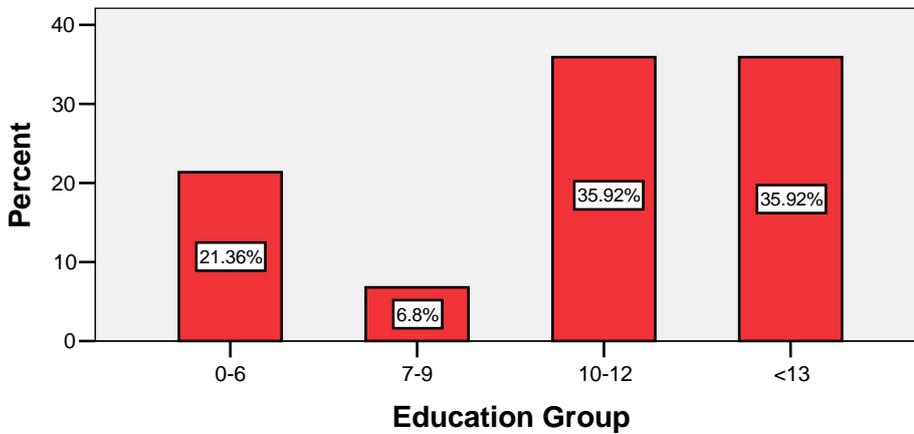


Fig. (5.3): Distribution of clients by education levels

#### 4. Age:

The age of respondents ranged from (8-71) years with an average age of 39.3 years (SD = 14.3). Thirty six respondents aged (31-45) years represented the highest percentage (34.6%); Twenty eight respondents aged (16-30) years and twenty eight aged (46-60) years with (26.9%) for each, eight respondents (7.7%) were above (60) years and four respondents (3.8%) were below (15) years (Fig. 5.4).

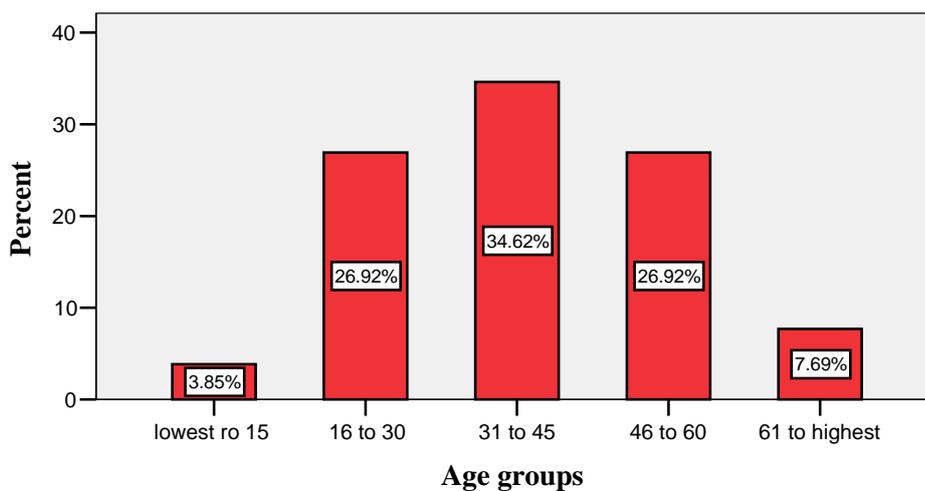


Fig. (5.4): Distribution of clients by age groups

## 5. Current Job:

Forty seven respondents (45.2%) were unemployed, twenty four respondents (23.1%) were employees and thirteen respondents (12.5%) were students. Eleven respondents (10.6%) were workers and nine respondents (8.7%) had independent work (Fig. 5.5).

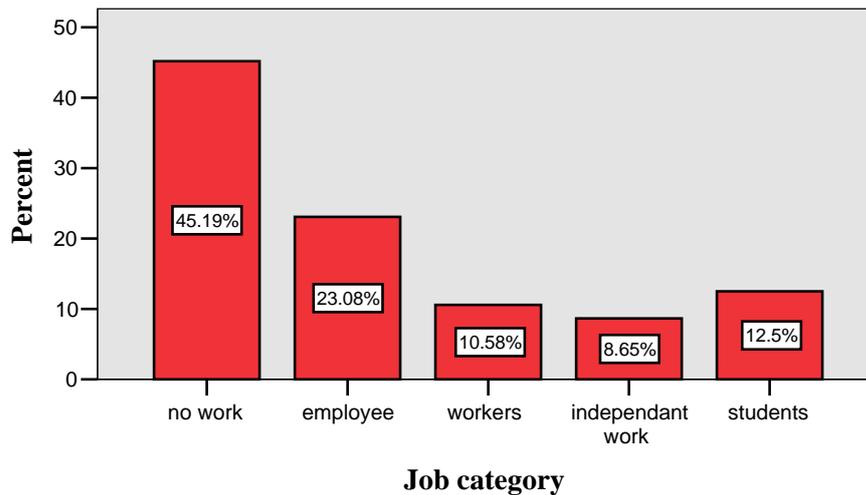


Fig. (5.5): Distribution of clients by job categories

For the purpose of the study these categories were defined as the following

- Unemployed: those who did not have a current payable jobs such as house wife's, elderly people who don't work...
- Employed: those who work for a monthly salary in institutions, such as clerical jobs, administration works...
- Workers: those who work in domestic jobs and mainly on daily paid system
- Independent work: those who run their own business.

## 6. Place of Residency:

Forty eight respondents (46.2%) reside inside Jerusalem, and forty-two respondents (40.3%) reside in Jerusalem suburbs while fourteen respondents (13.5%) were residents of the West Bank (Fig. 5.6).

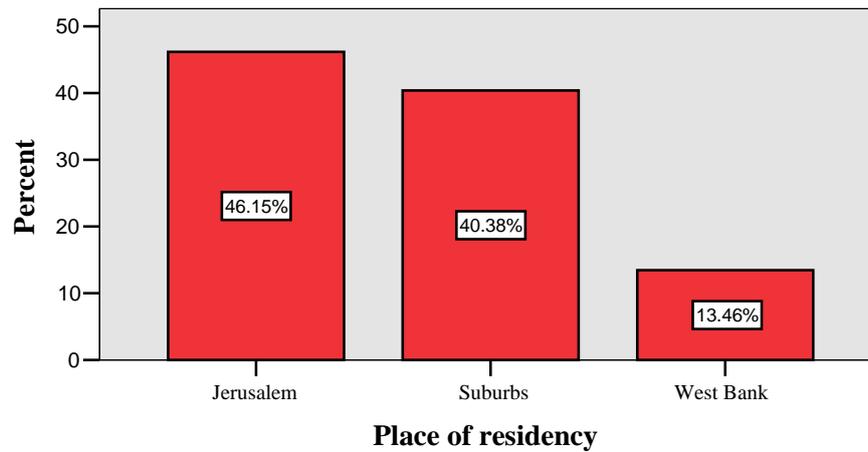


Fig. (5.6): Distribution of clients by place of residency

For the purpose of study the residency places were divided as the following

- Jerusalem: Jerusalem areas inside the annexation wall
- Suburbs: Jerusalem areas outside the annexation wall
- West Bank: Palestinian territories

#### 7. Clients' knowledge of the institution:

Fifty nine respondents (56.7%) knew about the institution from their doctors, twelve respondents (11.5%) knew from other patients and eleven respondents (10.6%) were informed by their insurance company, while seventeen respondents (16.3%) from their friends, and five respondents (4.8%) indicated that since they live in the area they already had a previous idea about the existence of the institution ( Fig. 5.7).

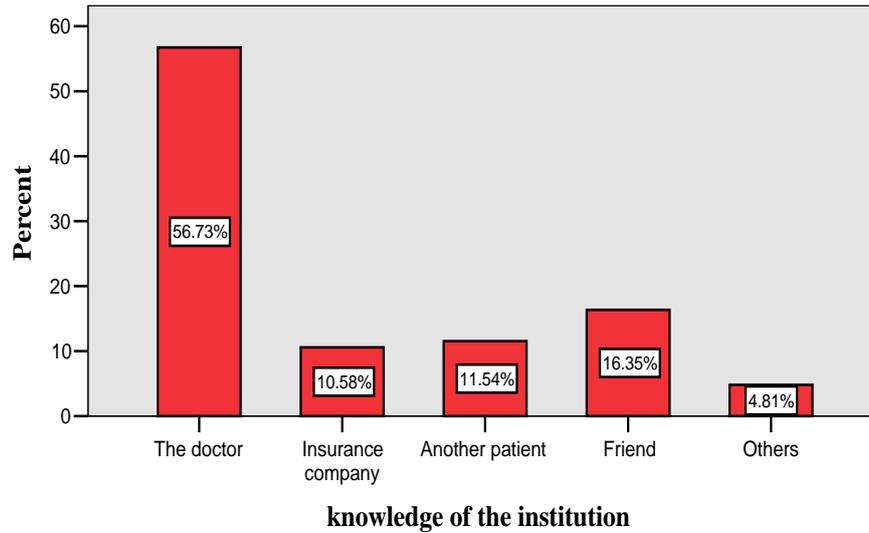


Fig. (5.7): Distribution of clients by knowledge of the institution

#### 8. Familiarity to physiotherapy:

Forty five respondents (51.9%) indicated that they were receiving physiotherapy sessions for the first time, while fifty respondents (48.1%) said that they had received physiotherapy sessions in the past (Fig.5. 8).

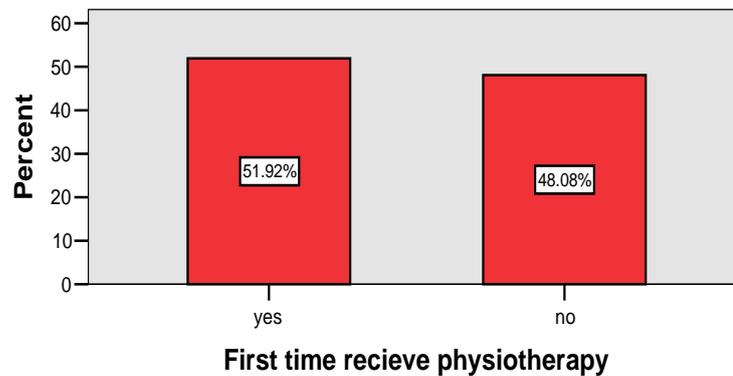


Fig. (5.8): Distribution of clients by familiarity to physiotherapy

#### 9. Familiarity to physiotherapy service at JCDC:

Seventy one respondents (68.3%) were visiting JCDC for the first time, while thirty three respondents (31.7%) were former patients (Fig 5.9).

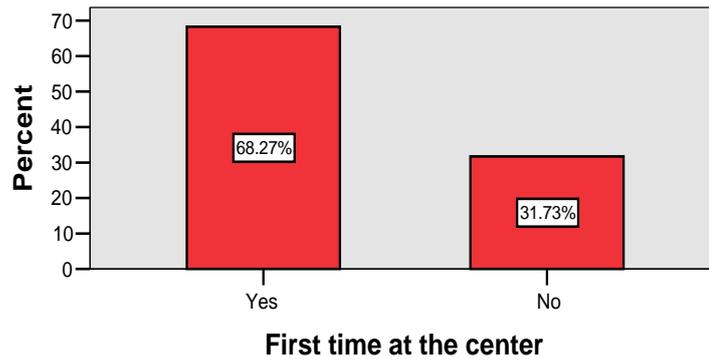


Fig. (5.9): Distribution of clients by familiarity to physiotherapy service at JCDC

10. Clients type of complaints:

Thirty five respondents (33.7%) indicated that they suffered from neck pain, this was the highest group followed by thirty three respondents (31.7%) who suffered from back pain. Ten respondents (9.6%) had shoulder pain, seven respondents (6.7%) had wrist pain and also seven respondents (6.7%) had ankle pain, four respondents (3.8%) had pelvic pain, while three respondents (2.9%) had knee pain, three respondents (2.9%) had indicated several different diagnoses of facial palsy, chest problems and the other complains of neurological problems (C.V.A.), and finally two respondents (1.9%) had elbow pain (Fig.

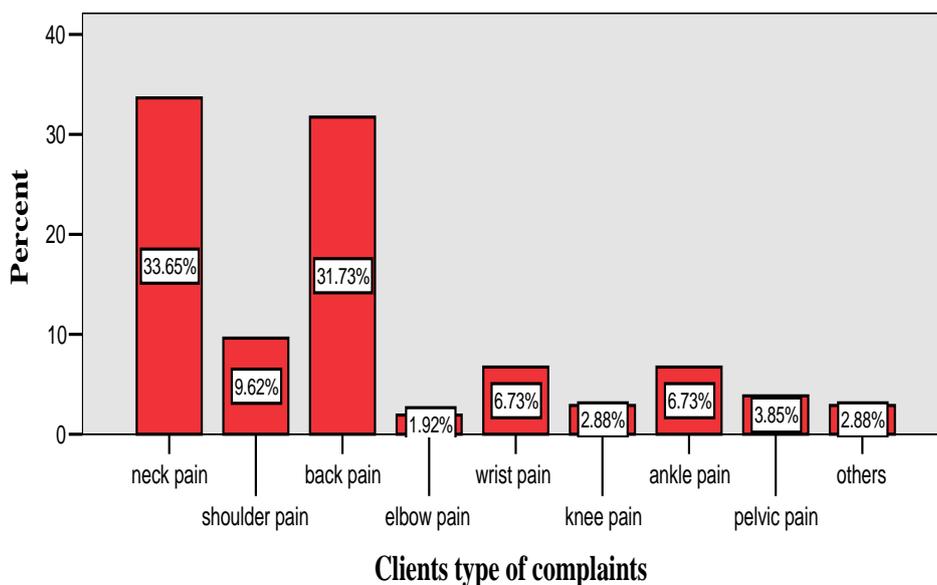


Fig. (5.10): Distribution of clients by clients' type of complaints

## 11. Insurance coverage:

The majority of the respondents, eighty eight respondents (84.6%), had health insurance coverage and sixteen respondents (15.4%) didn't have any coverage. These respondents are divided according to the following schemes: Fifty five respondents (52.9%) insured by sick fund (Kopat Cholim – Leumit), twenty three respondents (22.1%) by sick fund (Kopat Cholim – Clalit), four respondents (3.8%) by sick fund (Kopat Cholim – Meuhedet) and so for sick fund (Kopat Cholim – Macabe). Two respondents (1.9%) had institutional insurance and the other sixteen respondents (15.4%) had no insurance coverage at all (Fig 5.11).

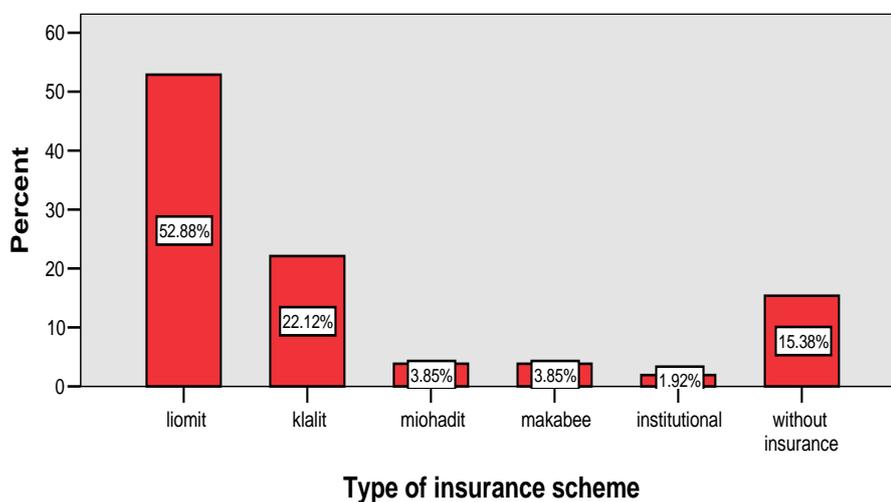


Fig. (5.11): Distribution of clients by insurance coverage

## 12. Covering Expenses

Fifty one respondents (49%) were covered by Leumit sick fund, forty three respondents (41.3%) paid their treatment expenses themselves, nine respondents (8.7%) were covered by their institutions and one respondent (1%) is covered by Care insurance company (Fig. 5.12).

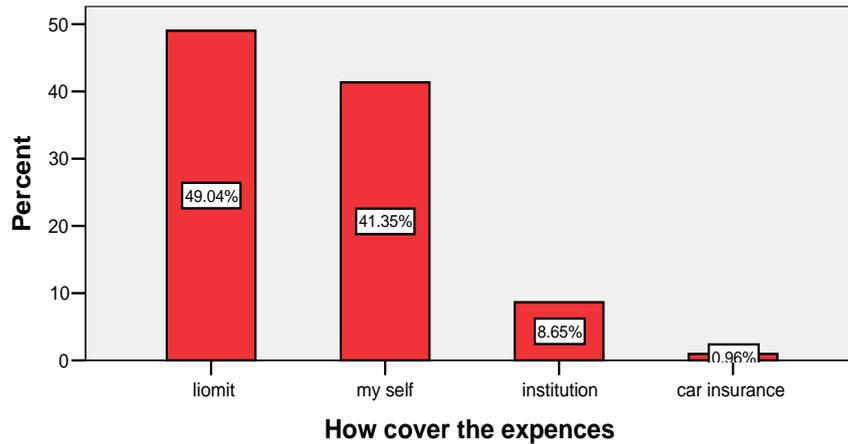


Fig. (5.12): Distribution of clients by covering expenses

### 5.2.2 General Satisfaction:

The total satisfaction score (overall satisfaction) reflects all of the satisfaction domains' scores. The eleven dimensions of client satisfaction with physiotherapy care were treatment, privacy, waiting time, accommodation, courteousness of physiotherapists, courteousness of the staff, convenience of location, cost, scheduling, ease of scheduling and overall satisfaction. 5- point Likert scale that was used to measure the level of patient satisfaction (1= strongly agree, 2= agree, 3= uncertain, 4= disagree and 5= strongly disagree). The low mean of scores indicates a higher level of satisfaction and vice versa (Table 5. 1). The overall mean of satisfaction domains was 1.4801 (88%). The mean satisfaction scores for domains of satisfaction ranged from 1.8990 to 1.2788 (77.6% to 93.03%).

Table (5. 1): Domains of satisfaction by means

Domains of satisfaction	N	Mean
Treatment	104	1.3293
Privacy	104	1.3173
Convenient of location	104	1.8990
Accommodation	104	1.7500
Cost	104	1.7692
Ease of scheduling	104	1.4423
Scheduling	104	1.3606
Waiting time	104	1.4712
Courteous of physiotherapist	104	1.2788
Courteous of staff	104	1.3077
Overall satisfaction	104	1.3558
Valid N (listwise)	104	

The highest level of satisfaction was expressed by the clients towards the courteousness of physiotherapists reached (93.03%). The lowest level of satisfaction reported, in relation with the convenience of location was (77.6%), (Fig. 5.13).

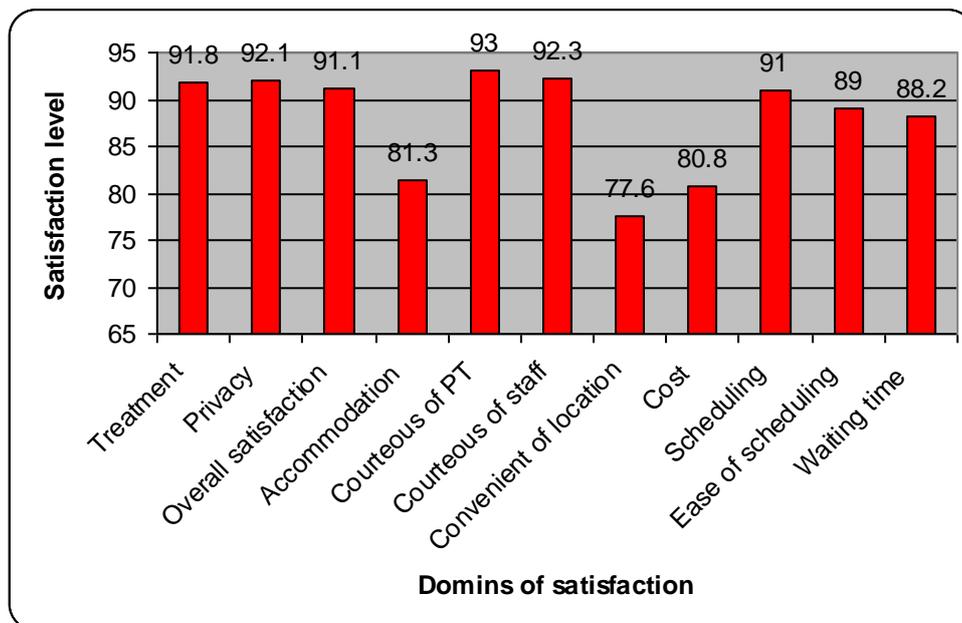


Fig. (5.13): Domains of satisfaction by percentages

### **5.3 Clients' independent variables with regard to satisfaction scores**

Clients' independent variables were analyzed with respect to their potential relationship with the eleven dimensions of client satisfaction scores (Table 3.1). Mean levels were recorded for each of the domains by independent variables.

One-Way ANOVA was used to assess the differences between the age groups of the respondents regarding the level of satisfaction. The different age groups, included (0-15), (16-30), (31-45), (46-60) and (61 & over). The results showed that there is significant difference between the age groups regarding overall satisfaction ( $p=0.032$ ), accommodation ( $p=0.021$ ), courteousness of the physiotherapists ( $p=0.027$ ) and courteousness of the staff ( $p=0.027$ ) (Table 5. 2).

Scheffe test showed that the older age group (46-60) of the respondents reported the highest satisfaction scores with the overall satisfaction (mean 1.2381) and in all dimensions of satisfaction, while the youngest age group (0-15) reported the lesser level of satisfaction for the overall satisfaction (mean 1.9167), and in all dimensions of satisfaction.

Table (5. 2): One-Way ANOVA comparing clients' satisfaction scores regarding age

<b>Domains of clients satisfaction</b>	<b>Age</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Treatment</b>	Between Groups	1.560	4	.390	2.291	.065
	Within Groups	16.848	99	.170		
	Total	18.408	103			
<b>Privacy</b>	Between Groups	1.009	4	.252	1.160	.333
	Within Groups	21.520	99	.217		
	Total	22.529	103			
<b>Convenient of location</b>	Between Groups	4.356	4	1.089	1.490	.211
	Within Groups	72.334	99	.731		
	Total	76.690	103			
<b>Accommodation</b>	Between Groups	5.411	4	1.353	3.037	.021*
	Within Groups	44.089	99	.445		
	Total	49.500	103			
<b>Cost</b>	Between Groups	2.620	4	.655	1.288	.280
	Within Groups	50.341	99	.508		
	Total	52.962	103			
<b>Ease of scheduling</b>	Between Groups	.672	4	.168	.574	.682
	Within Groups	28.982	99	.293		
	Total	29.654	103			
<b>Scheduling</b>	Between Groups	.432	4	.108	.479	.751
	Within Groups	22.297	99	.225		
	Total	22.728	103			
<b>Waiting time</b>	Between Groups	2.465	4	.616	2.223	.072
	Within Groups	27.448	99	.277		
	Total	29.913	103			
<b>Courteous of PT</b>	Between Groups	2.388	4	.597	2.879	.027*
	Within Groups	20.526	99	.207		
	Total	22.913	103			
<b>Courteous of staff</b>	Between Groups	2.511	4	.628	2.871	.027*
	Within Groups	21.643	99	.219		
	Total	24.154	103			
<b>Overall satisfaction</b>	Between Groups	1.904	4	.476	2.765	.032*
	Within Groups	17.044	99	.172		
	Total	18.948	103			

\* Statistically significant

An independent t-test was used to compare the means of satisfaction scores in regard to gender. Table (5.3) showed that females had a higher mean score in general and in all subscale dimensions, and there were significant differences between males and females

with respect to client satisfaction with privacy ( $p=0.043$ ), ease of scheduling ( $p=0.046$ ) and overall satisfaction, ( $p=0.034$ ).

Table (5.3): Client satisfaction in relation to gender

Domains of clients satisfaction	Gender	N	Mean	Std. Deviation	T	Sig.
Treatment	Male	51	1.4020	.4772	1.735	.086
	Female	53	1.2594	.3534		
Privacy	Male	51	1.4118	.4971	2.102	.043*
	Female	53	1.2264	.4225		
Convenient of location	Male	51	2.0294	.8684	1.521	.131
	Female	53	1.7736	.8467		
Accommodation	Male	51	1.8824	.6371	1.935	.056
	Female	53	1.6226	.7266		
Cost	Male	51	1.8137	.6705	.619	.537
	Female	53	1.7264	.7631		
Ease of scheduling	Male	51	1.5490	.5767	2.019	.046*
	Female	53	1.3396	.4781		
Scheduling	Male	51	1.4314	.5002	1.517	.132
	Female	53	1.2925	.4323		
Waiting time	Male	51	1.5686	.5387	1.830	.070
	Female	53	1.3774	.5272		
Courteous of PT	Male	51	1.3137	.5095	.738	.462
	Female	53	1.2453	.4344		
Courteous of staff	Male	51	1.3137	.4686	.124	.902
	Female	53	1.3019	.5033		
Overall satisfaction	Male	51	1.4444	.4603	1.935	.034*
	Female	53	1.2704	.3815		

\* Statistically significant

One-Way ANOVA was used to assess the differences in the level of clients' satisfaction between the residency places groups (Table5.4). The residency place groups (Jerusalem, Suburbs and West Bank). The results showed that there are no statistically significant differences in all the dimensions of satisfaction in relation to clients' place of residency.

Table (5.4): One-Way ANOVA comparing clients' satisfaction scores regarding place of residency

Domains of clients satisfaction	Residency place	Sum of Squares	df	Mean Square	F	Sig.
<b>Treatment</b>	Between Groups	.116	2	.058	.321	.726
	Within Groups	18.292	101	.181		
	Total	18.408	103			
<b>Privacy</b>	Between Groups	.207	2	.104	.469	.627
	Within Groups	22.321	101	.221		
	Total	22.529	103			
<b>Convenient of location</b>	Between Groups	1.862	.244	2	.122	.543
	Within Groups	74.828	22.670	101		
	Total	76.690	22.913	103		
<b>Accommodation</b>	Between Groups	.940	.207	2	.104	.469
	Within Groups	48.560	22.321	101		
	Total	49.500	22.529	103		
<b>Cost</b>	Between Groups	.098	1.094	2	.547	2.397
	Within Groups	52.864	23.060	101		
	Total	52.962	24.154	103		
<b>Ease of scheduling</b>	Between Groups	.127	.098	2	.049	.093
	Within Groups	29.527	52.864	101		
	Total	29.654	52.962	103		
<b>Scheduling</b>	Between Groups	.005	1.862	2	.931	1.256
	Within Groups	22.723	74.828	101		
	Total	22.728	76.690	103		
<b>Waiting time</b>	Between Groups	.530	.005	2	.003	.110
	Within Groups	29.384	22.723	101		
	Total	29.913	22.728	103		
<b>Courteous of PT</b>	Between Groups	.244	.944	2	.472	2.647
	Within Groups	22.670	18.004	101		
	Total	22.913	18.948	103		
<b>Courteous of staff</b>	Between Groups	1.094	.940	2	.470	.977
	Within Groups	23.060	48.560	101		
	Total	24.154	49.500	103		
<b>Overall satisfaction</b>	Between Groups	.944	.116	2	.058	.321
	Within Groups	18.004	18.292	101		
	Total	18.948	18.408	103		

\* Statistically significant

As shown in Table (5.5), One-Way ANOVA was used to assess the difference in the level of satisfaction regarding the educational level of the respondents. There were four age groups: (0-6) years, (7-9) years, (10-12) years and (13 & over). The results showed that there is a significant difference between the level of education regarding the treatment ( $p=$

0.021) and privacy (p=0.008) only. Scheffe test indicated that the respondents of higher level of educational attainment (13 years & over), tended to be more satisfied than others.

Table (5.5): One-Way ANOVA comparing clients' satisfaction scores regarding educational level

Domains of clients satisfaction	Educational level	Sum of Squares	df	Mean Square	F	Sig.
<b>Treatment</b>	Between Groups	1.691	3	.564	3.374	.021*
	Within Groups	16.538	99	.167		
	Total	18.229	102			
<b>Privacy</b>	Between Groups	2.496	3	.832	4.210	.008*
	Within Groups	19.563	99	.198		
	Total	22.058	102			
<b>Convenient of location</b>	Between Groups	4.411	3	1.470	2.024	.115
	Within Groups	71.914	99	.726		
	Total	76.325	102			
<b>Accommodation</b>	Between Groups	.473	3	.158	.329	.804
	Within Groups	47.449	99	.479		
	Total	47.922	102			
<b>Cost</b>	Between Groups	.477	3	.159	.300	.825
	Within Groups	52.431	99	.530		
	Total	52.908	102			
<b>Ease of scheduling</b>	Between Groups	.303	3	.101	.345	.793
	Within Groups	29.037	99	.293		
	Total	29.340	102			
<b>Scheduling</b>	Between Groups	.660	3	.220	.993	.400
	Within Groups	21.937	99	.222		
	Total	22.597	102			
<b>Waiting time</b>	Between Groups	1.564	3	.521	1.839	.145
	Within Groups	28.067	99	.284		
	Total	29.631	102			
<b>Courteous of PT</b>	Between Groups	.683	3	.228	1.017	.388
	Within Groups	22.152	99	.224		
	Total	22.835	102			
<b>Courteous of staff</b>	Between Groups	1.205	3	.402	1.770	.158
	Within Groups	22.465	99	.227		
	Total	23.670	102			
<b>Overall satisfaction</b>	Between Groups	.444	3	.148	.791	.502
	Within Groups	18.503	99	.187		
	Total	18.947	102			

\* Statistically significant

As shown in Table (5.6), One-Way ANOVA was used to assess the difference in the level of satisfaction regarding the marital status. The marital status groups were (single, married, divorced, widow and others). The results showed that there are no statistically significant

differences in all the dimensions of satisfaction among the clients in relation to their marital status

Table (5.6): One-Way ANOVA comparing client's satisfaction scores regarding marital status

Domains of clients satisfaction	Marital status	Sum of Squares	df	Mean Square	F	Sig.
<b>Treatment</b>	Between Groups	.114	3	.038	.208	.890
	Within Groups	18.294	100	.183		
	Total	18.408	103			
<b>Privacy</b>	Between Groups	.632	3	.211	.962	.414
	Within Groups	21.897	100	.219		
	Total	22.529	103			
<b>Convenient of location</b>	Between Groups	.435	3	.145	.190	.903
	Within Groups	76.255	100	.763		
	Total	76.690	103			
<b>Accommodation</b>	Between Groups	.833	3	.278	.570	.636
	Within Groups	48.667	100	.487		
	Total	49.500	103			
<b>Cost</b>	Between Groups	.326	3	.109	.207	.892
	Within Groups	52.635	100	.526		
	Total	52.962	103			
<b>Ease of scheduling</b>	Between Groups	.741	3	.247	.854	.468
	Within Groups	28.913	100	.289		
	Total	29.654	103			
<b>Scheduling</b>	Between Groups	.479	3	.160	.717	.544
	Within Groups	22.250	100	.222		
	Total	22.728	103			
<b>Waiting time</b>	Between Groups	.500	3	.167	.567	.638
	Within Groups	29.413	100	.294		
	Total	29.913	103			
<b>Courteous of PT</b>	Between Groups	.101	3	.034	.148	.931
	Within Groups	22.812	100	.228		
	Total	22.913	103			
<b>Courteous of staff</b>	Between Groups	.586	3	.195	.829	.481
	Within Groups	23.568	100	.236		
	Total	24.154	103			
<b>Overall satisfaction</b>	Between Groups	.213	3	.071	.379	.768
	Within Groups	18.735	100	.187		
	Total	18.948	103			

\* Statistically significant

The different age groups of occupation (unemployed, employed, labor force, independent jobs and students) revealed no real difference when analyzed using (One-Way ANOVA) with respect to their level of satisfaction (Table. 5.7).

Table (5.7): One-Way ANOVA comparing clients' satisfaction scores regarding occupation

Domains of clients satisfaction	Occupation	Sum of Squares	df	Mean Square	F	Sig.
<b>Treatment</b>	Between Groups	.713	4	.178	.998	.413
	Within Groups	17.695	99	.179		
	Total	18.408	103			
<b>Privacy</b>	Between Groups	.667	4	.167	.756	.557
	Within Groups	21.861	99	.221		
	Total	22.529	103			
<b>Convenient of location</b>	Between Groups	1.975	4	.494	.654	.625
	Within Groups	74.715	99	.755		
	Total	76.690	103			
<b>Accommodation</b>	Between Groups	.605	4	.151	.306	.873
	Within Groups	48.895	99	.494		
	Total	49.500	103			
<b>Cost</b>	Between Groups	1.198	4	.299	.573	.683
	Within Groups	51.764	99	.523		
	Total	52.962	103			
<b>Ease of scheduling</b>	Between Groups	1.971	4	.493	1.762	.143
	Within Groups	27.683	99	.280		
	Total	29.654	103			
<b>Scheduling</b>	Between Groups	.277	4	.069	.306	.874
	Within Groups	22.451	99	.227		
	Total	22.728	103			
<b>Waiting time</b>	Between Groups	2.428	4	.607	2.186	.076
	Within Groups	27.486	99	.278		
	Total	29.913	103			
<b>Courteous of PT</b>	Between Groups	1.329	4	.332	1.524	.201
	Within Groups	21.585	99	.218		
	Total	22.913	103			
<b>Courteous of staff</b>	Between Groups	.959	4	.240	1.023	.399
	Within Groups	23.195	99	.234		
	Total	24.154	103			
<b>Overall satisfaction</b>	Between Groups	1.153	4	.288	1.603	.180
	Within Groups	17.795	99	.180		
	Total	18.948	103			

\* Statistically significant

As shown in Table (5.8), One-Way ANOVA was used to assess the differences in the level of satisfaction in relation to the patient knowledge of the institution. The results showed that there is a significant difference between the knowledge of institution regarding privacy ( $p=0.008$ ), accommodation ( $p=0.026$ ) and convenient location ( $p=0.020$ ). Scheffe test showed that the respondents who acquired the knowledge from a former patient reported

higher satisfaction scores with the overall satisfaction (means 1.111) and in all the dimensions of satisfaction, while clients who had known about the institution from the insurance company reported the lower scores of the overall satisfaction (mean 1.4545) and in all dimensions of satisfaction.

Table (5.8): One-Way NOVA comparing client satisfaction scores regarding the knowledge of the institution

Domains of clients satisfaction	Knowledge about institution	Sum of Squares	df	Mean Square	F	Sig.
<b>Treatment</b>	Between Groups	1.214	4	.304	1.748	.145
	Within Groups	17.194	99	.174		
	Total	18.408	103			
<b>Privacy</b>	Between Groups	2.889	4	.722	3.641	.008*
	Within Groups	19.640	99	.198		
	Total	22.529	103			
<b>Convenient of location</b>	Between Groups	8.423	4	2.106	3.054	.020*
	Within Groups	68.267	99	.690		
	Total	76.690	103			
<b>Accommodation</b>	Between Groups	5.176	4	1.294	2.890	.026*
	Within Groups	44.324	99	.448		
	Total	49.500	103			
<b>Cost</b>	Between Groups	4.084	4	1.021	2.068	.091
	Within Groups	48.878	99	.494		
	Total	52.962	103			
<b>Ease of scheduling</b>	Between Groups	.705	4	.176	.603	.662
	Within Groups	28.949	99	.292		
	Total	29.654	103			
<b>Scheduling</b>	Between Groups	1.832	4	.458	2.170	.078
	Within Groups	20.896	99	.211		
	Total	22.728	103			
<b>Waiting time</b>	Between Groups	.708	4	.177	.600	.664
	Within Groups	29.206	99	.295		
	Total	29.913	103			
<b>Courteous of PT</b>	Between Groups	.341	4	.085	.374	.827
	Within Groups	22.573	99	.228		
	Total	22.913	103			
<b>Courteous of staff</b>	Between Groups	.356	4	.089	.370	.830
	Within Groups	23.798	99	.240		
	Total	24.154	103			
<b>Overall satisfaction</b>	Between Groups	.942	4	.236	1.295	.277
	Within Groups	18.005	99	.182		
	Total	29.913	103			

\* Statistically significant

An independent t-test was used to compare the means of satisfaction scores in regards to the familiarity to physiotherapy services (Yes or No). Table (5.9) shows that respondents who had a previous experience of physiotherapy services, and those who did have the experience closely showed similar mean scores in general and in all dimensions, and no statistical significant differences were recorded between the two groups.

Table (5.9): Independent t-test comparing familiarity to physiotherapy services with client satisfaction scores

Domains of clients satisfaction	Familiarity to physiotherapy	N	Mean	Std. Deviation	T	Sig.
Treatment	Yes	54	1.3009	.44079	-.710	.479
	No	50	1.3600	.40457		
Privacy	Yes	54	1.2593	.44234	-1.320	.190
	No	50	1.3800	.49031		
Convenient of location	Yes	54	1.7963	.88764	-1.266	.209
	No	50	2.0100	.82986		
Accommodation	Yes	54	1.7593	.74442	.141	.888
	No	50	1.7400	.64079		
Cost	Yes	54	1.7685	.74424	-.010	.992
	No	50	1.7700	.69407		
Ease of scheduling	Yes	54	1.4444	.53787	.042	.967
	No	50	1.4400	.54060		
Scheduling	Yes	54	1.3333	.43437	-.613	.451
	No	50	1.3900	.50800		
Waiting time	Yes	54	1.4630	.50331	-.160	.873
	No	50	1.4800	.57994		
Courteous of PT	Yes	54	1.2963	.50017	.390	.697
	No	50	1.2600	.44309		
Courteous of staff	Yes	54	1.3148	.46880	.155	.877
	No	50	1.3000	.50508		
Overall satisfaction	Yes	54	1.3827	.45515	.664	.508
	No	50	1.3267	.40119		

\* Statistically significant

An independent t-test was used to compare the means of satisfaction in regards to the familiarity to the institution (Yes or No) .Table (5.10) showed that there is no statistically significant differences were recorded between the two groups.

Table (5.10): Independent t-test comparing client satisfaction scores regarding familiarity with the institution

Domains of clients satisfaction	Familiarity to the JCDC	N	Mean	Std. Deviation	T	Sig.
Treatment	Yes	71	1.3063	.42299	-.812	.419
	No	33	1.3788	.42445		
Privacy	Yes	71	1.2958	.45964	-.687	.494
	No	33	1.3636	.48850		
Convenient of location	Yes	71	1.9296	.88356	.528	.599
	No	33	1.8333	.82601		
Accommodation	Yes	71	1.7676	.71129	.378	.706
	No	33	1.7121	.66180		
Cost	Yes	71	1.8169	.72820	.994	.233
	No	33	1.6667	.69222		
Ease of scheduling	Yes	71	1.4648	.52999	.625	.533
	No	33	1.3939	.55562		
Scheduling	Yes	71	1.3239	.43996	-1.169	.245
	No	33	1.4394	.52675		
Waiting time	Yes	71	1.4789	.50311	.213	.832
	No	33	1.4545	.61699		
Courteous of PT	Yes	71	1.2676	.47683	-.355	.723
	No	33	1.3030	.46669		
Courteous of staff	Yes	71	1.2817	.45302	-.802	.425
	No	33	1.3636	.54876		
Overall satisfaction	Yes	71	1.3521	.43603	-.127	.899
	No	33	1.3636	.41969		

\* Statistically significant

As shown in (Table 5.11), One-Way ANOVA was used to assess the differences in the level of satisfaction in relation to the type of clients' complaints. The clients' complaints groups were identified to include those who suffered from (neck pain, shoulder pain, back pain, elbow pain, wrist pain, knee pain, ankle pain, pelvic pain and other diagnosis not included).The results showed that there is no statistically significant differences between the clients type of complaints regarding all the dimensions of satisfaction.

Table (5.11): One-Way ANOVA comparing client satisfaction scores regarding clients' type of complaints

Domains of clients satisfaction	Clients complaints	Sum of Squares	df	Mean Square	F	Sig.
<b>Treatment</b>	Between Groups	1.212	8	.152	.837	.572
	Within Groups	17.196	95	.181		
	Total	18.408	103			
<b>Privacy</b>	Between Groups	1.317	8	.165	.737	.658
	Within Groups	21.212	95	.223		
	Total	22.529	103			
<b>Convenient of location</b>	Between Groups	4.288	8	.536	.703	.688
	Within Groups	72.402	95	.762		
	Total	76.690	103			
<b>Accommodation</b>	Between Groups	2.865	8	.358	.730	.665
	Within Groups	46.635	95	.491		
	Total	49.500	103			
<b>Cost</b>	Between Groups	4.822	8	.603	1.189	.314
	Within Groups	48.140	95	.507		
	Total	52.962	103			
<b>Ease of scheduling</b>	Between Groups	1.014	8	.127	.420	.906
	Within Groups	28.640	95	.301		
	Total	29.654	103			
<b>Scheduling</b>	Between Groups	1.106	8	.138	.607	.770
	Within Groups	21.622	95	.228		
	Total	22.728	103			
<b>Waiting time</b>	Between Groups	2.555	8	.319	1.109	.364
	Within Groups	27.358	95	.288		
	Total	29.913	103			
<b>Courteous of PT</b>	Between Groups	2.179	8	.272	1.248	.280
	Within Groups	20.734	95	.218		
	Total	22.913	103			
<b>Courteous of staff</b>	Between Groups	2.853	8	.357	1.591	.138
	Within Groups	21.301	95	.224		
	Total	24.154	103			
<b>Overall satisfaction</b>	Between Groups	.507	8	.063	.326	.954
	Within Groups	18.441	95	.194		
	Total	18.948	103			

\* *Statistically significant*

An independent t-test was used to compare the means of satisfaction in regards to the insurance coverage (Yes or No). Table (5.12) showed that there were no statistically significant differences recorded between those who are covered by an insurance scheme and those who are not covered.

Table (5.12): Independent t-test comparing client satisfaction regarding insurance coverage

Domains of clients satisfaction	Insurance coverage	N	Mean	Std. Deviation	T	Sig.
Treatment	Yes	88	1.3068	.41821	-1.277	.204
	No	16	1.4531	.43987		
Privacy	Yes	88	1.2955	.45886	-1.119	.266
	No	16	1.4375	.51235		
Convenient of location	Yes	88	1.8295	.78377	-1.952	.054
	No	16	2.2813	1.16860		
Accommodation	Yes	88	1.7614	.68639	.390	.697
	No	16	1.6875	.75000		
Cost	Yes	88	1.7841	.71033	.494	.623
	No	16	1.6875	.77190		
Ease of scheduling	Yes	88	1.4205	.51910	-.974	.332
	No	16	1.5625	.62915		
Scheduling	Yes	88	1.3466	.46336	-.710	.479
	No	16	1.4375	.51235		
Waiting time	Yes	88	1.4659	.54560	-.232	.817
	No	16	1.5000	.51640		
Courteous of PT	Yes	88	1.2841	.47824	.265	.792
	No	16	1.2500	.44721		
Courteous of staff	Yes	88	1.3295	.49646	1.080	.283
	No	16	1.1875	.40311		
Overall satisfaction	Yes	88	1.3636	.41871	.437	.663
	No	16	1.3125	.49394		

\* Statistically significant

As shown in Table (5.13), One-Way ANOVA was used to assess the difference between the level of satisfaction regarding the covering expenses. The covering expenses groups included (Kopat Cholim – Leumit, myself, institutional and car insurance). The results showed that there was no real difference between the covering expenses and all dimensions of satisfaction.

Table (5.13): One-Way ANOVA comparing client satisfaction scores regarding covering expenses

<b>Domains of clients satisfaction</b>	<b>Covering expenses</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Treatment</b>	Between Groups	.535	3	.178	.998	.397
	Within Groups	17.873	100	.179		
	Total	18.408	103			
<b>Privacy</b>	Between Groups	.551	3	.184	.836	.477
	Within Groups	21.978	100	.220		
	Total	22.529	103			
<b>Convenient of location</b>	Between Groups	1.177	3	.392	.520	.670
	Within Groups	75.513	100	.755		
	Total	76.690	103			
<b>Accommodation</b>	Between Groups	.286	3	.095	.194	.900
	Within Groups	49.214	100	.492		
	Total	49.500	103			
<b>Cost</b>	Between Groups	1.163	3	.388	.749	.526
	Within Groups	51.798	100	.518		
	Total	52.962	103			
<b>Ease of scheduling</b>	Between Groups	1.511	3	.504	1.790	.154
	Within Groups	28.143	100	.281		
	Total	29.654	103			
<b>Scheduling</b>	Between Groups	.712	3	.237	1.077	.362
	Within Groups	22.017	100	.220		
	Total	22.728	103			
<b>Waiting time</b>	Between Groups	.542	3	.181	.615	.607
	Within Groups	29.372	100	.294		
	Total	29.913	103			
<b>Courteous of PT</b>	Between Groups	.571	3	.190	.851	.469
	Within Groups	22.343	100	.223		
	Total	22.913	103			
<b>Courteous of staff</b>	Between Groups	.548	3	.183	.774	.511
	Within Groups	23.606	100	.236		
	Total	24.154	103			
<b>Overall satisfaction</b>	Between Groups	.683	3	.228	1.246	.297
	Within Groups	18.265	100	.183		
	Total	18.948	103			

\* Statistically significant

## **5.4 Summary**

This chapter covered the data presentation. The first section covered the patients' characteristics of the sample, while the second part included a detailed interpretation of client satisfaction for each independent variable in general, as well as with all the dimensions of satisfaction for this study; however, clients showed lower satisfaction levels of accommodation cost and convenience of location.

## CHAPTER SIX

### Discussion and Implications

#### 6.1 Introduction

This study was conducted to assess the level of satisfaction among clients receiving services Out-Patient Physiotherapy at JCDC, and to assess whether there is difference in the level of client satisfaction with JCDC out-patient physiotherapy services according to different patient characteristics. As indicated earlier, there are many reasons behind this study. Besides the lack of research evidence in this area, the research was intended to support the JCDC quality improvement efforts especially the center is currently implementing the ISO 9001:2000 standards, and also to provide information for the strategic planning process at the centre.

The true value of patient satisfaction studies is achieved when appropriate feedback of results is transformed into practice. Therefore, this chapter presents the interpretation and discussion of the study's findings. It also focuses on the conclusion of the findings and the implications as well as the recommendation for the decision and for future studies.

#### 6.2 Patient characteristics

A total of 104 questionnaires were completed, returned and entered to data file. The age of respondents ranged from (8-71) years with an average age of 39.3 years (SD = 14.3). Eighty eight and half percent of the respondents ranged from (16 – 60) years. This is typical for an out patient setting, where children and older people mainly have special places that meet their needs, mainly rehabilitation centers. Males and females were almost equally represented 49% and 51% in respect. The largest percentage of participants 70.2% are married, and 45.2% of the respondents were unemployed this is due to the fact that many of the clients are housewives and in the other hand the poor socio-economic status to the city in general, while 42.3% had different jobs and the rest of patients were students. Mainly most of the respondents (86.5%) reside in Jerusalem "inside the Annexation Wall" (Fig. 5.6) , while the rest (13.5%) are from the West Bank. 71.6% of respondents have an

educational level of secondary school and above which may affect the level of satisfaction since they may have better knowledge to assess services provided to them.

The clients typically were being managed for neck pain, lower back pain, shoulder pain, wrist pain and ankle pain (33.7%, 31.7%, 9.6%, 6.7%, and 6.7% respectively) (Fig. 5 10). They typically knew about the institution from their doctors (58.7%) and 68.3% of them had no prior experience with the facility, while 51.9% of respondents indicated that they were receiving physiotherapy sessions for the first time. This indicates that a high proportion of clients were unfamiliar neither with the physiotherapy services nor with the institution and that might have played a role in determining their level of satisfaction. However; their expectations about the care they will receive may affect their rating of their level of satisfaction.

The majority of the respondents (84.6%) had health insurance coverage through different schemes. However many of the clients were paying the service themselves (41.4%), because the centre had a subcontract with one sick fund only, Kopat Cholim Leumit. As the results shows that there is no difference in satisfaction levels between those who are medically covered and who are not, this gives an indication that the center gives a quality service that make the clients really satisfied, and they are willing to bear the cost of the care even if the service are not covered by the insurance scheme.

### **6.3 Satisfaction levels**

Clients' satisfaction is an important out-come measure of health care, as well as a mean to evaluate the process of health care provision. Goldstein (2000) framework was adapted with some modification to assess the clients' satisfaction with out-patient physiotherapy services at JCDC.

The results showed that, patients in this study expressed high level of satisfaction with JCDC out-patient physiotherapy services (88%). Almost all of them expressed that they would like to utilize the out-patient service again in the future, and 99% of them expressed that they would recommend the service to their family and friends.

When we look at patient satisfaction with the different 11 domains (Fig. 5.13), we can see that the highest level of satisfaction (90% - 100%) was expressed towards courteousness of the physiotherapist (93%), which reflected the extent of clients' acceptance of the service provider and the high ethical and professional behavior the provider projected in dealing with the clients. Also, a high level of satisfaction was reported in terms of the courteousness of centre staff (92%). This positive attitude affects clients' health status and encourages them to come back again in case of need to similar services. Also, clients reported high satisfaction scores towards privacy, treatment, overall satisfaction and scheduling (92.1%), (91.1%) and (91%) respectively, which reflects the extent of clients trust towards service providers, in terms of comfort and security. (Fig. 5.13)

Moderate satisfaction scores (80% - 90%) were reported with ease of scheduling (89%), and waiting time (88.2%), accommodations (81.3%) and cost (80.8%). Therefore, reinforcement of the role of the staff in facilitating the service is considered an important area in improving the quality of the services, to be supported by improving the physiotherapy facility, especially the registration process and amenities at waiting areas. Improving the services and accommodations will affect the clients' attitude towards the cost of service and make them feel more comfortable with the fees of the sessions.

The lowest degree of satisfaction (less than 79%) was reported towards the convenience of the location of the centre (77.6%). This could be attributed to the fact that the institution is far from the City Centre and transportation is somehow difficult nowadays, "the busses didn't have a fix time to leave the parking". On the other hand, the difficult economic conditions of the population in general might have affected the satisfaction level in relation with the cost of transportation. Therefore, improving the quality of services encourages the clients to continue attending the Centre to avoid their seeking services at other facilities or relying on self care. It is worthwhile to consider all factors that might affect satisfaction positively and negatively and find ways to reinforce the strength aspects and adapt or readjust negative ones.

#### **6.4 Satisfaction and patient characteristics**

One of the main objectives of the study was to assess whether there is a difference in the level of clients' satisfaction with JCDC out-patient service according to the patient's

characteristics. This part discusses the results that show statistical significance relationship between the level of satisfaction and patient characteristics.

The study results showed that some characteristics of respondents were statistically significant when analyzed with respect to satisfaction as elaborated below. The other characteristic of respondents' shows no statistical significance, which means the rejection of the null hypothesis in these cases.

In particular statistical analysis pointed out that there were significant differences between satisfaction level and the age of participants. Higher satisfaction level was reported by (46 – 60) year's age group.. The consistent relationship between satisfaction and age means that satisfaction is primarily influenced by age. This gives the ideas to meet different needs of different age groups.

Regarding the relation between satisfaction and gender, there were evidence on the significant differences between males and females; males and females were represented nearly equally in this study. Females indicated higher level of satisfaction than males. This maybe because females have less experiences and chances to compare with other services and they are willing to accept treatment more than males. Also, females feel more comfortable to have services in centers nearby.

In this study, respondents with higher level of education (13 years and more) reported the highest satisfaction level 89.9%. The findings pointed that there were significant statistical differences in satisfaction level regarding educational level. This means that those with higher educational level might be more informed about the service. Therefore they tended to be more satisfied in this study.

These results reinforce the importance of informing the clients about the nature of the institution, the services and the process of delivering services. Concentrating on those with lower educational attainment, will positively affect the way clients handle and deal with the service provider.

Moreover; there were statistically significant relationship between the level of satisfaction and knowledge of the institution. Clients how knew about the institution from a former

patient reported the higher level; of satisfaction 97%. This indicates the high trust of patients to each other of the service provider. In which the experience transformed from patient to another patients gives really affect on the attitude and behaviour towards the service provider that raise the trust and give senses of security and comfortability.

## **6.5 Conclusions**

The study showed that the clients' satisfaction with out-patient physiotherapy services at JCDC was relatively high 88%. There are 11 domains of satisfaction assessed in this study; these domains were illustrated by Goldstein (2000). The highest level of satisfaction was expressed by clients to towards courteousness of physiotherapist domain (93.03%), and the lowest was reported to the convenience of location domain (77.6%).

The characteristics of respondents played an important role regarding the level of clients' satisfaction. Therefore, the centre should take into account the differences among clients' related characteristics, and consider them when providing care to the clients. These study findings concluded that different variables might interact to influence satisfaction. Although each variable had its main effect, but several variables interact either to decrease or to enhance the level of satisfaction.

In spite of the highly quality of services provided by JCDC, the number of clients admitted to the centre decreased in the last period. This can be returned to the decreased referrals from the West Bank due the Israeli closure and the Annexation Wall. Moreover, the increased competition in the area and opening new centres that provides the same service.

Conducting clients' satisfaction studies in a health care setting is one of the most important administrative responsibilities of a health care manager because it is both a direct and an indirect way of creating value for both patients and the health care providers in the health care setting.

This patient satisfaction study at the out patient physiotherapy clinic of the JCDC can be considered the first in Palestine focusing on physiotherapy service. So it will be the baseline study for other researchers or studies with the same content.

## **6.6 Recommendations**

Given the findings of the study, the researcher submits some practical recommendations to sustain and improve level of satisfaction with the centres services.

- ✓ Improve the physical environment of the waiting area, e.g. additional number of seats; improve the cleanliness and decreasing the source of noise.
- ✓ Support strategies to inform share information with clients about their health related issues, in order to help them alter their behaviours in way that positively influence their health.
- ✓ To have some kind of arrangements with the Mt. of Olives Bus Company for better of transportation frequencies and times to improve accessibility to the centre.
- ✓ To open an out-patient physiotherapy clinic in Rammallah to serve clients from West Bank who are not able to reach the centre in Jerusalem.
- ✓ To consider an outreach services, through mobile clinics to localities in need.

## **6.7 Areas for further research**

Several areas emerged from this research and seem to be in needed for further or more in-depth assessment. These are addressed as follows:

- ✓ Further studies to assess clients' satisfaction with other services (e.g. Inpatient, orthopaedic workshop...) provided by JCDC.
- ✓ To conduct a comparative study measuring patient satisfaction, between services provided at an East Jerusalem health care facility and an Israeli clinic.
- ✓ To conduct further studies to assess the relationship between the therapist's job satisfaction and client's satisfaction.

## **6.7 Summary**

This chapter presented the discussion, interpretation and recommendations of the study results at the out-patient physiotherapy unit at the JCDC. The study showed that the services provided by out patient physiotherapy clinic are highly acceptable by clients. The majority of clients were highly satisfied with the provided services.

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## Annexes

**Annex (1)**

Physical Therapy Patient Satisfaction Questionnaire

1.	Your age ..... years	
2.	Your sex	<input type="checkbox"/> Male <input type="checkbox"/> Female
3.	Place of Residence .....	
4.	Educational Level .....	
5.	Marital Status	<input type="checkbox"/> Single <input type="checkbox"/> Married <input type="checkbox"/> Divorced
		<input type="checkbox"/> Widow <input type="checkbox"/> Other
6.	Your current job .....	
7.	<input type="checkbox"/> How did you learn about the facility ?	<input type="checkbox"/> Physician <input type="checkbox"/> Friend
		<input type="checkbox"/> Former Patient <input type="checkbox"/> Insurance Co.
		<input type="checkbox"/> Other, Please indicate
8.	Is this your first experience with physical therapy ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
9.	Is this your first experience at this facility ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
10.	Please check the box that indicates your problem for which you received physical therapy ? <input type="checkbox"/> Neck <input type="checkbox"/> Lower back <input type="checkbox"/> Shoulder <input type="checkbox"/> Elbow <input type="checkbox"/> Hip <input type="checkbox"/> Knee <input type="checkbox"/> Hand <input type="checkbox"/> Ankle <input type="checkbox"/> Other, please indicate .....	
11.	Are you insured ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
12.	Indicate your Insurance Company .....	
13.	Who covers the treatment fees ? .....	

		<b>Strongly Agree</b>	<b>Agree</b>	<b>Not Certain</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
14.	I was satisfied with the treatment provided by my physical therapist					
15.	My physical therapist understood my problem and condition					
16.	I was satisfied with the overall quality of my physical therapy care					
17.	The instructions given to me by my physical therapist were helpful					
18.	My privacy was respected during my physical therapy care					
19.	The location of the facility was convenient for me					
20.	Parking was available for my car					
21.	The cost of the physical therapy treatment was reasonable					
22.	If I had to, I would pay for the physical therapy services myself					
23.	The clinic scheduled my appointments at convenient times					
24.	My first visit for physical therapy was scheduled without delay					
25.	Subsequent visits scheduled easily					
26.	I was seen promptly when I arrived for treatment					
27.	My physical therapist was courteous					
28.	All the other staff members were courteous					
29.	I would recommend this facility to others					
30.	I would return to this facility if I required physical therapy care in the future					
31.	Overall, I was satisfied with my experience with physical therapy					
32.	The facility was clean and tidy enough					
33.	There are signs to show the service location					

Annex (2)

بسم الله الرحمن الرحيم

Al-Quds University  
School of Public Health  
Jerusalem



جامعة القدس  
كلية الصحة العامة  
القدس

التاريخ: 2005/8/6م

الرقم: ك. ص. ع/ 352 / 2005/8م

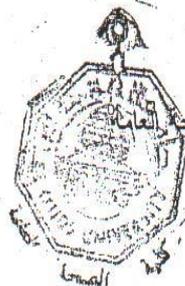
حضرة السيدة بيتي مجج المحترمة،  
مديرة مؤسسة الأميرة بسمة للأولاد المعاقين - القدس،

الموضوع: الموافقة على إجراء بحث للطالب جورج مجج

تحية طيبة وبعد،

نرجو التكرم من حضرتكم بالموافقة على إجراء دراسة بعنوان "رضى المنتفعين من خدمات مؤسسة الأميرة بسمة في القدس"، والتي تهدف إلى التعرف على مستوى رضى المستفيدين من الخدمة وبالتالي رفع توصيات من أجل تحسين جودة الخدمة المقدمة في المؤسسة، حيث أن هذه الدراسة هي متطلب تخرج من برنامج ماجستير الصحة العامة في كلية الصحة العامة في جامعة القدس.  
الرجاء عدم التردد في الاتصال بالكلية في حال لزوم أي معلومات إضافية عن الدراسة.

وتفضلوا بقبول فائق الاحترام والتقدير،



د. معتصم حمدان

القائم بأعمال عميد كلية الصحة العامة

نسخة/الملف.

**THE JERUSALEM PRINCESS BASMA  
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Executive Committee

The Rt. Rev. Riah Abu El-Assai

Mr. Arnold Hjertstrom

(Former Swedish Consul General)

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**مؤسسة الأميرة بسمة للأولاد المعاقين بالقدس**

تلفون: ٥٨-١٢٨٣٠٠١٢٨٣١، ص.ب ١٩٧٦٤ - القدس ٩١١٩٧

فاكس: ٩٧٢ - ٢ - ٦٢٧٤٤٤٩

بريد الكتروني: jcdc@alqudsnet.com

اللجنة التنفيذية

الاسقف المطران رباح ابو العسل

السيد ارنولد هيرتستروم

(المنصل السويدي العام سابقا)

السيد ابراهيم مطر

رئيس

نائب الرئيس

سكرتير / امين الصندوق

لديرة

السيدة بتي امين مجج

التاريخ : 2005/8/9

حضرة الدكتور معصم حمدان المحترم  
القائم بأعمال عميد كلية الصحة العامة

الموضوع : إجراء بحث دراسة للطالب جورج مجج

تحية طيبة و بعد:

ردا على رسالتكم المؤرخة في 2005/8/6 بخصوص بحث السيد جورج مجج  
إجراء دراسة بعنوان "رضي المنفعين من خدمات مؤسسة الأميرة بسمة" فإننا نرحب و نوافق  
على دراسة هذا البحث في المؤسسة.

وتفضلوا بقبول فائق الاحترام

بيتي امين  
مديرة المؤسسة  
بيتي مجج



## **Annex (4)**

### Consent Letter

Dear Client,

I appreciate your participation in this evaluation research as a part of my study at Al-Quds University – Palestine. The study aims at assessing the level of patient satisfaction with out-patient physiotherapy services. The findings of this study might help in improving the quality of physiotherapy services that are provided to the clients at JCDC.

Please keep these statements in consideration before answering the questions:

- ✓ Your participation is voluntary.
- ✓ You can withdraw at any time without consequences.
- ✓ There is no foreseeable risk from your participation.
- ✓ All collected information will be confidential and will strictly be used for scientific issues only.
- ✓ Your name will not be published or mentioned in any place.

Thank you for your cooperation and participation to achieve the goal of this study.

Researcher

*George Majaj*