Assessment of Selected Health Indicators of Dheisheh Refugee Camp

By
Suzanne Abu Tair – Shamali

B.Sc.: Nursing, Bethlehem University – Palestine

A Thesis Submitted in Partial Fulfillment of Requirements for the Degree of Master of Public Health/ School of Public Health

Al-Quds University

April 2004

Al-Quds University School of Public Health

Assessment of Selected Health Indicators of Dheisheh Refugee Camp

By
Suzanne Abu Tair – Shamali

Supervised by Aysha Rifai

M.P.H. Thesis

2004

Master of Public Health / School of |Public Health Deanship of Graduate Studies

"Assessment of Selected Health Indicators of Dheisheh Refugee Camp"

By: Suzanne Abu Tair – Shamali		
Registration no.: 9910816		
Supervisor: Dr. Aysha Rifai	Signature:	
Master thesis submitted and accepted on the 25 th of may 2004		
The examining committee:		
1. Dr. Aysha Rifai		
(Head of Committee)	Signature:	
2. Dr. Sumaya Sayej		
(Internal Examiner)	Signature:	
Dr. Suha Hindeya		
(External Examiner)	Signature:	

Al-Quds University 2004

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 other

university or institution.

Signed: Suzanne Abu Tair – Shamali

Date: 26th April, 2004

iii

Dedication

To my husband Mohammed, sons Yanal and Qais and all my family and friends

ACKNOWLEDGEMENT

This study would not have been possible without the support, assistance and patience of my family and friends to whom I would like to extend my gratitude for their understanding, indulgence and endurance.

I also wish to extend my deep appreciation to my supervisor, Dr. Aysha Rifai, for her invaluable advice, encouragement, support and guidance throughout my thesis, which made the accomplishment of this work possible.

My gratitude also goes to Mr. Hussein Shahien, Dheisheh Refugee camp service officer, all the staff at the Dheisheh Health Center, Ibdaa Cultural Center, the Public Services Committee, and Mr. Mr. Ibrahim Mattar, principal of Dheisheh Boys School for their cooperation and kind assistance in providing me with the necessary information.

I owe special thanks to Mrs. Sylvia Hassanat-Jawabreh for her great efforts in processing, analyzing and interpreting the data.

Not to forget the population of Dheisheh camp who through their cooperation, warm reception, and time dedicated to answer the questionnaire, enabled me to finish the survey, to them I am gratified.

Last but not least, I wish to thank both Mr. Khaled Elias and Mr. Yasser Qaisi for their help in presenting this study in its final shape by editing and typing it, and many others unnamed here who have assisted me in different ways, I offer my warm thanks.

ABSTRACT

Based on the policy of "Health for all in the twenty-first century" adopted by the world community in May 1998, to realize the vision of the World Health Assembly at the Alma-Ata conference in 1978, World Health Organization (WHO) had developed the World Health Survey (WHS) as a mean of providing low-cost, valid, reliable and comparable information. (WHS) served as an evidence base to monitor the efficiency of different health systems in meeting the desired goals. Thus providing policy makers with the evidence they might need to adjust their policies, strategies and programs as necessary. This study aims to assess and describe the health conditions of households in the

This study aims to assess and describe the health conditions of households in the Dheisheh Refugee Camp/Bethlehem District, the methodology that was used in the study consisted of a house to house survey which covered 1321 households at Dehaisheh refugee camp, (all target population living in the geographical area originally identified as the camp area as by 1949).

The aim of the study is to construct a community profile for the Dheisheh camp with emphasis being placed on selected health characteristics and behavior of the population.

Data was collected through structured interviews utilizing a questionnaire and was analyzed using the chi square statistical test and the P value.

The results of the study indicate that there is no direct relationship between the source of water, its availability or shortage with the incidents of Ameba and or Giardia infections.

In the Deheisheh camp 80% of the residents utilize UNRWA health center, which is the only health center available in the camp.

Smoking was proofed to be a risk factor which is strongly associated to certain chronic diseases specially diabetes (P value = 0.028), and hypertension (P value = 0.000).

The presence of disabled person among family members is strongly related to receiving welfare from different sources (P value ranges from 0.000 to 0.008).

The wish of mothers sending their children to play outdoors was found to be strongly associated with the morbidity of Ameba, Giardia infections.

ملخص

استنادا إلى سياسة "الصحة للجميع في القرن الواحد والعشرين" المتبناة من قبل المجتمع الدولي في أيار 1998، ولتطبيق رؤية مجلس الصحة العالمي في مؤتمر ألمآتا لعام 1978، طورت منظمة الصحة العالمية (WHO) المسح الصحي العالمي (WHS) كوسيلة لتقديم معلومات غير مكلفة، صالحة، يعتمد عليها ومقارنة. (WHS) تخدم كقاعدة دلانلية لمراقبة فعالية نظم صحية مختلفة في استجابتها للأهداف المبتغاة. بالإضافة إلى تزويد صناع القرارات بالدلائل التي يمكن أن يحتاجوا إليها لتطويع سياساتهم، استراتيجياتهم وبرامجهم كما ينبغي.

هذه الدراسة تهدف إلى تقييم وتوصيف الظروف الصحية للأسر في مخيم الدهيشة للاجئين/ محافظة بيت لحم. المنهجية المستخدمة في هذه الدراسة عبارة عن مسح من منزل إلى منزل شمل 1321 أسرة في المخيم، (جميع السكان المستهدفين يقطنون في المنطقة الجغرافية المحددة أصلا كمنطقة مخيم في عام 1949).

كما وتهدف الدراسة إلى إنشاء قاعدة بيانات لمجتمع مخيم الدهيشة مع تركيز على خصائص وممارسات صحية معينة للسكان.

جمعت المعلومات من خلال مقابلات مهيكلة باستخدام استمارة تم تحليلها باستخدام الفحص الإحصائي لمربع كاى التربيعي، والدالة الإحصائية قيمة "P".

نتائج الدراسة تشير إلى أنه لا علاقة مباشرة بين مصدر المياه، توفرها أو نقصها بحالات الإصابة بالأمبيا و/أو جيارديا.

80% من سكان مخيم الدهيشة يستخدمون مركز الأنروا الصحي، والذي هو المركز الصحي الوحيد المتوفر في المخيم.

أثبت أن التدخين هو عامل مخاطرة وذو صلة قوية بأمراض مزمنة معينة خاصة السكري (قيمة P = P أثبت أن التدخين هو عامل مخاطرة وذو صلة قوية بأمراض مزمنة معينة خاصة السكري (قيمة P = 0.008).

وجود أشخاص معاقين ضمن أفراد الأسرة ذو صلة قوية باستلام المعونة من مصادر مختلفة (قيمة P تتفاوت بين 0.000 و 0.008).

وجد أن رغبة الأمهات في إرسال أطفالهن إلى اللعب في الخارج ذات صلة قوية بالإصابة بالأميبا والجيارديا.

Table of Contents

CHAPTER	1: Introduction	1
	1.1 Background and significances	3
	1.2 Problem Statement	6
	1.3 Refugee Status	7
	1.3.1 General Overview of Refugees	7
	1.3.2 Refugees in Dheisheh Camp	14
	1.4 Geography and Demography	25
CHAPTER	2: Literature Review	27
	2.1 Conceptual Framework	27
	2.1.1 Definition and Elements	27
	2.1.2 Why choose Doyal and Gough?	29
	2.2 Contextual Framework	29
	2.2.1 Global Review.	29
	2.2.2 Regional Review	40
	2.2.2.1 Introduction	40
	2.2.2.2 Regional perspective	42
	2.2.2.3 Palestinians as Refugees in the Regional Countries	43
	2.2.3 Local Review	50
	2.2.3.1 Introduction	50
	2.2.3.2 Overview	52
	2.3 Conclusion.	56

CHAPTER	3: Methodology	57
	3.1 Aim of the Study	57
	3.2 Objectives of the Study	57
	3.3 Structure of the Study	57
	3.4 Design of the Study	58
	3.5 Hypothesis	58
	3.6 Target Population	60
	3.7 Survey Techniques	60
	3.8 Data Collection Methods	61
	3.9 Pilot Testing	62
	3.10 Ethical Consideration	62
	3.11 Definition of Concepts	63
	3.12 Limitation.	65
CHAPTER	4: Results	66
	4.1. Descriptive analysis of data	66
	4.2. Statistical testing of survey hypotheses	81
	4.2.1 Hypotheses one	81
	4.2.2 Hypothesis two	83
	4.2.3. Hypothesis three	84
	4.2.4 Hypothesis four	85
	4.2.5 Hypothesis five	86
	4.3.1 Analysis of the open question	87

CHAPTER 5: Discussion		89
	5.1 Analysis of Result	89
	5.2: Recommendations	96
	5.3: Conclusion	97
Appendices:		99
References:.		113

List of Figures

Figure 1:	Pie chart of percent distribution of water sources of the surveyed	ed
	houses in Dheisheh camp6	59
Figure 2:	Distribution of (water availability variables) of the surveyed house	es
	of Dheisheh camp6	9
Figure 3:	Pie chart represents the number and percentages of type of toilets	of
	Dheisheh houses	70
Figure 4:	Pie chart represents percent of houses with and without electricity	in
	Dheisheh camp	71

List of Tables

Table 1:	Distribution of total, female and male family members in Dheisheh
	households
Table 2:	Distribution of rooms in Dheisheh houses
Table 3:	Descriptive data of water sources; availability; and water storage of
	Dheisheh houses
Table 4:	Descriptive data of environmental facilities of total houses surveyed
	in Dheisheh camp70
Table 5:	Descriptive data of the environmental related behaviors of the total
	households surveyed in Dheisheh camp71
Table 6:	Descriptive data of socio - economic conditions of the surveyed
	households in Dheisheh camp72
Table 7:	Types of welfare received by all the households surveyed in
	Dheisheh camp
Table 8:	Descriptive data of general health indicators of all surveyed
	households in Dheisheh camp74
Table 9:	Descriptive data of households infected with Ameba / Giardia in
	Dheisheh camp

Table 10:	Descriptive data of non-communicable diseases (Diabetes,
	Hypertension, Heart diseases) of the surveyed people in Dheisheh
	camp
Table 11:	Descriptive data in relation to disabilities of all households surveyed
	in Dheisheh camp
Table 12:	Descriptive data of what children do after school
Table 13:	Descriptive data of children lives variables of all households
	surveyed in Dheisheh camp
Table 14:	Descriptive data of what would mothers like their children to do after
	school of all the households surveyed in Dheisheh camp80
Table 15:	Chi square and the P values of the relationships of the prevalence of
	A/G and with different selected environmental and child related
	factors
Table 16:	Chi square and the P values of the relationships of the incidence of
	diabetes and several environmental and health related factors83
Table 17:	Chi square and the P values of the relationships of the incidence of
	hypertension and several environmental and health related
	factors84
Table 18:	Chi square and the P values of the relationships of the incidence of
	heart disease and several environmental and health related
	factors 85

Table 19:	Chi square and the P values of the relationships of the presence o	
	disabled person and several social factors	6
Table 20:	Frequencies of all the answers related to the question:	
	What are the two most important services that are lacking in the	ıe
	camp?8	7

List of Appendices

Survey questionnaire English version	99
Survey questionnaire Arabic version	101
Destroyed villages- from 1948	105
Photos of the camp	107

CHAPTER 1

Introduction

Health is defined broadly, as not just the absence of disease but also as the state of complete physical, mental and social well-being (World Health Organization, 1948). The policy for "Health for all in the twenty first century", adopted by the world community in May 1998, aims to realize the vision of health for all- a vision born in the World Health Assembly in 1977 and launched at the Alma – Ata Conference in 1978. It sets out, for the first two decades of the twenty-first century, global priorities and ten targets that will create the conditions for people world wide to reach and maintain the highest attainable level of health throughout their lives. The two aims for better health that guide efforts towards this ultimate goal are promoting and protecting people's health and implementing the World Health Organization (WHO) definitions of health and health potential. According to WHO rationale, 2001: there are two major challenges that health policymakers face at the national and international level; the need for reliable information to be able to improve the health of the populations they represent and increased international and national attention on the role of health in human and economic development, which has resulted in increasing resources being committed to improving health in all settings. For these reasons the WHO had conducted World Health Surveys (WHS) in different countries in order to develop a means of providing low-cost, valid, reliable and comparable information, to build the evidence base to monitor whether health systems are achieving the desired goals, and to provide policy-makers with the evidence they need to adjust their policies, strategies and programs as necessary. (http://www.who.int/whs.) This illustrates the importance of health needs assessment surveys. The purpose of community health assessment is to engage the community sector to share the responsibility for health protection and improvement and to include the average citizen in designing and implementing a community health assessment. Health depends on such things as appropriate nutrition and housing, safe physical environment, economic security, and social and psychological environment which fosters emotional security and a sense of self worth and belonging. In addition, health is affected by individuals themselves, especially their behaviors such as smoking. It is also affected by public health measures, occupational health and safety regulations. Therefore, a full health needs assessment would require that all health measures be taken into account. In other words health needs assessment is a process of measuring ill – health in a population (Picken & St Leger 1994, Mooney 1994). Under the umbrella of this definition, health needs assessment involves reconstruction of a health profile, which relies on measures such as incidence, prevalence and degree of severity of various health problems in the population, so the greater the amount of ill – health is, the greater the need of assessment. Picken et al (1994) point out that achievement of health needs assessment starts by looking at the services currently available, and only then looks at how many people and what source of people might benefit from them. Picken & St Legers stress that to achieve health assessment there must be a focus, on people and not on services, if services are to be appropriate to people's needs, and that there is a need to know what sort of outcomes people value and consequently what source of benefit they hope to receive.

Another definition of health needs assessment is the capacity to benefit from health care, 2Culyer (1977). Through out this definition the amount of need is not dependent on the

size of the health problem, but on the ability to benefit from health related interventions. From an economic point of view the capacity to benefit from health services is always going to be, William (1993) for greater than the resources to implement every possible beneficial intervention. William said that one must choose who is to receive beneficial services and who is not. Thus, health needs assessment can't be separated from the question of rationalizing based on the fact that if health care resources are to be allocated on the basis of need or on the basis of an ability to benefit from health care, so this means determining priorities between competing claims and limited resources, and because not all these competing claims and health care recourses can be met.

This study is one form of health needs assessment of selected indicators in Dheisheh¹ Refugee Camp, West Bank. Therefore, this health needs assessment study must result in some form of rationalizing.

1.1 Background and significance of the study

Palestinian refugees are one of the largest and longest standing form of displacement through out the world today. Dheisheh Camp was set up in 1949 and is located within the boundaries of Bethlehem. With a population of more than 10,000 (2003) on less than one square kilometer of land, the living conditions are very cramped. The Palestinian-Israeli conflict has been accompanied by a severe deterioration in the status of about two million Palestinian refugees and internally displaced persons living in the 1967 occupied Palestinian territories.

_

¹ The name of Dheisheh originated from the nature of the hilly area that had wild trees and plants that made astonishing views.

According to UNRWA camp service officer (CSO, 2003) of Dheisheh; curfews and closures imposed on the West Bank by the Israeli military have hit the camp hard, since many residents were largely dependent on income from work inside Israel. The Israeli military incursions into the camp during March of 2002 caused great damage to the whole population; many young people were killed, others were arrested, many were injured, numerous houses were demolished and others were left with huge holes in the walls that made them unsafe for use by their owners. The incursions also caused great damage to the infrastructure; in water supply networks, in sewage systems, in roads, in electricity and in the communication network in different areas of the camp. The incursions of March 2002 were the toughest experience for the population since 1948 Nakba. Dheisheh Camp residents had earlier experiences in facing the collective punishments that were imposed by the Israeli military raids in the first Intifada. In 1988 they were under a total of 49 days of curfews, and in 1989 were under a total of 109 nights and 38 days of curfews. In 1990, the camp was under a total of 244 nights and 58 days of curfews. As a result, unemployment in Dheisheh Camp had risen and different aspects of socio economic conditions had deteriorated further.

The unemployment rate in the recent conditions, according to the CSO in the camp exceeds 70 percent, while the main findings of the Palestinian Central Bureau of Statistics (PCBS) of the Survey on the Impact of Israeli measures on the economic Conditions of the Palestinian Households (6th Round: July-August 2003) were about 2.5 million Palestinians suffer from poverty, and 264 thousand households lost more than 50% of their usual income. The median monthly income of households has decreased from NIS 3,000 to NIS 2,000 in the West Bank, while in the Gaza Strip it decreased from

NIS 2,000 to NIS 1,200. Generally speaking the amount of suffering in the Palestinian community is increasing and the suffering of the refugees who live in camps is greater than their capacity of tolerance. In Dheisheh, the job opportunities are limited for men, that's why there are many working women, including working mothers. In Dheisheh camp, as in all other Palestinian refugee camps, children play in alleys and streets of the camp because there is no other place for them to play.

The sanitation conditions are very poor, highlighted in the accumulation of trash in the main road in front of the camp with all the dangerous impact on the health of the population. The CSO stated that there are only nine UNRWA sanitation workers who collect the trash of a population of 10,000. There are no garbage trucks in the camp, and the main garbage truck comes from Hebron, which is often delayed or doesn't reach Dheisheh because of the closure. Sanitation workers use push-carts making their jobs even more difficult.

This study will be a descriptive study, which will provide an overview of important findings in the following areas: demography, housing, health, education, economic resources, social status, opinions, attitudes and children's life profile.

Given this description and justification, this overview can be an effective way to develop consensus about the most important problems to be managed with the aim to engage community sector to share the responsibility for health protection and improvement, including the average citizen. In other words, this survey will be a living condition study, which analyzes results that can usually be based on comprehensive social models of the essential relationships and dynamics of the society in Dheisheh

camp. Thus survey results can be used significantly to confirm, modify or challenge the existing conditions, policies and /or models.

In summary, this study will be the first survey of its type ever conducted among people living in Dheisheh camp. It will focus on a society under prolonged occupation with the consequent disruptions of different life means and traditional social structure.

1.2 Problem Statement

For more than fifty five years, the endless suffering of Palestinian refugees who were dispossessed of their lands, homes and all sources of their livelihood as a result of the 1948 war, has resulted in a collective sense of insecurity, anger, and mistrust among refugees altogether. Refugees displaced in 1948 ended up living in tents without proper living conditions. This urged the international community to mobilize resources for the placement of Palestinian refugees in more durable shelters that constituted what became later to be known as refugee camps (UNRWA, A Brief History 1950-1982). According to the CSO, Dheisheh camp is one of the communities which have grown rapidly over the years on the same piece of land, thus, over-crowdedness is a significant problem, which led to some disproportionate expansion in size entailing limited space for family activities. According to statements of the camp representative committee members, "inhabitants of Dheisheh camp played historically an active role in the political movements and were subjected to imprisonment, expulsion and besiegement. That led to an overall reduction of employment opportunities for the camp inhabitants and limited access to community resources, which resulted in deterioration in living standards."

The harsh conditions that Palestinians face in their daily lives, presented in the prolonged closures, curfews and road blocks, have caused a severe deterioration in their health and

their socio- economical status. "The growing rates of poverty, exceeding 55% in the West Bank and 70% in the Gaza Strip have brought a significant deterioration in the health and nutritional status of the population" (UNRWA Annual Health Report,2002). It increases the community vulnerability to disease, both communicable and non-communicable, because of higher stress level and suppressed immunity, which drags them to unhealthy life style behaviors including smoking and limited environmental safety concerns.

Service providers are ignoring health awareness and behavioral modifications as tools for improving the quality of life of individuals and groups in the camp as health education and awareness activities are minimal.

The fact that the space is extremely limited in all community settings doesn't allow for chances for social interactions between peers, recreational activities, or other forms of useful community activities. No single institution whether governmental or non-governmental seemed to be concerned with constructing a community profile for Dheisheh camp, which is fundamental for needs-based planning and development projects.

1.3 Refugee Status

1.3.1 General Overview of Refugees

Palestinian refugees more than 50 years of injustice

The Palestinian refugees' problem is the oldest and largest refugee problem in the world. It has been on the agenda of the United Nations since its inception. For five decades, the Palestinian refugees have endured great injustice and hardships after having been uprooted from their homes and forced to live in Diaspora and deprived of minimum human and national rights. Their plight is considered to be one of most difficult and

complex issues. Clearly, a just solution to the question of Palestine cannot be achieved without a just solution to the Palestinian refugees.

The question of Palestinian refugees involves a number of complex interrelated elements of great importance including historical, political, moral, emotional and socio-economic elements that cannot be ignored and must be addressed.

Following the establishment of the State of Israel in 1948, approximately 880,000 Palestinians (almost half of the Palestinian population) were forced to leave their homes. Among the main reasons for this huge exodus of Palestinians from their homes, lands, properties and livelihood were the outbreak of war, the forced eviction of Palestinians and violent campaign of terror and fear waged by Zionist terrorist groups. (Badil, Right's of Return, 2001)

The value of the refugee movable property plus owned land by Arabs taken over by the Israeli government was approximately estimated 120 million 1947 pounds sterling, or about 18.5 billion 1990 US dollars. After the outbreak of the war in 1967, another 325,000 Palestinians from the West Bank and Gaza Strip were forced to flee their homes, many for the second time. A systematic policy of deportation and forced migration continued for several years after the war with annual average of 21,000 Palestinians leaving the occupied Palestinian territories, prevented from returning. (Badil, Right's of Return, 2001).

Today the number of Palestinian refugees totals approximately 4.9 million persons, of which about 4 million are registered with the UNRWA. The largest concentration of Palestinian refugees is in Jordan representing more than 40% of those refugees registered with UNRWA. The refugees in the occupied Palestinian territories

including Jerusalem represent 38% of UNRWA's registration. Lebanon and Syria each host about 10% of the registered refugees and the remaining live in Egypt and other Arab countries, while others have migrated to Europe, the United States, Canada and South America.

Israel has systematically blocked the return of the Palestinian refugees in blatant violation of many United Nations resolutions, despite the commitments it made to the UN when it was admitted as a state member of that world body. In fact, Israel's intentions were clearly manifested from the very beginning when the new Jewish State enacted a number of laws blocking any possible return of the Palestinian refugees including the "Abandoned Areas Ordinance" (1948), "Emergency Regulations concerning the cultivation of Waste Land" (1949), "The Absentees' Property Law" (1950) and "Land Acquisition Land" (1953). Under such laws, Israel "legalized" the expropriation of Arab land property, some of which even belonged to several Palestinians who remained in their homes.

At the same time, Israel had enacted the "Law of Return", allowing any Jew regardless of his/her origin, place of birth or nationality to immigrate to Israel and automatically acquire Israeli citizenship. Since then, Jewish immigrants have continued to come to Israel and have been living on the land and the property of the Palestinian refugees. According to the UN Conciliation Commission for Palestine, over 80% of Israel's total area represents abandoned Arab land. Most of the Jewish communities between 1948 and 1953 were established on former Arab property. More than 500 villages and large parts of another 94 towns and cities, in addition to most of their shops and businesses, were taken under Jewish control.

There have been numerous UN resolutions regarding the Palestinian refugees. Two are fundamental resolutions considered to be the basis for any just and lasting solution of the plight of the 1948 refugees and the 1967 displaced Palestinians. The first is General Assembly Resolution 194 (III) adopted on 11th of December 1948 and has been endorsed annually since then. Resolution 194 (III) resolves that "refugees wishing to return to their homes and live in peace with their neighbors should be allowed to do so at the earliest practicable date, and compensation should be paid for the property of those choosing not to return and for loss or damage of property which under principles of international law or in equity should be made by the governments or authorities responsible." (Badil, Issue No.7, August2002).

The second is Security Council Resolution 237 (1967) adopted on 14th of June 1967 which calls upon the government of Israel "to facilitate the return of those inhabitants who have fled the areas since the outbreak of hostilities." Since then, the Security Council has adopted numerous resolutions reaffirming the basic and inalienable right of the Palestinian refugees to return to their homes, affirming the applicability of the Fourth Geneva Convention of 1949 to the territories occupied since 1967, including Jerusalem, as well as resolutions condemning Israel's expulsion and deportations of Palestinians such as resolution 799 (1992). Another important Security Council Resolution is 242 (1967) since it has been the basis of all Arab-Israeli peace talks and agreements. Resolution 242 adopted in November 1967 emphasizes "the inadmissibility of the acquisition of territory by war and affirms the necessity for achieving a just settlement of the refugee problem." (Badil, Issue No.7, August2002).

Every year, the international community through the United Nation General Assembly, reaffirms its call for the implementation of resolution 194 (III) and 237 (1967). These resolutions should form the legal and political basis for any solution of the problem of 1948 refugees and the 1967 displaced persons.

UNRWA's Fields of Operations

There are about 4 million Palestinian refugees who are registered with UNRWA's fields of operations: Jordan, Lebanon, The Syrian Arab Republic, The West Bank and Gaza Strip.

The UNRWA's services for the refugees include the following broad categories: elementary and preparatory education, vocational and technical training, comprehensive primary health care including family health assistance towards hospitalization, environmental health services in refugee camps, relief assistance to needy households and developmental social services for women, youth and persons with disabilities. The Agency has also developed a microfinance and micro-enterprise program that assists in developing the income-generating capacity of the refugees. In addition to its regular programs, the agency undertakes a range of infrastructure projects to improve the living conditions of the refugees.

Distribution of the Registered Refugees

According to UNRWA annual health report 2001, the largest number of Palestinian refugees (1,662,000) resides in Jordan and is divided into two categories: camp population (291,000) and non-camp population (1,371,000). The camp population is distributed into 10 camps located in different urban and rural areas of Jordan. The

same applies on the non-camp population. The majority enjoys full Jordanian citizenship and is able to serve in government services and access to governmental and developmental institutions and other assistances. (UNRWA, Annual Health Report, 2001).

Palestinian refugees in Lebanon

Their total number is (385,000) persons and divided into camp population (216,000) and non-camp population (169,000). The camp population is distributed into 12 camps located in different urban and rural areas of Lebanon. The same applies to the non-camp population. (UNRWA, Annual Health Report, 2001)

Palestinian refugees in Lebanon are among the most disadvantaged. They only have limited access to government services and have to depend almost entirely on UNRWA for basic education, health, relief and social services. Lebanese authorities continue to prohibit construction in certain refugee camps and the entry of construction materials. They are subject to military checks and always Palestinian refugees suffer from poor living and difficult housing conditions, restrictions on mobility and high rates of unemployment.

Palestinian refugees in Syrian Arab Republic

There total number is (396,000) and divided into camp population (111,000) and non-camp population (285,000). The camp population is distributed into 9 camps located in different urban and rural areas of Syrian Arab Republic. The same applies to the non-camp population. Palestinian refugees in Syrian Arab Republic continued to have fully access to government services; education, health and other services.

Palestinian refugees in the West Bank and Gaza Strip

Palestinian refugees in the West Bank whose total is (618,000) are divided into camp population (166,000) and non-camp population (452,000). The camp population is distributed into 19 camps located in different urban and rural areas of the West Bank. The same applies on the non-camp population.

Palestinian refugees in Gaza Strip whose total is (865,000) are divided into camp population (463,000) and non-camp population (402,000). The camp population is distributed into 8 camps located in different urban and rural areas in Gaza Strip. The same applies on the non-camp population.

The registered refugees in the West Bank and Gaza Strip constitute over 50% of the Palestinian population (70% in Gaza Strip and 30% in the West Bank).

For more than two and a half years, since the beginning of Al-Aqsa Intifada (Uprising), the Palestinians have gone through a cycle of non-ending violence by the Israeli government with strict closures, prolonged curfews, military incursions deep into population centers, house demolitions and criminal actions against the Palestinians represented in the killing of children, women, elderly and Palestinian activists. In addition, destruction of agricultural crops, uprooting of citrus and olive groves and wide spread damage to infrastructure has left behind a heavy toll on the economic, social and psychological well being of the people. (UNRWA, Annual Health Report, 2001)

Therefore, UNRWA, the UN Agency whose sole concern is the welfare of the Palestinian refugees, has to face the double-burden of responding to the emergency humanitarian needs of the population whom it serves while simultaneously struggling to

sustain its regular programmed activities and prevent breakdown in service delivery and quality.

More than half of the Palestinians killed by the middle of January 2002 were refugees registered with UNRWA. Thirty three percent of the total number of deaths was individuals under the age of 18. Since the start of the Intifada, 25 students in UNRWA schools in Gaza Strip and 4 in the West Bank were killed; eleven of them were between the ages 12-16. Another 545 students in Gaza Strip and 245 in the West Bank were injured.(UNRWA Annual Health Report2002). Due to the severity of injuries, it is expected that a large proportion of injured persons will sustain permanent disability. The psychological effects of loosing family members, mass destruction and excessive use of military force have had devastating impact on vulnerable groups especially women and children. Coupled with the generalized socio-economic hardships, disappointments and frustration, and feelings of fear and insecurity have generated new conditions where post-trauma stress disorders have become common.

1.3.2 Refugees in Dheisheh Camp

As all other Palestinian refugees, the Dheisheh Camp refugees who had been uprooted from their homes and lands in 1948 and descended from Ramleh, Jerusalem and Hebron districts came from more than 46 destroyed villages² and fled to Bethlehem area. They had to take refuge in the caves, old buildings and abandoned houses, and others were able to share with families of the area their homes and food.

.

² Refer to appendix 3.

Emergency assistance was provided by the International Committee of the Red Cross and from the United Nations Relief for Palestine Refugees until May 1950 when UNRWA started its operations.

The Dheisheh refugees had to stay in tents and bare the cold, wind and snow in winter and the strong heat in summer. Officially the area of the Camp was rented by UNRWA from the Jordanian Government in 1948 for a period of 99 years. The refugees were accommodated in tents until the late 1950s when UNRWA replaced the tents with more durable shelters. Each new shelter was a brick room with asbestos roofing and a family of 6-8 had two rooms on a plot of land not exceeding 80-100 square meters. The refugees who settled in Dheisheh were about 4,500 persons.

The water supply was located in water containers that had been established by UNRWA in different parts of the Camp. The families used to carry their barrels and fill them with water and carry them back to their homes. The WC units were also established by UNRWA in different parts of the Camp and were divided as two parts, one served the males and the other served the females. Feeding centers were established by UNRWA for the distribution of well balanced meals for the refugees to maintain a well nourished community in order to cope with the land living conditions and better immunity to face diseases.

In 1952, UNRWA established basic schools for boys and girls. Before that, the children used to take teaching lessons in a big tent, some of those were able to graduate and have higher education and became professional in different professions.

In 1958, UNRWA established the Dheisheh health center to provide the comprehensive primary health care for the population. Also, in this period UNRWA established the distribution centers that distribute basic food supplies for the refugees.

The Dheisheh population was 5,500 people in 1951; 7,300 in 1967 where nearly one third of Dheisheh population left the Camp during 1967 War. Fearing for their lives, many Camp residents crossed the river into Jordan. Some remained in Jordan while others left for other Arab countries. Most families in Dheisheh today have relatives in various Arab states as well as Europe and the United States.

After the Israeli occupation of the West Bank began in 1967, violence increased in the alleys and homes of Dheisheh as confrontations with Israeli soldiers, mass arrests, night raids and curfews became daily occurrences and worries of massive deportations of the Camp population were always there.

During the Palestinian Uprising "Intifada" between 1987-1993, Dheisheh Camp was very active and played a leading role in the activities that involved the Intifada and the struggle for the Independence and the return of the refugees³. The estimated number of martyrs of the Intifada from West Bank and Gaza Strip was 5,410. The Camp was surrounded by six meter fence to prevent the stone throwing at the Israeli settlers' cars and Israeli patrols and all but one of the 14 entrances were sealed. (UNRWA CSO,2003).

In 2000, Al-Aqsa Intifada started and had severe impact on Dheisheh population causing prolonged sufferings and pain resulting from the continuous Israeli military incursions.

Dheisheh Camp has lost 15 young martyrs during the Al-Aqsa Intifada, while the total number of martyrs in the West Bank and Gaza Strip reached 2,519 martyrs

_

³ Dheisheh Camp lost 19 martyrs of the Camp population, while hundreds were injured and imprisoned.

according to The Palestinian Central Bureau of Statistics (PCBS) dated on first of May 2003. The number of injuries is shown as follows:

- Injuries in the West Bank and Gaza Strip were 40,000 persons.
- Injuries in the West Bank and Gaza Strip which cause disability from 5% to 100% were 2,666.
- Injuries in Bethlehem District were more than 2,400.
- Injuries in Dheisheh Camp which caused disability from 5% to 100% were 31.
- Injuries in Dheisheh Camp which caused permanent disability were 12.

The number of civilians in Dheisheh Refugee Camp who were detained by the Israeli occupation during the incursions reached 800. One hundred of them were sentenced to prison either administrative detention or for investigation, and 30% of them were under 18 years of age and are still imprisoned.

The damage caused by the military incursions according to the Public Services Committee's Annual Report 2002 was as follow:

- 1. Complete demolition of 6 houses by explosives which caused partial demolish of another 75 houses. Owners had to evacuate the houses because they were not safe to live in.
- 2. Destruction of 221 house walls while moving from house to house search.
- 3. Destruction of about 1,500 square meters of walls that surrounded schools and other local institutions.
- 4. Destruction of contents of several institutions such as in Ibda'a old building, new building, the Zakat Committee, the Fenieq Hall that belongs to the public service committee and other institutions.

- 5. Serious damage in the infrastructure facilities such as water pipes, electricity, phone lines, sewage nets and roads.
- 6. The destruction of more than 17 cars that belonged to civilians in the Camp.
- 7. The damage of several shops etc.
- 8. The deportation of 4 young men from those who were held in the Nativity Church; 2 to Gaza Strip and 2 to Europe.
- 9. During 2002 the Camp had suffered from 162 days of curfews and more than 5 incursions.

Dheisheh Camp Institutions

UNRWA's responsibility inside the Camp is limited to providing services and administering its installations. UNRWA has a Camp Services Office in each camp. The residents visit the office to update their records or to raise problems relating to agency services with the Camp Services Officer (CSO). The CSO, in turn, refers refugee concerns and petitions to the UNRWA administration in the area in which the Camp is located. The CSO is responsible for the provision of all services in the Camp health, education, and sanitation and supply distributions.

Dheisheh Health Center

Health services provided at the Dheisheh Health Center include outpatient medical care, disease prevention and control, mother-and-child health, and family planning advice and health education. The health center provides these services on daily bases except on Sundays. It is the only center that provides medical care for the Dheisheh residents and in the incursions periods the center had to work for 24 hours every day as emergency condition.

There is one medical officer who is supposed to supervise all technical instructions that UNRWA implements in the health services. The consultation average is 77 patients a day, which is high consultation average for one doctor through 7 hours a day. Recently the consultation average increased to 180 daily consultations because of the devastating economic and political situation. According to the CSO, the unemployment rate reached 70% because of the closures; the majority of laborers lost their work whether they work in Israel or in the West Bank.

The pharmacy provides medications free of charge to the patients but the problem of the increased demand leads to shortage of drugs. Patients always claim the inability to buy drugs that are supposed to be available at the clinic, but these drugs are not provided by UNRWA such as expensive antibiotics and other important drugs.

The dental clinic provides daily services now, whereas before it used to provide services 3 days a week, including the dentist and a dental nurse. They provide treatment, extractions, fillings, scaling, root canal filling and x ray for diagnostic purposes. The daily average consultation reaches 35. They also provide screening activities for oral care for pregnant women, school students and for diabetics and hypertensive patients.

The nursing team working in the center consists of one staff nurse, four practical nurses and one midwife who all work as a team and divide the responsibilities according to services. Because of the emergency situations the number of nurses increased from six nurses to nine nurses.

The number of registered children from 0-3 years is 1,138 according to the Mother and Child monthly report of April 2003. Among these children five suffer from being underweight.

The number of registered pregnant women is 290 according to the Antenatal monthly report of April 2003. Among them twenty one were diagnosed as high risk pregnant women and other six as alert risk. Number of women seeking family planning is 688.

According to the Annual Report of the Non Communicable diseases of December 2002 number of registered patients who complain of diabetes is 103 among them (11 insulin dependent and 92 non insulin dependent), and number of hypertensive patients is 241. While number of patients who suffer from both diabetes and hypertension are 171.

Dheisheh Health Center had reported one case of maternal mortality because of myocardial infraction. Also it reported that one case of infant mortality and one child mortality due to congenital malformation of the first quarter of 2003.

The tuberculosis quarterly report on March 2003 has zero cases.

Immunization coverage during 2002

Rapid assessment technique for Dheisheh infants who were **born in January 2002**, the number was 40 infants.

Vaccination	No. of infants	Percentage
BCG	40	100%
DPT, three doses	40	100%
Polio (Oral Drops), three doses	40	100%
Measles	39	97.5%
All vaccines	39	97.5%

Immunization coverage during 2002

Rapid assessment techniques for Dheisheh children who were **born on July 2001**, the number is 34 children

Vaccination	No. of infants	Percentage
DPT, booster dose	34	100%
Polio, booster dose	34	100%
MMR	34	100%

Laboratory services are provided on daily basis with different kinds of tests that are done, including Biochemistry, Hematology, Serology, Urine, Stool and Bacteriology such as (Acid Fast Stain) for T.B. Usually there are screening laboratory tests that are done to test the hemoglobin as a preventive measure to detect anemia in children, nursing mothers and pregnant women. Other screening tests are done routinely for diabetics and hypertensive patients. Tests are also done for diagnostic purposes which are usually requested by the doctor.

Physiotherapy Unit

The Physiotherapy Unit consists of two main physiotherapists and another two who are working on the emergency employment program. This department is considered to be part of the emergency departments since the first Intifada. The services that this unit provides are of great need for the population of Dheisheh and other refugees in Bethlehem district because it's the only one in the district that provides physiotherapy services in UNRWA's health centers.

Total clients who received treatment reached 505 during the past year by the end of January 2003. Those clients came from different parts of the West Bank, refugees and non-refugees who were under treatment in different health organizations and rehabilitation centers such YMCA, Beit Jala Hospital etc.

An outreach program for follow up and home visits in different parts of Bethlehem district had an average of 70-80 monthly home visits. They assess and follow 132 different kinds of injuries from Dheisheh alone, including falling down and sprains, second and 3rd degree burn cases, contusions, fractures, internal injuries, chest and abdomen peripheral nerve injuries such as cut in nerve post operative conditions, and amputation cases.

UNRWA's Basic Schools in Dheisheh

There are two basic schools, one for girls and the other for boys. They provide elementary and preparatory education. The school for girls, newly built in 1998, provides education to 1,500 students in school year 2002-2003. Because of the large number of students, there is not enough number of class rooms, and students go in two shifts to schools, morning and afternoon. Still this doesn't solve the problem of overcrowding; the number of students in each class reaches 42.

A newly built boys' school, which was completed in June 2002, consists of 4 floors. The total number of students in school year 2002-2003 was 1310 students. Like the girls' school, the boys' school has educational facilities such as science laboratory, computer lab, and library and multi purpose hall. The problem of overcrowding also exists in the boys' school, with an average of 42 students in each class.

The location of both schools is on the main road and easy to reach. For safety reasons, there are order committees to assure safe crossing manner for the students.

The education teams are enrolled in training services that are organized by UNRWA's education department and with the Ministry of Education. There is active participation by the students and teachers with voluntary activities such as scouts, preparation of researches in the library, and computer skills workshops during the summer vacation. There is good cooperation and communication between the schools and the local NGOs in the field, such as Ibda'a Cultural Center, YMCA, the Public Services Committee, the Zakat Committee and the Social Workers Union Committee through their involvement in different activities for the sake of the development of students. The Dheisheh Boy's School was prepared to receive students with special needs.

The Public Services Committee

The Public Services Committee is regarded as an official body representing the Camp population. It is actively involved in activities that provide better living conditions for the population in the Camp. Because of the deteriorating economical situation and the increased number of people who lost their jobs because of the political situation, the Public Services Committee was able to cooperate with UNRWA and the UNDP to develop job creation projects. The total number of workers who benefited from these projects was 2,109 workers and the number of family members that had benefited as a result of that was 11,045 persons, (Public Service Committee, Annual Report 2002). The workers had worked a total of 23,863 working days. Each worker worked an average of

7-10 days during the year 2002. Some of the workers had the chance to extend this period of working days because of severe poverty conditions.

Re-operational maintenance was done for 11,023 meters of sewage system, other damaged public buildings, walls and roads pavement, which were damaged through the incursions of 2002.

The committee also provided financial aid and food aid for more than 600 families. Through the rehabilitation local committee, aid was also facilitated for special cases, such as hearing aids, crutches, wheel chairs, certain medications and diapers for disabled children and other vital needs like electricity improvement.

Local Rehabilitation Committee

The center is now under construction and they have a community based rehabilitation program. They have classes for children who need speech therapy and hearing aids. Most of these children suffer from mental retardation. The center is also involved in improving the living situation of the disabled through rearranging and rebuilding their houses in more accessible to disabled persons.

Ibda'a Cultural Center

Ibda'a Cultural Center was established in 1994 with the mission of the development of children's skills and international cultural exchange. It has diversified its projects through the years with new projects to serve children, youth and women. Today Ibda'a reaches hundreds of children and young people through various programs and it provides job opportunities to over 40 families in the Camp. Ibda'a programs help youth develop their ability, creativity and leadership skills through social, cultural and educational activities that are not otherwise available in the Camp's environment. Ibda'a empowers

refugee children and it enhances their confidence and strength to face up to their difficult future. Ibda'a also strives to educate the international community on the Palestinian refugee issue. Ibda'a runs several projects: kindergarten, nursery, computer and Internet lab, guesthouse, library, dance group, international cultural exchange, sports teams, women's handcraft cooperative, oral history and music project etc.

The Zakat Committee

There are three big mosques in three parts of the Camp. The Zakat Committee is involved in different activities, provision of Islamic lessons at the mosques, celebration on religious holidays, kindergartens, distribution of food aid for poor families and active participation with other centers in activities for improving living conditions.

The Women's Center

The Women's Center has different activities that aim to improve the women's skills and position in the community. It has a kindergarten, a nursery, a sewing workshop for young women, and a hairdresser and cosmetic workshop to teach women skills that they could use in their future. It coordinates with other organizations for lectures about different topics, such as health issues, nutrition, civil rights, etc.

1.4 Geography and Demography

Dheisheh camp was established in 1949, after the expulsion and flight of more than 750,000 Palestinians following the war in 1948. Those that fled to Dheisheh originated from 46 villages of West Jerusalem and Hebron, the descendents of whom comprise the 10,000 inhabitants of the camp today. The camp lies within the municipal boundaries of Bethlehem and it is only 3km away from downtown Bethlehem. It is situated on a hilly area of 460 dunums. The borders of the camp are: Bethlehem city in the east, Alkhader

village in the west, Beit Jala and Al Doha city in the north and Artas village in the south. The increased number of families and the limited space made it overcrowded, which resulted in extension of 14 dunums from the eastern side and another south eastern extension. About 5% of the population lives on these extensions. Others who were able to buy land and build new houses moved out of the camp to Doha city and Bethlehem.

As a collective punishment, the Israeli authorities built a fence around the camp with a metal turnstile for the main entrance. In 1995 the camp came under Palestinian authority and the fence was been removed.

The registered refugees of Dheisheh camp is approximately 10,876 with 226 special hardship cases. The number of families that received emergency aid distributions is 1,395. There are 1,231 male students and 1,345 female students in the UNRWA schools.

CHAPTER 2

Literature Review

2.1 Conceptual Framework

2.1.1 Definition and elements:

The conceptual framework of this study is Doyal and Gough's model whose work represents an important exception to the prevailing view that needs are relative and subjective Doyal and Gough, (1992) believe that there must be objective, universal needs which are common to every one. Doyal and Gough's model relies on the fact that the ultimate goal of all human beings is to be able to participate fully in their societies. In order to do that, two basic needs must be met: the need for physical health and the need for autonomy. Doyal and Gough (1992) said that these two basic needs are universal of all human beings. They are objective needs and not relative to a particular historical era or to a particular geographical area. Doyal and Gough's conceptualization of 'needs' rests on the idea that there are different levels of need. There exist, not only the two basic needs for health and autonomy, but also a number of intermediate needs which must be satisfied if the two basic needs are to be met. Doyal and Gough (1992) claimed that the intermediate needs are also universal and objective. They listed eleven such intermediate needs:

- 1. Adequate nutritional food and water.
- 2. Adequate protective housing.
- 3. A non hazardous work environment.

- 4. Anon hazardous physical environment.
- 5. Appropriate health care.
- 6. Security in childhood.
- 7. Significant primary relationship.
- 8. Physical security.
- 9. Economic security.
- 10. Safe birth control and child-bearing.
- 11. Basic Education.

Bradshaw, (1972) &Richardson, (1994) believed that need is a relative and subjective concept. There are no such things as objective needs. Rather there are simply different definitions of need held by different groups in society. One group's definition of need is no more objective than another's. It is argued that needs are not only subjective; they are also relative to a particular time and place. For example, needs in 2003 are different from needs in the 1970s, and people living in towns and villages have different needs than people living in camps.

The Conceptual Framework of Doyal and Gough (1992) composed of the following elements:

- 1. Basic and intermediate needs can be met in an almost infinite variety of ways.
- 2. Basic and intermediate needs are universal and thus ways of meeting them vary widely.
- 3. Evaluation of the range of policies and services to meet need should take place against the yardstick of how well they meet basic and intermediate needs.

- 4. Based on Doyal and Gough framework needs assessment is a process of assessing how well people's basic and intermediate needs are being met.
- 5. This framework stresses the non-substitutability of need and that one domain of need-satisfaction cannot be traded off against another.

2.1.2 Why choose Doyal and Gough Conceptual Framework in this Survey?

- The strength of the Doyal and Gough conceptual framework in this theoretical approach is that it both provides legitimacy and suggests a particular type of methodological framework that is based on the fact that human needs cannot be "argued away".
- 2. Doyal and Gough conceptual framework believes that there exist real, objective human needs and that is an important and legitimate first step in meeting needs to assess levels of need-satisfaction, drawing on both top-down and bottom-up sources of information. (Robinson & Elkan, 1996).
- Doyal and Gough's conceptual framework is based on the idea that the level of need-satisfaction found in a deprived area should be judged against the best standard achieved elsewhere.
- 4. Doyal and Gough's conceptual framework can be criticized on the grounds that it raises unrealistically high expectations. (Robinson & Elkan, 1996).

2.2 Contextual Framework.

2.2.1 Global Review

Worldwide many studies were done on refugees and on the different aspects of their lives and health. For example, the Cambodian refugees who endured the Pol Pot regime experienced a horrendous assault on their physical and mental health. The complaints and

diagnosis of 168 Cambodian refugees who consulted a family medicine primary care clinic between 1985 and 1987 were examined. Fourteen of these patients were visited in their homes to obtain an in-depth perspective of their health believes and needs. The results of this study supported the growing awareness that Cambodian refugees required sensitive and sophisticated approaches in dealing with wide spread emotional and physical dysfunction (Baughan, Pickwells, Bartlone, 1990).

Schriever, (1990) examined the background, cosmology, health, illness, healing, death and mourning related beliefs and practices of two groups of refugees in Canada, the ethnic Viet and the Lao Hmong. Emphasis was placed on the syndrome of uprootedness among refugees, which exacerbated the patients' sense of loss in the palliative care setting.

A report by Elias, (1990) demonstrated the role of epidemiological surveillance and investigation in the control of infectious diseases in a long-term refugee camp. The applications of simple epidemiologic methods in a refugee camp on the Thai-Cambodian border were described for a one year period. The development of a health information office facilitated the collection of demographic and vital statistical data, administration of disease surveillance system, regular monitoring of hospital and outpatient discharge diagnosis and investigation of research outbreaks.

This office also organized community health education campaigns and disease control efforts. Examples of specific disease investigations were provided to demonstrate the utility of epidemiologic surveillance in the control of infectious diseases. The author concluded that for health need assessment studies among refugees, simple

epidemiological methods played an important role in health planning in long-term refugee camps.

Refugees requesting asylum in Canada are termed "Applicants for Refugee Status". An epidemiological study of a large number of these refugees was conducted by the community health department of St-Luke's Hospital in Montreal and provided a picture of their social and health profiles. The refugees came from developing countries with serious internal conflicts. On the whole, their state of health was satisfactory. However, in some cases specific diseases were detected, which were often connected with their geographical origin. The author said that these diseases which included treponematosis, intestinal parasitosis and nutritional deficiency found in this study gave rise to health care programs specially adapted to the sub-populations concerned (Thonnean et al., 1990).

The medical profiles of 1967 refugee claimants to Montreal, Quebec, Canada were reviewed from January to July 1987 to evaluate the importance of imported intestinal parasite infection in this group and to re-examine the screening policy governing these infections. An overall infection rate of 29.3% was obtained for pathogenic parasites, where helminous were from times more frequently found than protozoa Giardia Comblia and Entameba histolytica. Age, sex, years of schooling, country of origin and level of Eosinophilia were found to be associated with infection, with country of origin being the strongest predictor of infection. These results documented the parasite infection in a selected group of immigrants which would not have been identified and treated if a special program of screening were not in operation. The authors suggested that the refugees, who were considered to be at high risk for parasite infection, should be

informed that an examination for parasites would be beneficial for their health. (Goude, & Gyorks, 1990).

With relation to Amebiasis (Candler et al., 1990) pointed out that symptomatic intestinal Amebiasis was highly endemic among the Cambodian refugees living at Green Hill, the evacuation site on the Thai-Cambodian border, between June 1987 through May 1989. Monthly incidence rates of intestinal Amebiasis were determined to be inversely proportional to cumulative monthly rainfall. The highest incidence of amebic dysntry was 63/1000 in children 12-23 months old. Behavioral risk factors were investigated by conducting a case control study. A questionnaire was administered to 73 families, each having at least one member with confirmed intestinal Amebiasis within the past 3 months, and to 95 randomly selected control families having no individual with diarrhea for at least 3 months. Individuals from families with greater than four members were at high risk for acquiring intestinal Amebiasis. No significant differences in behavioral risk factors were identified between case and control families. 86 % of 51 water samples drawn from wells where Amebiasis patients obtained their drinking water had greater than 10 coli forms per 100 ml. The main route of transmission of E. histolytica was not identified, but was most likely via the fecal-oral route.

Refugees often face extra ordinary health risks. Government policies may consider or compound those risks. In Pakistan, a comparative assessment was conducted of access to medical care for refugees from Afghanistan living in refugee camps in the Northwest frontier of Pakistan and Afghan refugees living in the general population of Peshawar in Pakistan. (Rives et al., 2002) Rives sought to compare access to medical care for refugees from Afghanistan living in a camp environment and Afghan refugees residing in

somewhat segregated but general urban population in Peshawar-Pakistan. Data was derived from personal interview responses to a questionnaire designed collaboratively by representatives from the United Nation High Commission for refugees (UNHCR) Peshawar, Pakistan and the University of Texas Health Science Center at Houston. One adult family member per family (N=185) provided data for all family members in their household (N=997). Sixty one percent of the urban refugees reported there had been at least one time since becoming a refugee when one of their children had needed medical care but could not receive it, compared to 19% for camp refugees (P. value = < 0.001). The urban refugees reported that family members received medical care for serious illness or injuries 17.6% of the time, while camp refugees reported they received care 58.1 % of the time (P. value =<0.001). Thirty six percent of those interviewed reported the death of a child in their family since becoming refugees. This study concluded that the data collected from Afghan refugees living in the camp environment suggested woefully inadequate, yet greater access to medical care than refugees living in the general population of Peshawar. Results of this study will be used by policy makers and/or different organizations to match the needs of this population.

Assessment of the health status among Kosovo refugees was studied in March 1999, as a result of the armed conflict in the Kosovo province of the Federal Republic of Yugoslavia, approximately 860,000 ethnic Albanians sought refuge in neighboring Albania, the Former Yugoslav Republic of Macedonia (FYROM), the Republic of Montenegro, the Federal Republic of Yugoslavia and Bosnia - Herzegovina. As a result of massive refugee movement into FYROM, many countries, including the United States, accepted refugees for resettlement. An assessment of different indicators of health status

of the refugees was conducted for 4,045 Kosovo refugees at Fort Dix, U.S. during a 10 week period. This assessment found that the refugees were in good health, which underscores the need for a tailored intervention program targeted at the health conditions of a specific population. Refugees were assessed for selected conditions (e.g. untreated chronic diseases in the elderly and dental conditions). A pharmacy was established and dispensed approximately 7,600 medications for conditions such as hypertension and diabetes. In addition, approximately 1,000 dental visits were reported. Because high birth rates were reported in Kosovo before the conflict, women of childbearing age (18-45) years that had abnormal menstruation were screened for pregnancy to determine whether they needed prenatal care and should not receive live vaccines. Approximately 120 pregnancy tests were performed during the first month, 58 women received prenatal care, including approximately 400 prenatal visits.

Refugees were assessed and treated at a 24 hour acute-care clinic (5,127 visits) and referred to specialized care when necessary (72 hospitalized during the first month). Medical charts including medical history, conditions and medications, vaccinations, dental and prenatal records, and results of this study were transferred to the state and local health agencies providing health care after resettlement (Yeskey, 1999).

Worldwide, there are approximately 37 million refugees and internally displaced persons (IDPS). Roughly, one quarter of them are women of reproductive age. The sanitation, health and nutritional needs of refugee populations have always been of great concern, but until recently the reproductive health of refugees had been largely overlooked. The CDC's Division of Reproductive Health (DRH) collaborated with the reproductive health for consortia to develop a prevalence survey tool that was field tested

in East Timor and Kosovo. This tool provided information that will improve international and local capacity to prevent and respond to gender based violence among refugees in a manner that is culturally sensitive and respects human rights (WHO, 2000). The literature suggested that mental trauma and its psychological consequences are a concern for substantial portion of war affected populations and that these concerns should be addressed as a major public health problem in countries plagued by collective violence.

The mental health needs assessment of refugees reflects the problems of uprooted persons and the traumatic experiences encountered before and during their flight, as well as after having arrived in a place of refuge. However, the psychological damage of traumatic experiences during war and internal conflict has traditionally not been addressed in international humanitarian emergencies since there is a tendency to focus mostly on the immediate physical needs: water, shelter, and medical care. The logistical and operational tasks of meeting these legitimate needs are enormous. In addition, issues regarding security, make it more difficult to address the psychological component, which are often perceived as a lower priority.

Public health nurses working with undocumented refugees from Central America encountered afflictions ranging from parasite infections, emotional traumas and homelessness. Magar, (1990) concluded that helping this population requires the skills of a diplomat, advocate and public health professional. Public health nurses have historically been on the front line in meeting the needs of refugees in communities worldwide. However, little nursing research has been focused on the needs of the refugees.

The purpose of a study held by (Fox et al., 1994) was to focus on the needs of the refugee group, Southeast Asia. Findings indicated that pre-migration experiences, especially violence, played an important role in health status and adaptation after settling in the United States. Since health problems are often manifested in cultural ways different from Western norms (Fox et al., 1994), the number of refugees in Western Europe has risen dramatically. Such an increase poses unique challenges for all health personnel. A study was done by (Murphy et al., 1994). This study is an assessment of the screening of 178 Bosnian refugees in Ireland. Results showed that patients with significant problems tended to visit clinics for appropriate treatment soon after arrival. A total of 92 problems diagnosed at screening, general medical 14%, psychiatric 14% and gynecological 11% were the most frequently encountered. Of the 30 problems referred, 80% were referred by a general practitioner. Deficiencies in immunizations and drug history were highlighted. Authors pointed out the need to improve future assessment studies to improve the health refugee status in Ireland.

Little is known regarding the prevalence rate of hypertension among recent Southeast Asian refugees to the United States. In a randomized, prospective study, four northern California countries with large Southeast Asian refugee populations were screened for the prevalence rates of hypertension and boarder line hypertension. A population density method based upon 1988 census data was used to screen a representative sample of subjects from each country. Criteria for hypertension came from the joint National Committee of Detection, Evaluation and Treatment of High Blood Pressure. Results of the 964 subjects who were screened showed that the prevalence of hypertension was 4.8 and 10.9 for boarder line hypertension. The relatively low

prevalence rate of this disease can be explained by the youth of this refugee population, mean age 37.6 + / - 0.36 years, as the presence of hypertension increases with chronological age (Tanji et al., 1994).

In 1991, a computerized, comprehensive epidemiological surveillance system was developed to monitor health trends in approximately 25,000 Aculdy displaced Kurds in Nowsood and Sauyas refugee camps, Baktaran region, in Northwestern Iran. In addition, a community based survey offered information unobtainable from health facilities. Weekly population movements, attack rates, point prevalence estimates and case fatality ratios were calculated, and the data was analyzed and compared. The overall crude mortality rates (CMR) in the camps under study was still 9 times higher than the reported CMR for Iraq. Health problems with very low rates (< 1/1000) population per week included the trait of Measles, Meningitis and Tetanus. However, morbidity for the most common conditions as diarrhea, skin infections, eye disease and acute respiratory infections was shown to increase at the end of the intervention, highlighting that the pressure of repatriation on refugees made them progressively worse. This article concluded that surveillance appeared to be indispensable in order for the international agencies to keep abreast of events and to safe guard refugees' rights when international attention subsides (Babille, 1994).

The process of international migration has been associated with increased levels of psychological disturbance, and recently investigators have noted the experience of post traumatic stress disorders (PTSD) symptoms among recent war refugees from Southeast Asia. A study done by Salgado et al., (1990) sought to first examine the overall impact of migration in a large sample of refugees from Central America and Mexico in terms of

symptoms related to depression, anxiety, and generalized distress. Also the authors aimed to note the existence of specific symptoms of PTSD as related to self-reported reasons for migration. Refugees were found to have overall higher levels of generalized distress symptoms when compared to non immigrants. Self-reported reasons for migration were highly related to PTSD diagnosis, with 52% of Central America war refugees in this sample meeting the (DSM)-(III criteria for the disorder).

This can be considered a needs assessment study with its importance in sensitizing mental health professions to the psychological SEQUELAE of forced migrations (Salgado, 1990).

The author Wester, (1990) studied the mental health of recently employed persons as the mental health of welfare recipients is not well understood. Among the increasing refugee population, the author said, "Many receive welfare benefits at some point." The Hmong were among those who were highly represented among welfare recipients in a several areas of the United States. He posed the question "do psychiatrists have anything to contribute toward the resolution of high welfare rates?" This question was especially relevant in refugee populations that are at increased risk for several psychiatric disorders including depression, paranoia, and adjustment disorders. This study was undertaken among 100 Hmong refugees who had been in the United States for eight years. Indices of mental health included two rating scales (the Zung depression scale and the SCLQO). These indices were compared with current welfare status and a duration of time on welfare, other comparisons with welfare included demographic characteristics, material positions, health and social problems and non occupation avocations. Results indicated

that welfare recipients showed elevated psychiatric symptoms levels, and suggestions were made to activate studies on Hmong refugees to improve their health situations.

Among the studies of health needs assessment of the refugees, was the dental carries prevalence in Vietnam's children and teen-agers in three London boroughs Todd and Gelbier, (1990) said in their study that there was over one quarter of the 20,000 Vietnams refugees residing in Britain lived in the London boroughs, of Lambeth, Lewisham and Southwork. Examination of 268 Vietnamese children showed a high carries rate in deciduous teeth and a low rate in permanent teeth. Five year olds had a mean of decay, missing and fillings (DMF) of 8.3 and none were carries free. The mean of DMF was significantly related to the length of time the children had lived in Britain. Factors affecting the severity of dental carries in young Vietnamese children were discussed and results were compared with studies on Vietnamese refugees in other countries.

Mckeivey, (1994) from the Department of Psychiatry at the Baylor Collage of Medicine in Huston Texas presented an Amerasian Vietnamese case study which was used to illustrate the complex and interactive affects of refugees status, diverse cultural traditions and dramatic life events on refugee patients' willingness and ability to share the details of their lives and in to the diagnostic and therapeutic process. The author stressed the ways in which clinicians working with such patients can increase the accuracy of data and further the development of the therapeutic alliance.

On the other hand a study conducted by Aday, (1994) from the University of Texas School of public health mentioned that the notion of risk under-lying the concept of vulnerability implied that everyone is potentially vulnerable or at risk. That is, there is

always a chance of developing health problems. The risk is, however, greater for those with the least social status, social capital, and human capital resources, to either prevent or ameliorate the origin and consequences of poor physical, psychological or social health.

2.2.2 Regional Review

2.2.2.1.Introduction

War, natural disasters and economic sanctions have catastrophic consequences on the health and well-being of nations. Studies have shown that these events have caused more mortality and disability than any major disease. War has destroyed communities and families and too often disrupted the development of the social and economic fabric of a nation. The effects of disaster and war have included long-term physical and psychological harm to children and adults, as well as reduction in material and human capital. The imposition of economic sanctions on countries has also had negative health consequences, often crippling the operation of the health sector. Assessing the full impact of sanctions on health in embargoed nations is a difficult task, as the health effects of sanctions only become clear over an extended period of time. Death as a result of wars, disasters and sanctions is simply the "tip of the iceberg". Other consequences, besides death, are not well documented and hence are not measured. Such consequences may include endemic poverty, malnutrition, disability, economic/social decline and psychological illness, to mention only a few.(United Nations, Background Paper No.5,2002).

All of the countries of the Eastern Mediterranean Region have been exposed over the past century to war, disasters or international sanctions. At present, Afghanistan, Palestine, Somalia and Sudan are experiencing long-term protracted social conflict. Palestine is being subjected to brutal and unprecedented aggression. Other countries, such as Djibouti, Egypt, Islamic Republic of Iran, Lebanon, Pakistan, Sudan and Syrian Arab Republic, are prone to natural disasters such as earthquakes, landslides, floods and drought. In addition, United Nations reports, 2002 indicated that 18 of the countries in the region are infiltrated with landmines, which dramatically impact the livelihood and productivity of communities.

As with armed conflict and natural disasters, the imposition of sanctions on countries has had a detrimental impact on the health, development and welfare of populations. During the 1990s, sanctions were imposed on Afghanistan, Iraq, Libyan Arab Jamahiriya and Somalia. The growing body of information about the adverse effects of sanctions on the health and livelihoods of the people in these countries has prompted international debate and review of the effectiveness and appropriateness of international sanctions. It is vital that more research is conducted and the results be analyzed thoroughly to assess the health and human welfare implications of sanctions in affected countries.

Natural disasters, refugee crises, drain of health personnel, economic collapse and ongoing violence are all determinants of ill health. Health indicators in certain countries of the Eastern Mediterranean Region reflect the problems inherent in trying to improve the overall health status and delivering health care under difficult circumstances. Despite lack of in-depth research and data analysis, it is clear that countries with ongoing difficult circumstances, such as Afghanistan, Palestine, Somalia and Sudan, face complex challenges. WHO must continue to invest in and advocate for health under difficult

circumstances. Moreover, ensuring immediate equitable access to basic quality health care will lay a foundation for future investments in development.

2.2.2.2 Regional Perspective

The Eastern Mediterranean Region comprises 23 countries, all of which have been exposed over the past century to war, disasters or international sanctions. At present, Afghanistan, Palestine, Somalia and Sudan are experiencing long-term protracted social conflict. Palestine is being subjected to brutal and unprecedented aggression. Other countries, such as Djibouti, Egypt, Islamic Republic of Iran, Lebanon, Pakistan, Sudan and Syrian Arab Republic, are prone to natural disasters such as earthquakes, landslides, floods and drought. In addition, United Nations reports indicate that 18 of the countries in the Region are infiltrated with landmines, which dramatically impact the livelihood and productivity of communities. Furthermore, countries such as Afghanistan, Iraq, Libyan Arab Jamahiriya, Somalia and Sudan have been subject to international sanctions and political instability for decades. Finally, endemic poverty, lack of basic health infrastructure, population upheavals and displacements, as well as the overall poor health profiles of various populations in the region, further exacerbate the adverse consequences of these determinants of ill health.

Chronic emergencies and disasters (both man-made and natural) in the Eastern Mediterranean Region have had a dramatic impact on the livelihood and the health status of communities. Disasters have threatened the lives of civilians, and disturbed their emotional and social well-being, in many countries throughout the region. Furthermore, disasters damage natural environments, destroy physical infrastructure, destabilize the social fabric of societies and paralyze economic systems. Disasters and protracted

conflicts have resulted in massive losses of technical expertise in countries, population migration and displacement, high levels of mortality and disability of vulnerable groups, marginalization of medical and aid workers and disruption of essential medical services.(British medical journal,2002,324(9):310-1).

2.2.2.3 Palestinians as Refugees in the Regional Countries.

Jordan is one of the most ethnically diverse countries in the Middle East. According to a recent survey, about 20% of the total population was born in other counties, and over 70% of those aged 50 years or more in Amman was born in Palestine (Randall and Kalaldeh, 1998). While the country includes many ethnic and nationality groups, its ethnic diversity is mainly due to the influx of Palestinian refugees during the 1948-1949 and 1967 Arab - Israeli wars, as well as the return of labor migrants in the aftermath of the Gulf war. As a result of the 1948 - 49 war, an estimated 750,000 Palestinians fled, or were otherwise expelled from their homes to seek refuge mainly in Jordan, Lebanon, the West Bank, Gaza and Syria (Morris, 1987). Two years later, Jordan annexed the West Bank making the expanded Kingdom the largest recipient of Palestinian refugees, and the Palestinian refugees became Jordanian citizens. The eruption of the 1967 war created another wave of refugees mainly from the West Bank of the Jordan River. Many of those displaced by the 1967 war were originally refugees from the 1948 war.

There are a total of 13 Palestinian refugee camps in Jordan (Khawaja, 2002). Four of the oldest camps Irbid, Wihdat, Hussein and Zarqa, were established soon after the war 1948 (UNRWA, 1998; Khawaja, 2002). The camps are quite heterogeneous in terms of infrastructural conditions, density, area, economy, and population size (DPA, 2000; Khawaja, 2002).

However, a study conducted by Marwan Khawaja from the American University of Beirut, Lebanon, examined the link between poverty and migration into and out of camps using recent (1999) household survey data on the refugee camp population in Jordan and a binominal logistic regression. The findings showed a clear clustering of poverty in the camps where about a third of households are poor. Results from several nested regression models show that in-migration is not the cause of persistent poverty in the camps. On the other hand, human capital variables, especially education, economic activity and "social inheritance", as well as demographic factors such as household headship and dependency rate have significant effects on poverty incidence.

Other than Jordan, over one million Palestinian refugees are hosted in four countries: Lebanon, Syria, Iraq and Egypt, in which their status and living conditions vary largely from one country to another.

The Palestinian refugee population in Lebanon, which stands officially at 380,000 persons, is increasingly suffering from the long lasting exile. According to Lebanese laws, refugees are not entitled to citizenship and are therefore treated as foreigners enjoying temporary hospitality of the host country. The unemployment rate among the Palestinian refugees of working age is estimated at 65% compared to 30% for the host country population. According to UNRWA, 11% of the total number of registered refugees, or 42,688 people, has been categorized as destitute. In reality this figure is much higher because it does not take into account the socio-economic situation of unregistered refugees, which is even worse.

Syria is hosting 400,000 registered Palestinian refugees; 30% of them are accommodated in ten refugee camps recognized and supported by UNRWA. In Syria, Palestinian refugees enjoy similar rights to those of Syrian nationals.

In Egypt the status of the Palestinian population differs from that in Syria and Lebanon. They are not living in refugee camps, but are scattered amidst the Egyptian population, mainly in the poor suburbs. While there are no accurate statistics on the Palestinian population in Egypt, their number is estimated to be over 80,000.

According to the Palestinian Central Bureau of Statistics, the Palestinian population in Iraq is estimated at 62,000. These refugees are not covered by UNRWA, but fall under the mandate of the UN High Commissioner for Refugees (UNHCR).

The health status of Palestinian refugees is in transition from a developing to a developed stage. Poor housing conditions, unemployment, poverty, the level of international assistance for health programs, and individual genetic susceptibility, all impact refugee health.

The rate of chronic and acute illness among refugees varies from as low as 4% to more than 40%. Chronic health problems are more prevalent among the poor and among refugees in camps. The rate is highest among refugees in 1967 occupied Palestinian Territories and in Lebanon.

Approximately 4% of refugees outside of camps suffer from long term illness, compared to 13% of refugees in the camps. Nearly half of the chronically ill suffer from severe health problems. Chronic illness among the poor in camps is about twice as high as other camp dwellers FAFO,(2002) stated that women and the poor experience more problems in mobility and physical disability.

FAFO, (2002) results showed that one in every five Palestinian refugees in Lebanon suffers from poor health and chronic health failure. Thirteen percent have a chronic problem caused by war (21% of males versus 3% of females).

Approximately 9% suffer from a severe chronic problem making it difficult to go out without help. Chronic health problems are more prevalent in the lower income bracket and the southern camps as well as among women rather than men beginning in the late 40s age bracket (FAFO, 2002).

Nearly 45% of refugees in Lebanon use UNRWA health clinics (FAFO, 2002) as compared to less than one of 30% of refugees in Jordan (FAFO 1997). One half as many refugees in Lebanon get services for free compared to refugees in the camps (FAFO, 2002).

Acute malnutrition is very rare in Jordan where less than 1% of children in Jordan camps are malnourished and around 2% are considered vulnerable (FAFO, 1997).

Also, 5% of children ages 1-3 in Lebanon are malnourished. Another 4% are vulnerable (FAFO, 2002).

Health is generally poor for children under five years of age. However, symptoms of psychological distress and mental illness are more common among women and among refugees in camps. For example one in every five Palestinian refugees in Lebanon requires medicine for psychological distress (FAFO, 2002). Women are generally more affected by mental problems than men in Jordan, with the exception of male camp refugees, and more often take medication. Female camp refugees report that they experience continuous fear more often than other women do.

Regarding occupation in Jordan more than 30% of employed Jordanian males work in public administration while only 6-7% of Palestinian refugees and displaced do so (FAFO, 1997). Results of the PCBS, (2001) showed that approximately 12% of the Syrian workforce is employed as professionals, managers and administrators compared to 2% of Palestinian refugees.

Generally, refugees living in camps report more environmental problems than refugees outside of camps especially problems related to garbage collection and lack of safe out door spaces for children. A study conducted by FAFO, (2002) show that nearly 50% of refugees outside camps of Lebanon express dissatisfaction with pollution compared to less than 40% in camps. While around 15% of camp refugees face problems in garbage disposal more than 60% of refugees outside camps face similar problems. The same study also reported that in Lebanon more than 30% of households are concerned about safety for children, while the FAFO study (2002) reported that in Jordan approximately 33% of households report concerns for safety of children and 21% with traffic.

According to education, enrollment rates among Palestinian refugees are high but tend to drop off at the secondary level due to poverty. Drop out rates appear to be lower in UNRWA schools. However, there is a substantial increase in the drop out rate among refugee students in UNRWA schools in Lebanon and Syria at the secondary level. High drop out rates in Lebanon are related to high rates of poverty. FAFO, (2002) reported that at the secondary level 21% of refugees drop out of school due to poverty, with an additional 15% in order to assist their families.

In Jordan 10% of refugees drop outs reported that they can't afford to attend school. Boys more often drop out due to lack of interest while girls more often due to marriage and social constraints FAFO, (1997) reported that the comparatively high ratio of school irregularity of children between 15-17 years in Syria was related to child employment in the labor market. However de-motivation is a particularly strong factor influencing drop out rates in Lebanon where four in ten Palestinians leave school at the lowest level due to de-motivation (Ajal Center).

An example of other Refugees in the Region:

The UNHCR estimates that up to 65,000 refugees have fled a conflict situation in the Western Sudan and crossed the border into Chad. At least two distinct caseloads have been identified, both with close ethnic and cultural ties to the host population in Chad. In the northeast, Zaghawa refugees are fleeing between Government and Sudan Liberation Movement (SLM) forces, while further south Masalit refugees are reportedly fleeing intra-ethnic hostilities. The existing caseload is currently scattered along a 500-600 kilometer-long border. Given the crudeness of the area, access is very limited. Local authorities with support from UNHCR are planning assessment programs. UNHCR has also deployed a 4 person specialized emergency team to the area to coordinate support to the refugees.

Results of the assessment study programs showed the immediate need to provide urgently needed logistical support to the Red Cross of Chad (RCC). The assessment team reported that while the health situation is at present reasonable there appears to be a very low health and sanitation awareness among some of people. This will become an issue of particular concern, should the caseload be relocated into camps and settlements? Results

of the assessment program will be used to provide the area with targeted public health interventions focused on prevention and treatment of water and sanitation related diseases, epidemic control, well coordinated with the Government, UN agencies and the NGO's present and active in the area (http://www.ifrc, org, 2003).

Toole and Waldman, (1990) said that more than 30 million refugees and internally displaced persons in developing countries are currently dependent on international relief assistance for their survival. Most of this assistance is provided by Western nations such as the United States. Mortality rates in these populations during the acute phase of displacement were extremely high, up to 60 times the expected rates.

Displaced people in Northern Ethiopia in 1985 and Southern Sudan 1988 have suffered the highest crude mortality rates. Although mortality rates have risen in all age groups, excess mortality has been the greatest in children age 1 -14. The major causes of death have been measles, diarrheal diseases, acute respiratory tract infections and malaria. Case fatality ratios for these diseases raised due to the prevalence of both protein-energy malnutrition and certain micronutrient deficiencies. Despite current technical knowledge and resources, several recent relief programs failed to promptly implement essential public health programs such as provision of adequate food rations, clean water and sanitation and Measles vaccinations and control of communicable diseases. The author said that basic structural changes in the way international agencies implement and coordinate assistance to displaced populations are urgently needed.

2.2.3 Local Review

2.2.3.1 Introduction

The population of Palestine has suffered from abject poverty, escalating conflict, occupation and military incursions for more than five decades. This ongoing lack of security and peace has had a devastating impact on socioeconomic development in Palestine. Although there has been no formal trend analysis of the health status over the past decade, much of the reported health data show an epidemiological picture of deteriorating health in the country.

According to UNHCR statistics, 4 million Palestinian refugees were living outside their country of origin in 2000. In addition, UNRWA reports that over 1.1 million refugees still live in camps throughout the West Bank and the Gaza Strip, where conditions of overcrowding and lack of access to clean water, safe sanitation and basic social services produce an overall unhealthy environment. Although there was a slight improvement in the overall health profile of Palestinians during 1995–2000, the rates of infant, child and maternal mortality are higher than those of neighboring countries such as Lebanon, Jordan and Syrian Arab Republic. The recent escalation in violence in both the Gaza Strip and the West Bank has resulted in significant increase in the mortality rates of infants, children under 5 years, and adults between 15 and 45 years. As of May 2002, the violence had resulted in over 36,522 Palestinian injuries and more than 2,195 deaths since September 2000.

The Ministry of Health of Palestine reports that over the past 2 years the health status of communities living in the West Bank and Gaza has deteriorated significantly as a direct result of denial of access to and disruption of routine health services. In addition,

medical personnel have been injured or killed trying to perform their duties and ambulances have been seized or destroyed. Clearly the disruption of routine services and programs such as environmental inspections, solid waste collection and disposal, home visits, medical transportation, vaccination campaigns, growth monitoring, antenatal care and school health programs all have adverse effects on the overall health status of Palestinians. Initial reports by the Ministry of Health and UNRWA indicate:

- Dramatic rise in the number of consultations at health facilities (by 29% in UNRWA clinics in the Gaza Strip alone).
- Increase in the number of high risk and complicated pregnancies and increase in the number of stillbirths observed (by 12.4% in the West Bank and 16.1% in Gaza Strip).
- Already short supplies of critically needed medical supplies and equipment compounded by the sudden increase in demand by emergency medical services.
- Blood shortages at hospitals.
- Limited supply of essential drugs and vaccines compounded by difficulty in replenishing supplies because of restrictions on movement of people and goods.
- Decrease in implementation of school vaccination programs by 40%.
- Increase in malnutrition rates among children below 5 years in Gaza.
- Food insecurity in a number of refugee camps.
- 32% decrease in administration of tetanus toxoid for women seeking antenatal care.

- 52% decrease in women seeking antenatal care.
- Increase in home deliveries in the West Bank of 29%.
- Lack of clean water and safe sanitation (50% decrease in sampling, testing, chlorination, monitoring and follow-up), and the high probability of epidemics.

2.2.3.2 Overview of local refugee's conditions

The Demographic survey in the West Bank and Gaza Strip includes a report on Bethlehem district. The survey was conducted in (1995) by PCBS. About 90% of houses had access to tap water. However, public sewage is connected to only 10% of the district's houses. The median age at marriage for both males (22 years) and females (17 years) is lower than that of the remaining West Bank (23 and 18 respectively). However the fertility rate was estimated to be 4.97, a lower rate than the 5.61 figure for the Refugee West Bank. The infant mortality rate was estimated at 31 per thousand births, a higher figure than Refugee West Bank which is 25 per thousand births (Pcbs, 1996: 109 pp).

FAFO conducted a comprehensive study of living conditions in the occupied territories in (1992) FALCOT. The field visit was done in a period of two months from June to July and 2,500 households were interviewed. The study sample covered Gaza Strip and West Bank including Arab Jerusalem. The study took a broad view of living conditions according to which a host of variables were employed, including demographics, health, education, work, income, housing and opinions and attitudes. Main results for Health determinant showed that more than (89%) and 102 other health services. Also, reported rates of symptoms of psychological distress were very high. Only

20% of the populations reported no symptoms of distress. Somatic illness was a strong determinant of psychological distress and when corrected for illness, the degree of distress increased slightly with age.

UNRWA's annual report for (1994) covered a year in which major development took place including the transfer of responsibility for the health care system in the Gaza Strip and West Bank from the Israeli Civil Administration to the Palestinian Authority. The document begins with a description of the overall management of UNRWA programs and personnel, and follows with the health in the Palestinian self-rule areas is described. The report also includes a review of UNRWA's activities and accomplishment in medical care services, health education and environmental health.

Endresent et al., (1997) prepared a document that presents an overview of available data on public health for Palestinian refugees living in the West Bank, Gaza, Lebanon, Jordan and Syria. Such data were available in the West Bank, Gaza, and Jordan, despite the difficulty in breaking them down according to refugee statistics. Available data showed high levels of mental health problems in the area in general, particularly among refugees. Main result showed that the health status is similar for refugees and non refugees in the West Bank and Gaza and that there was a need for better integration of services for refugees (FAFO, 1997).

A paper on the public health perspectives for Palestinian Refugees was presented by the Italian Cooperation as a basis for policy discussion in a seminar on developing the Palestine Health System. The paper discussed issues related to international support of health services for Palestine refugees in Lebanon, Syria, the West Bank and Gaza Strip. It also presented the Italian vision of the problems and

limitations of the policy formulation process by the Palestinian Authority (Public Health Perspectives, 1997).

A client-based KAP survey was conducted by UNRWA (1993) to determine which types of material health services were needed. The sample consisted of 988 ever-married refugee women between the ages of 15-44 attending UNRWA clinics in the West Bank. Results showed that more than 98% of the participants were married at time of the study. The mean educational attainment was 8.7 years of schooling. Only 4.4% of the women reported working outside the home. Over 95% of the women approved of family planning. The total marital fertility rate of the sample was 9,550 per 1000 during 1992, indicating that an average of 9.6 children would be born to a married woman during her life time. This was a sharp contrast to the respondent desired family size of 5.5 children (UNRWA, 1993)

In the UNRWA annual health report 2002 the following results were obtained in the fields of:

Health protection and promotion:

Approximately 79,000 pregnant women received antenatal care, 91.4% of whom received assistance during delivery in hospitals or at UNRWA maternities. More than 220,000 children below three years received preventive care including growth monitoring and immunization against vaccine-preventable diseases and more than 90,000 women benefited from the agency's family planning services.

• Disease prevention & control:

During 2002, complete immunization coverage against vaccine-preventable diseases was sustained, and zero incidences of poliomyelitis and neo-natal tetanus

was maintained. While the WHO target of 70% case-detection rate of smear-positive pulmonary tuberculosis could not be achieved, the cure rates were ahead the defined target of 85%.

Environmental health services:

Approximately 98% of camp shelters were connected to in-door systems, 76% were connected to underground sewerage schemes and 50 out of 58 camps were partially or fully served by UNRWA mechanized solid waste collection and disposal systems.

• Conditions in the occupied territories:

The situation as described in the report of the personal humanitarian envoy of the Secretary-General is "a crisis of access and mobility. Palestinians are subject to a variety of closures, curfews, roadblocks and restrictions that have caused a near-collapse of the Palestinian economy, rising unemployment, increased poverty, reduced commercial activities, limited access to essential services (such as water, medical care, education, emergency services) and rising dependency on humanitarian assistance. The restrictions affect almost all activities, rendering most Palestinians unable to carry out any resemblance of a normal life and subject to daily hardship, deprivations and affronts to human dignity." The growing rates of poverty, exceeding 55% in the West Bank and 70% in the Gaza Strip, have brought a significant deterioration in the health and nutritional status of the population.

2.3 Conclusion

Wars, disasters and sanctions have had a tremendous impact on the health and human security of populations in some countries in the Eastern Mediterranean Region. Natural disasters, refugee crises, drain of health personnel, economic collapse and ongoing violence are all determinants of ill health. Health indicators in certain countries of the Eastern Mediterranean Region reflect the problems inherent in trying to improve the overall health status and delivering health care under difficult circumstances. Despite lack of in-depth research and data analysis, it is clear that countries with ongoing difficult circumstances, such as Afghanistan, Palestine, Somalia and Sudan, face complex challenges. WHO must continue to invest in and advocate for health under difficult circumstances. Moreover, ensuring immediate equitable access to basic quality health care will lay a foundation for future investments in development. In the meantime, policies to reduce the likelihood of war; further promote relief and development; reduce inequalities between groups; address unemployment and discrimination; regulate national and international illicit trade; ensure adherence to internationally-agreed treaties (including international humanitarian law); and eliminate individual and community incentives to conflict are among the measures needed on the global agenda.

CHAPTER 3

Methodology

3.1 Aim of the Study

To construct a community profile for the Dheisheh Camp with emphasis being placed on selected health characteristics and behavior of the population.

3.2 Objectives of the Study

- 1. To describe the living conditions of Dheisheh inhabitants in relation to selected households' characteristics.
- 2. To examine the services utilization behavior members of the surveyed households.
- 3. To explore the general health of the surveyed population with emphasis being placed on selected communicable and non-communicable diseases.
- 4. To produce a child well-being profile including issues of education, school drop out, child labor and others.
- 5. To identify the expressed needs for services as articulated by the surveyed population.

3.3 Structure of the Study

The structure of this study is a house-to-house survey, which is an accurate vehicle for obtaining a large amount of information that was meant to provide a comprehensive profile of Dheisheh Camp.

In fact, this is a needs assessment survey that could be used to determine the most beneficial services to all Dheisheh Refugee Camp residents.

Secondly, different organizations might be willing to use this study in their effort to fulfill the needs of Dheisheh population by addressing their problems as they themselves perceive them and by getting a broader perspective through a survey of needs. This exactly was achieved through the questionnaire that was used in gathering information for this study, especially the question about the two most important services that are lacking in the camp.

3.4 Design of the Study

The design of this study is a descriptive non experimental house-to-house survey that aimed to describe and measure the dependent and the non dependent variables.

The study was conducted over a period of five months from 1st of November, 2002 until 30th of April 2003. The survey takes a broad view of living conditions, according to which an individual's living condition is defined by the ability to influence the course of the household life, especially children's lives.

The study therefore, employs a host of variables, including demographic, health, education, socio-economic conditions, infrastructure, attitudes, and child life in a way that allowed it to be comprehensive in terms of coverage.

3.5 Hypothesis

This study is a house to house survey that aims to asses and describe the health conditions of Dheisheh refugee camp households in relation to different variables that might have an impact on the health conditions.

More specifically, this study examined the following hypothesis:

1- There is no significant difference in the health conditions of camp population according to number of family members.

- 2- There is no significant difference in the health status of camp refugees according to size of houses.
- 3- There is no significant difference in the health status of camp refugees according to water source, availability and storage.
- 4- There is no significant difference in the health status of camp refugees according to toilet facilities.
- 5- There is no significant difference in the health status of camp refugees according to waste disposal.
- 6- There is no significant difference in the health status of camp refugees according to socio-economic conditions (women work), who work, place of work, and number of breadwinners.
- 7- There is no significant difference in the health status of camp refugees according to communicable diseases such as Ameba and/or Giardia.
- 8- There is no significant difference in the health status of camp refugees according to non-communicable diseases such as Diabetes, hypertension and heart disease.
- 9- There is no significant difference in the health status of camp refugees according to disability.
- 10-There is no significant difference in the health status of camp refugees according to smoking.
- 11- There is no significant difference in the health status of camp refugees according to children under 6 going to kindergarten or not going to kindergarten.
- 12-There is no significant difference in the health conditions of camp population according to children over 6 going to school or not going to school.

- 13- There is no significant difference in the health conditions of camp population according to space inside or outside the houses.
- 14-There is no significant difference in the health conditions of camp population according to activities of children after school.
- 15-There is no significant difference in the health conditions of camp population according to type of activities that mothers like their children to do.

3.6 Target Population

The target population of this needs assessment survey has been defined as "all the households" present in the "Dheisheh Refugee Camp". "All the Households" in this connection refers to all households belonging and located on the 460 dunum area of the original map of Dheisheh that had been established in 1949-1950, excluding all other households that had been established on the new expansion to the East part of the Camp near Anton's Mountain and to the South area between Dheisheh and Artas village. The expansion of the Camp started in the 1980s because of natural growth. Based on the above information the survey consists of 1321 households which included 7,009 persons and data was collected through structured interviews house by house accordingly.

3.7 Survey Techniques

- 1- It should be emphasized that being a sample survey and not a census, this study is only able to draw a picture of the living situation and relative distribution of variables. This study as a survey cannot give absolute numbers for certain variables like population, labor force, unemployment, etc.
- 2- The household information and basic data on all household members were gathered by interviewing the household wife and not other responsible adult

- household member at home at time of the visit. So there was a need to return to the households whose wives were working at time of the interview visit.
- 3- Data was collected through a questionnaire that was prepared with pre set questions that meet the different study variables. Interviews were held with the head of household to answer the study questions.
- 4- The interviewer was a community nurse who was already working with the Dheisheh Community and had trust relations that made the survey easier.
- 5- Before beginning data gathering, it was decided to test the questionnaire through piloting. Consequently, the questionnaire was tested before the start of the survey on a group of 140 household's wives who were from different education levels, different age groups and employment status as some were working women and others were housewives.
- 6- According to "body mass index" (BMI) all surveyed patients who suffered from non communicable diseases Diabetes, Hypertension, Heart disease, with (BMI) 30 and above were considered obese, after going back to their health records at the camp UNRWA health center.

3.8 Data Collection Methods

The questionnaire that was used in the survey consisted of different types of questions about a broad spectrum of factors that contribute to the quality of health in Dheisheh Refugee Camp. Among the issues covered were:

- 1- Demographic and socio-economic activities.
- 2- Income and poverty.
- 3- Health.

- 4- Environmental and Housing Conditions.
- 5- Attitudes.
- 6- Particular emphasis was given to factors of relevance for studying the youth and children education.
- 7- Child life, in relation to child labor in addition to school drop out and education.

The interviewer asked the questions and the subject provided answers, all of which were recorded on the questionnaire. Because the interviews took place inside the households, it was easier for the head of household to answer the questions without any constraints.

3.9 Pilot testing

Pilot study was done on 140 households that form approximately 10% of the total house holds.

Data from piloting was analyzed then certain modifications were done on questions related to health and diseases.

Through piloting the questionnaire, the house holds suggested including the open question that deals with their needs in the camp. The questions were put with different forms to see if we can obtain the same answers through frequencies.

3.10 Ethical Consideration

- 1- Permission of each head of household was asked by the interviewer.
- 2- A small introduction of the purpose of the study was explained for each subject.
- 3- All the gathered information was promised to be confidential and to be used only for scientific research purposes.

3.11 Definition of Concepts

The United Nation High Commissioner for Refugees (UNHCR) was established on 14th of December 1950 by the United Nations General Assembly. The Agency is mandated to lead and co-ordinate international action to protect refugees and resolve the refugee problem worldwide. It's primarily purpose is to safeguard the rights and well-being of refugees. It strives to ensure that everyone can exercise the right to seek asylum and find safe refuge in another state with the option to return home voluntarily, integrate locally or to resettle in a third country.

Refugee: A refugee is a person who "owing to a well founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion is outside the country of nationality and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country." *The 1951 convention relating to the status of refugees.*

The United Nations Relief and Works Agency for Palestinian Refugees in the Near East (UNRWA) was established pursuant to General Assembly Resolution 302 (IV) on 8th of December 1949. The Agency became operational on 1st of May 1950 with its head quarters in Beirut and began responding to immediate humanitarian needs of about 914,000 Palestinian refugees.

Palestinian Refugee: Under the UNRWA operational definition, Palestinian refugees are persons whose normal place of residence was Palestine between June 1946 and May 1948 and who lost both their homes and their means of livelihood as a result of the 1948 Arab-Israeli conflict. UNRWA's services are available to all those living in its

area of operations who meet this definition, who are registered with the Agency and who need assistance. UNRWA's definition of a refugee also covers the descendants of persons who became refugees in 1948. The number of registered Palestinian refugees has subsequently grown from 914,000 in 1950 to more than four million in 2002. and continues to rise due to the natural population growth.

A Camp: According to UNRWA's working definition, a camp is a plot of land placed at the disposal of UNRWA by the host government for accommodating Palestine refugees and for setting up facilities to cater to their needs. Areas not designated as such are not considered camps.

Displaced Person: An individual whose principle place of residence was the West Bank or Gaza Strip before 1967 and who departured during the 1967 war or was deported after the war. A Palestinian originating from the West Bank or Gaza Strip, but who resided outside the West Bank or Gaza Strip during the 1967 war and was not able to return to the West Bank or Gaza Strip after the war, is also considered displaced. This applies to workers in the Gulf or other countries, along with those who worked in Jordan and have not been able to return to their families in the West Bank or Gaza Strip as a result of the war. All descendants of these individuals are also included.

Both Refugee and Displaced: Those Palestinian refugees who left Palestine due to the 1948 war who took up residence in the West Bank or Gaza Strip and later were displaced to Jordan as a result of the 1967 War. All descendants of these individuals are also included.

Dheisheh Refugee Camp: It is situated over a hilly area of 460 dunums in the southern part of Bethlehem with closed boundaries; this area was rented from the Jordanian Government by UNRWA in 1949 – 1950 for a period of 99 years.

Internally Displaced Persons (IDPS): Those people who were uprooted from their homes and lands in their own countries such as the Palestinian refugees who are living in the West Bank and Gaza Strip and some of the Palestinians who had to move to their place of residence within the land of 1948 Palestine.

3.12 Limitation

The limitation of this survey is similar to those of all surveys of this nature:

- 1- This survey needed a lot of time and effort to be completed because of the structured interviews and having to come back to the households whose wives were working at the time of the first visit.
- 2- There had been some delay because of the political situation and curfews that had been imposed several times on Dheisheh Camp.
- 3- Sometimes, there has been lack of reliable housewives information especially answers related to income and assistance.

Despite these limitations, however, it is hoped that the analysis of the survey data will contribute new and useful insights into Dheisheh Refugee society, into its opportunities and constraints and the health concerns of its inhabitants.

CHAPTER 4

Results

4.1. Descriptive analysis of data

The total sample of this survey was 1321 households in Dheisheh refugee camp. Different variables were studied and data about different socio - economic; environmental health and children lives were collected for different analytical purposes.

(Table 1) shows the distribution of numbers and percentages of total family members and their sex categorization of the family households in the camp.

Table 1: Distribution of total, female and male family members in Dheisheh households:

Variable	categorization	number	percentage
Total family	1-7	1074	81.3
members	8-15	246	18.6
	> 15	1	0.1
Female members	0-3	1002	75.9
	4-7	314	23.8
	8-11	5	0.3
Male members	0-3	932	70.6
	4-7	375	28.4
	8-11	14	1

Table 1: Shows that the majority of households were of (1-7) members 81.3% which reflected small and middle sizes of the surveyed families, while about 19.7% were big families with members greater than 7.

Number of rooms in the surveyed houses, presented in table 2 shows the numbers and distribution of different rooms in the camp, taking into account that of the 1321 houses

that had been surveyed the number of rooms in each house was registered excecluding the kitchen.

Table 2: Distribution of rooms in Dheisheh houses:

Categorization of the	frequency	percentage
number of rooms		
1-3	800	60.6
4-6	511	38.7
7-10	10	0.7

Analysis of data in table 2 shows the following findings:

- 1. minimum number of rooms = 1
- 2. maximum number of rooms = 10
- 3. The majority of the houses are of small sizes considering that 60% of houses with only (1-3) rooms.

Also different data about the environmental conditions of the camp houses were collected and represented in the tables (3, 4, and 5).

<u>Table 3: Descriptive data of water sources; availability; and water storage of Dheisheh</u>
houses:

Variable	number	percentage
Water source		
Pipe	712	53.9
Pipe & tank	516	42.5
Others	45	3.4
missing	3	0.2
Water availability		
Always	821	62.1
(4-7)d/w	56	4.3
(1-3)d/w	105	7.9
< (1-3)d/w	339	25.7
Water storage		
Roof tank	1237	93.6
Well	1	0.1
Roof tank & well	68	5.1
Others	1	0.1
No storage	14	1.1
Longest period w/o water		
< 4 days	705	53.4
< 8 days	616	46.6

^{*} w/o: without

Table3 illustrates that53.9percentage of surveyed households depend on pipe water and42.5percentage on pipe & tankers because of the shortage of water. While 62.1% of households have always water and 25.7% have less than (1-3) days per week. The majority of them93.6percentage stores their water at roof tanks. 46.6% suffered of shortage of water less than eight days per month especially during summer.

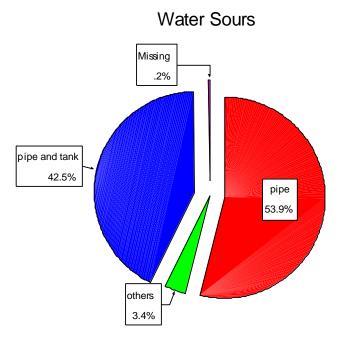


Figure 1: pie chart of percent distribution of water sources of the surveyed houses in Dheisheh camp

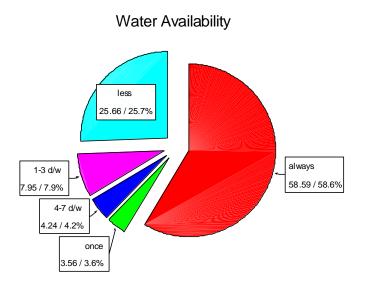


Figure 2: distribution of (water availability variables) of the surveyed houses of Dheisheh camp.

Questions related to environmental facilities in the houses were asked and data related to those questions were collected and represented in table 4.

Table 4: Descriptive data of environmental facilities of total houses surveyed in

Dheisheh camp.

Dheishen camp.		-
<u>variable</u>	number	percentage
Type of toilets		
Flush connected to	502	38
sewage system		
Flush connected to septic	38	2.9
tank		
No flush / sewage system	484	36.6
No flush / septic tank.	34	2.6
Uncovered / outside	51	3.9
others	212	16
Presence of electricity		
Yes	1313	99.4
no	8	0.6
Having refrigerator		
Yes	1223	92.6
no	98	7.4
Having washing machine		
Yes	1094	82.8
no	227	17.2

Type of toilet

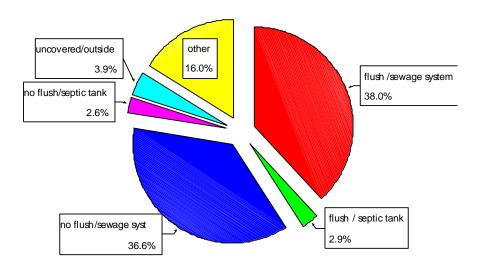


Figure 3: Pie chart represents the number and percentages of type of toilets of

Dheisheh houses

is there electirecity

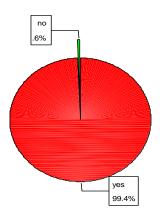


Figure 4: Pie chart represents percent of houses with and without electricity in

Dheisheh camp

The majority of the houses have electricity in their houses (99.4%) but still there few houses (0.6%) without electricity.

Table 5, represents data of how people in the camp deal with the garbage according to two different variables: the first is about the time in which the garbage left outside the houses and the second is how they dispose of it.

Table 5: Descriptive data of the environmental related behaviors of the total households surveyed in Dheisheh camp

<u>variable</u>	number	<u>Percentage</u>
Time you put garbage outside		
Evening	447	33.8
Morning	641	48.5
Time not fixed	233	17.6
How you leave garbage outside		
In plastic bags	1150	87.1
In a container	53	4.0
Just like that	3	0.2
Plastic bags & container	115	8.7

Other part of descriptive data is the data about the socio economic conditions of the different households being surveyed. Everything about the numbers and percentages of all the associated socio economic variables are found in table 6.

Table 6: Descriptive data of socio - economic conditions of the surveyed households in Dheisheh camp.

Variable:income in(NIS)	<u>Number</u>	Percentage
Average monthly income		
No answer	229	17.3
<1000	76	5.8
1000-2000	591	44.7
>2000-3000	256	19.14
>3000-4000	84	6.4
>4000-5000	50	3.8
>5000	35	2.6
Number of breadwinners		
0	113	8.6
0-3	1288	97.5
4-7	29	2.2
missing	4	0.3
Who works?		
Husband	1001	75.8
Son	120	9.1
Wife or daughter	83	6.3
No answer	117	8.9
Place of work		
Israel	364	27.6
Bethlehem	673	50.9
West-bank	101	7.6
Others	56	4.2
No answer	127	9.6
If woman work		
No	859	65
Yes	460	34.8
Missing	2	0.2
Why woman works? <u>Husband:</u>		
Has no work	11	0.8
Died	60	4.5
Divorced	8	0.6
In prison	2	0.2
Outside the country	1	0.1
Sick or disabled	104	7.9
Work to help the family	274	20.7
Missing	861	65.2
If receive social welfare		
Yes	229	17.3
No	1081	81.8
missing	11	0.8

We notice that the majority of families have the average monthly income of (1000-2000) NIS with a percentage of 44.7%. Also there are 113 households with zero breadwinners, and thus with zero income with a percent of 8.6%. Most of the breadwinners are men 75.8% and 50.9percentage work in Bethlehem district. While 34.8% are women with the majority of 20.7% of those women work to help their families either their husbands sick or disabled or cannot take the responsibility of looking after their families. In relation to social welfare 17.3% of families receive welfare.

Table 7: Types of welfare received by all the households surveyed in Dheisheh camp.

Variable	Number	<u>Percentage</u>
Receiving welfare from:		
UNRWA		
Yes	138	10.4
No	1183	89.6
Government		
Yes	48	3.6
No	1273	96.4
NGO		
Yes	1	0.1
No	1320	99.9
Zakat		
Yes	23	1.7
No	1298	98.3
Neighbors		
Yes	113	8.6
No	1208	91.4
<u>Others</u>		
Yes	3	0.2
No	1318	99.8

Table 7 illustrates that 10.4% of families receive welfare from UNRW and 8.6% of them receive from neighbors while 3.6% receive welfare from government, this data represent all types of welfare that are available at the camp, while the 17.3% of families who receive welfare from the previous question from table 6 represents the cases who are considered as hardship cases.

All the descriptive data related to the health indicators present in table 8. Health indicator variables include the common aliment consultation, insurance, and the most frequently health institution used by the families surveyed.

Table 8: Descriptive data of general health indicators of all surveyed households in Dheisheh camp.

<u>Variable</u>	<u>number</u>	<u>Percentage</u>
Common aliment being		
<u>consulted</u>		
Doctor	668	50.6
Pharmacist	9	0.7
Friends/neighbors	14	1.1
Books/TV/Magazines	28	2.1
Nurses	602	45.6
Most frequently health		
institution used		
UNRWA	1057	80
Government	74	5.6
NGO	11	0.8
NPO .	33	2.5
Private	138	10.4
Others	71	0.5
Missing	1	0.1
UNRWA insurance		
<u>Yes</u>	1277	96.7
<u>No</u>	44	3.3
Governmental insurance		
<u>Yes</u>	689	52.2
<u>No</u>	632	47.8
Private insurance		
<u>Yes</u>	37	2.8
<u>No</u>	1284	97.2
Other types of insurance		
<u>Yes</u>	27	2
<u>No</u>	1284	97.2
<u>Missing</u>	10	0.8

For most consultation for common aliments was the doctor with a percentage of 50.6 and nurses with 45.6%. For the most frequently health institution used was UNRWA

with a percent of 80, with 96.7% of almost all population depend on UNRWA health insurance.

According to the question about family members suffered from Ameba and / or Giardia, data shows clearly that from the 1321 households there were 168 households with one member at least suffered from one or both of the above mentioned enteric diseases with a percent of 12.7.

Regarding age, data shows that from the 168 households with members suffered from Ameba / Giardia there was 128 households in which the infected members were children (9.7%). Table 9 represents data related to Ameba / Giardia infection among the surveyed households in Dheisheh camp.

Table 9: Descriptive data of households infected with Ameba / Giardia in Dheisheh camp.

<u>Variable</u>	<u>number</u>	Percentage
Members suffered from Ameba / Giardia		
Children	128	9.7
Adults	40	3.0
Missing	1153	87.3
If the infected member consulted doctor?		
Yes	166	12.6
No	2	0.2
Missing	1153	87.3
If the infected member treated?		
<u>Yes</u>	161	12.2
<u>No</u>	7	0.5
<u>Missing</u>	1153	87.3

On the other hand data related to the non-communicable diseases especially diabetes, hypertension, heart disease are all documented in table 10.

Questions related to three risk factors (smoking, family history, overweight) were asked and data is summarized also in table 10.

Table 10: Descriptive data of non-communicable diseases (Diabetes, Hypertension, Heart diseases) of the surveyed people in Dheisheh camp.

<u>Variable</u>	number	Percentage
Who suffer from DM;HT;HD:		
Male	147	11.1
Female	224	17.0
Missing	950	71.9
Family members suffer from DM:		
Yes	153	11.6
No	1168	88.4
Family members suffer from HT:		
Yes	239	18.1
No	1082	81.9
Family members suffer from HD:		
Yes	92	7.0
No	1229	93
Does the person smoke:		
Yes	85	6.4
No	284	21.5
Missing	952	72.2
Family history of the disease:		
Yes	180	13.6
No	187	14.2
Missing	954	72.2
Is the person overweight:		
Yes	134	10.1
No	232	17.6
Missing	955	72.3

This study concerns with disabled persons and the effect of the presence of disabled persons on many study variables. To do so, it is very important first to show the necessary descriptive data before going insight statistical relationships of this variable with others. Such data is presented in table 11.

Table 11: Descriptive data in relation to disabilities of all households surveyed in Dheisheh camp.

<u>Variable</u>	number	Percentage
Presence of disabled persons in the family:		
Yes	163	12.3
No	1158	87.4
Number of disabled persons:		
\overline{o}	1157	87.6
1	136	10.3
2	21	1.6
3	3	0.2
4	3	0.2
missing	1	0.1
Sex of disabled persons:		
Male	89	6.7
Female	71	5.4
No answer	1158	87.7
Missing	3	0.2
Type of disability:		
Physical	<u>51</u>	3.9
Mental	<u>53</u>	4.0
Blind	<u>22</u>	1.7
Deaf/mute	51 53 22 18 19	1.4
Lose one eye	<u>19</u>	1.4
No disability	<u>1158</u>	87.7

Table 11 shows data related to description of kinds of disabilities, number and sex of disabled .Data shows that about 12.3% of the surveyed households have a disabled, while in the question related to table 20.7% of husbands either sick or disabled, which shown here that total percentage of disability is 12.3% and the rest of the 20.7% are sick

Tables 12, 13, 14, are dealing with all children aged from 0-18 years old as defined by the World Health Organization (WHO) of the surveyed household in relation to the question: Do your children have any activities outside the camp, there were 614 missed answers, while 290 answered yes and 417-answered no.

Table 12: Descriptive data of what children do after school

<u>variable</u>	Number	Percentage
Play outside		
Yes	464	35.1
No	243	18.4
missing	614	46.5
<u>Study</u>		
Yes	447	33.8
No	260	19.7
Missing	614	46.5
Play inside		
Yes	568	43.0
No	136	10.5
Missing	614	46.5
<u>Work</u>		
Yes	16	1.2
No	691	52.3
Missing	614	46.5
Watch TV		
Yes	303	22.9
No	404	30.6
missing	614	46.5
Do nothing		
Yes	9	0.7
No	698	52.8
missing	614	46.5
<u>Others</u>		
Yes	66	5.0
No	641	48.5
missing	614	46.5

The majority of mothers 43% want their children to play inside their houses. Also 33.8 % want their children to study.

1.2% of the women want their children to join a job, while 0.7% of them said that they don't want their children to do anything after school

Table 13: Descriptive data of children lives variables of all households surveyed in

Dheisheh camp.

Dheishen camp.		<u> </u>
<u>Variable</u>	<u>number</u>	<u>percentage</u>
Number of children < 6 years who go to		
kindergarten:		
0	1038	78.6
1	250	18.9
2	29	2.2
3	4	0.3
Number of children < 6 years who don't go to		
kindergarten:		
0	1010	76.5
1	290	22.0
2	21	1.6
Reason for not going to the kindergarten:		
Not yet	269	20.4
No need	3	0.2
Economical	28	2.1
Others	8	0.6
Missing	1013	76.7
Number of children over 6 who go to school:		
$\overline{\theta}$	612	46.3
1-3	490	37.1
4-6	210	15.9
7-9	9	0.7
Number of children over 6 who don't go to		
school:		
\overline{o}	1203	91.1
1	95	7.2
2	16	1.2
3	7	0.5
Reason of why they don't go to school:		
Married	14	1.1
Cannot afford	3	0.2
Must work	19	1.4
No need	16	1.2
Failed	10	0.8
Sick	7	0.5
Finished school	25	1.9
Job training	22	1.7
Missing	1205	91.2
On the other hand 25.3% of all the answ		

On the other hand, 25.3% of all the answers said that there is a place for their children to play outside the house. Also 25.8% of all the answers approve a place for children to play inside their houses.

Table 14: Descriptive data of what would mothers like their children to do after school of all the households surveyed in Dheisheh camp

Variable:	Number	percentage
I like my children to:		
Play:		
Yes	457	34.6
No	250	18.9
missing	614	46.5
Study:		
Yes	612	46.3
No	95	7.2
missing	614	46.5
<u>Learn</u>		
Yes	327	24.8
No	380	28.8
missing	614	46.5
<u>Work</u>		
Yes	6	0.5
No	701	53.1
missing	614	46.5
<u>Volunteer</u>		
Yes	22	1.7
No	685	51.9
missing	614	46.5
Do anything		
Yes	64	4.8
No	643	48.7
missing	614	46.5

Those who answered that they like their children to learn specify the subjects of learning. 7% like children to study sports; 1.1% music; 10.7% computer; 1.6% handcraft. 4.3% like their children to study other subjects while 75.3% of all the answered were missed. 22% of the total answers states that their children do have activities outside the camp, 31.6% don't, and the remaining 46.5% was missed answers.

4.2. Statistical testing of survey hypotheses:

4.2.1: Hypotheses one

There is relationship between the incidence of amebiasis / Giardiasis and different selected environmental and children related factors that include:

- 1. Number of children under 6 years old who go to the kindergarten
- 2. Number of children over 6 years old and don't go to school
- 3. The desire of the mother to let her children play outside the house most of the time.
- 4. Water storage
- 5. Water source
- 6. Water availability

The relationship between the morbidity of the above mentioned enteric diseases and each of the above sex variables separately, and results of the different relationships are summarized in the following table. Table 15.

The statistical test that is used to examine the different relationships is the Chi square test and the P value via cross tabulation.

It was supposed for example to have a relationship between the prevalence of A/G and the environmental factors that include: water storage, water availability and water sources, because the ameba / Giardia are enteric diseases that can be transmitted via the fecal oral root and that those organisms can freely live and prefer to live in a watery media.

Table 15: Chi square and the P values of the relationships of the prevalence of A/G and with different selected environmental and child related factors

<u>variables</u>	Has any member of the family				Pearson chi	P value
	suffer from A/G				<u>square</u>	
	Ν	No Yes				
	#	%	#	%		
Water availability						
Always	674	51	100	7.6	4.077	0.396
Once	40	3.0	7	0.5		
4-7 d/w	45	3.4	11	0.8		
1-3 d/w	95	7.2	10	0.8		
less than 1 day /w	300	22.7	39	3.0		
Water storage						
Rooftop tank	1083	82	154	11.7	8.249	0.083
Well	0	0	1	0.1		
Other	1	0.1	0	0		
No storage	13	1	1	0.1		
Roof tank and well	57	4.3	11	0.8		
Water source						
Pipe	614	46.6	98	7.4	1.947	0.378
Others	41	3.1	4	0.3		
Pipe and tank	496	37.6	65	4.9		
Number of children < 6						
years who go to						
kindergarten:						
	938	71	100	7.6	43.318	0.000
$\overline{1}$	190	14.4	60	4.5		
$\begin{bmatrix} 0\\ 1\\ 2\\ 3 \end{bmatrix}$	24	1.8	5	0.4		
<u>3</u>	2	0.2	2	0.2		
Number of children						
over 6 who don't go to						
school						
$\frac{\overline{0}}{1}$	1041	78.8	162	12.3	8.752	0.033
	90	6.8	5	0.4		
$\frac{2}{3}$	16	1.2	0	0		
$\overline{3}$	7	0.5	0	0		
_						
I like my children to						
play:						
Yes	377	53.3	80	11.3	7.199	0.007
no	225	318	25	3.5		

4.2.2: Hypothesis two

There is a relationship between the morbidity of diabetes among the surveyed households in Dheisheh refugee camp and the following factors, each separately:

- 1. Being smoker.
- 2. Family history
- 3. Hypertension
- 4. Presence of disabled person in the family.

<u>Table 16: Chi square and the P values of the relationships of the incidence of diabetes</u> and several environmental and health related factors

<u>variables</u>	Incidence of diabetes				Pearson Chi square	P value
	No Yes		Yes			
	#	%	#	%		
<u>Is there a disabled</u>						
person in the family:						
Yes	130	9.8	33	2.5	13.628	0.000
No	1038	78.6	120	9.1		
<u>Suffering</u> from						
<u>hypertension:</u>						
<u>Yes</u>	151	11.4	88	6.7	181.490	0.000
<u>No</u>	1017	77	65	4.9		
Suffering from heart						
<u>disease:</u>						
<u>Yes</u>	84	6.4	8	0.6	0.805	0.370
<u>no</u>	1084	82.1	145	11		
Does the person						
smoke:	41	11.1	44	11.9	4.829	0.028
<u>Yes</u>	175	47.4	109	29.5		
<u>No</u>						

4.2.3. Hypothesis three

There is a relationship between the morbidity of hypertension and several environmental and health factors.

- 1. Being smoker.
- 2. diabetic
- 3. Presence of disabled person in the family.
- 4. Heart disease.

Table 17: Chi square and the P values of the relationships of the incidence of hypertension and several environmental and health related factors

<u>variables</u>	Incidence of hypertension				Pearson chi square	P value
	Λ	No Yes		Yes		
	#	%	#	%		
<u>Is there a disabled</u>						
person in the family:						
Yes	116	8.8	47	3.6	14.479	0.000
No	966	73.1	192	14.5		
Suffering from						
diabetes:						
Yes	65	4.9	88	6.7	181.490	0.000
No	1017	77	151	11.4		
Suffering from heart						
disease:						
Yes	71	5.4	21	1.6	1.495	0.221
No	1011	76.5	218	16.5		
Does the person smoke:						
Yes	46	12.5	39	10.6	15.651	0.000
No	87	23.6	197	53.4		

4.2.4: Hypothesis four

There is a relationship between the morbidity of heart diseases and several environmental and health factors.

- 1. Being smoker.
- 2. diabetic
- 3. Presence of disabled person in the family.
- 4. Hypertension.

Table 18: Chi square and the P values of the relationships of the incidence of heart disease and several environmental and health related factors

<u>variables</u>	Incidence of heart disease				Pearson chi square	P value
	No Yes		Yes	square		
	#	%	#	%		
Is there a disabled						
person in the family:						
Yes	143	10.8	20	1.5	8.078	0.004
No	1086	82.2	72	5.5		
<u>Suffering</u> from						
<u>diabetes:</u>						
Yes	145	11.0	8	0.6	0.805	0.370
No	1084	82.1	84	6.4		
<u>Suffering</u> from						
hypertension:						
Yes	218	16.5	21	1.6	1.495	0.221
No	1011	76.5	71	5.4		
Does the person smoke:						
<u>Yes</u>	63	17.1	22	6	0.188	0.665
<u>No</u>	217	58.8	67	18.2		

4.2.5 Hypothesis five

There is a relationship between the presence of disabled person in the family and the effect of this on receiving welfare and its sources; also with the housewives working status.

<u>Table 19: Chi square and the P values of the relationships of the presence of disabled</u> <u>person and several social factors</u>

<u>variables</u>	Presence	e of disab	Pearson chi square	<u>P value</u>		
	Yes	Yes		. <u>o</u>		
	#	%	#	%		
If woman work:						
No	86	6.5	773	58.6	12.519	0.000
Yes	77	5.8	383	29.0		
If receive welfare/relief						
money:						
Yes	70	5.3	159	12.1	86.004	0.000
No	91	6.9	990	75.6		
Receive welfare from						
UNRWA:						
Yes	49	3.7	89	6.7	76.469	0.000
No	114	8.6	1069	80.9		
Receive welfare from the						
government:						
Yes	21	1.6	27	2	45.434	0.000
No	142	10.7	1131	85.6		
Receive welfare from NGO:						
Yes						
<u>No</u>	1	0.1	0	0	7.1	0.008
	162	12.3	1158	87.7		
Receive welfare from Zakat:						
Yes	7	0.5	16	1.2	7.086	0.008
<u>No</u>	156	11.8	1142	86.4		

Clearly from the data in the above table: the presence of disabled person in the family is statistically related to the work of the housewife and the welfare help and its sources.

4.3.1: Analysis of the question which is related to the major households needs as articulated by the participants:

Table 20 includes data of all answers of the open ended question which is related to the peoples needs in the camp. The table contains frequencies of answers and the main fields of concern for each answer. The highest was 784 participants answered that the major need is "improved sanitation" with five areas of concern that include:

- 1. workers coming later
- 2. workers coming twice a day
- 3. workers coming on Sunday
- 4. workers brooming the streets
- 5. Garbage containers.

Table 20: frequencies of all the answers related to the question:

What are the two most important services that are lacking in the camp? Area of concern Number " percenta frequency" ge Improved sanitation: 784 23.8% Workers coming later Workers coming twice a day Workers coming on Sunday Workers brooming the streets Garbage containers Centers for: 626 19.01% Children 267 8.11% Women - sports 93 2.8% 53 Women- awareness 1.6% Youth 47 1.4% Girls 40 1.2% Education 67 2.03% Elderly 14 0.43% Culture 0.45% 15 12 Others 0.36% 15.22% park/ playing space 501 Improved water supply 337 10.24% Improved medical services: 324 9.84% Hospital 78 2.37%

Free medicine	45	1.37%
24 th emergency service	29	0.88%
{more doctors; a pediatrician; better equipment;		
friendlier staff; full cover of referral; serve for non	172	5.22%
refugees living in the camp}		
<pre>Improved streets{asphalt; street lights}</pre>	194	5.89%
Improved sewage system{some areas not even	172	5.22%
connected}		
Improved electric supply { lines underground	163	4.95%
Social welfare: justice in distributions	85	2.58%
Work opportunities	49	1.49%
A library	46	1.37%
More kindergartens	22	0.67%
Services for elderly and handicapped	19	0.58%
Supervision	18	1.37%
Help with housing	21	0.64%
Improved schools{high school ;no shifts; no physical	99	3.0%
punishment.		
Others	32	0.97%

Others in table 20: includes the following answers:

- 1. Psychological counseling service (7)
- 2. Public transportation (9)
- 3. Rules for construction in the camp (2)
- 4. Privacy (3)
- 5. Banker (2)
- 6. Cleaning the walls (1)
- 7. Spraying against insects (1)
- 8. Pool (1)
- 9. Orphanage (1)
- 10. Traffic lights and rules (1)
- 11. Student loans (1)
- 12. Information about activities on the camp (1)
- 13. Market (1)
- 14. Trees

CHAPTER 5

Discussion

5.1 Analysis of Result:

This study is a house to house survey that aims to asses and describe the health conditions of Dheisheh refugee camp households in relation to different variables; demographic, infra-structure, socio-economic, general health, children's life, and attitudes of population. According to (Doyal & Gough 1992) needs assessment is a process of assessing how well people's basic and intermediate needs are being met.

This study, which is conducted on a target population consisting of 1321 households, also seeks to assess how well people's basic and intermediate needs are being met.

The data on family size shows that the percentage of households with family members between (1-7) represent 81.3% of the target population, while families that consist of more than 7 members represent 18.7% of that same target population.

In reference to housing conditions and house space, the data shows that 60.6% of the camp houses consist of (1-3) rooms, while 38.7% of the camp houses consist of (4-6) rooms, thus reflecting a situation of over-crowdedness in the majority of the households.

The FAFO survey results (1997) on housing space in Jordan refugee camps were somewhat similar, as 60% of the camps houses consist of (1-3) rooms and 30% consist of (4-6) rooms.

Concerning water sources and availability, data shows that 96.4% of houses are connected to pipe water, which assures the presence of clean and safe water for the

population, but the availability of water varies from one household to another. For example, water is always available for houses that are situated on the main road (Bethlehem- Hebron), these houses represent 62% of the total camp households, while for other houses inside the camp water is available to them (1-3) days per week and these represent 7.9% of the camp households.

Similar to other camps, the sewage network has many deficiencies, which is partly due to the over-crowdedness nature of the camp and sometimes due to misuse of certain dwellers, the flooding in sewage pipes is a major source of infections and contamination. The data shows that 74.4% of camp houses are connected to sewage network and 9.4% of houses are connected to septic tanks.

The camp is part of Bethlehem city and electricity is provided for all households. The data shows that 99.4% of the camp houses are provided with electricity and that 92.6% of the households have refrigerators. 82% of them have washing machines, which indicates that not all the families can afford to buy these basic equipments.

The analysis of the households' behavior in disposing their waste (garbage), the data shows that 33.8% dispose it in the evening, while 48.5% dispose it in the morning and 17.6% dispose it at different times.

Concerning the manner in which households dispose their garbage, the data shows that 87.1% of the families dispose their garbage in plastic bags, while 8.7% of them dispose it in plastic bags and containers, 4.0% dispose it in containers, and 0.2% dispose their garbage by throwing it outside.

The socio-economic conditions in the camp are no different than they are in other camps in the West Bank.

The data shows that 5.8% of the families with average monthly income <1000 NIS, and families with average monthly income 1000-2000 is 44.7% which was the highest average. And that 19.14% of families with average monthly income of >3000-4000 NIS. However, in Jordan refugee camps, 60% of households depend on their monthly income as their major source for living, while refugees in Dheisheh camp have no other source except their monthly income.

The data shows that 75.8% of families depend on the husband as the main breadwinner. 50.9% of the workers work in Bethlehem, while 27.6% work inside Israel, and 7.6% work in other areas of the West Bank.

The data shows that women in Dheisheh refugee camp represent 34.8% of the population working force there.

Among these working women, the data shows that 20.7% of them work to assist their families, while 7.9% work because their husbands suffer from sickness or a disability. 4.5% of working women are widows, and replaced the dead husband as the main breadwinners for their children, while 0.6% of working women are divorced and have to be the main breadwinners, and 0.2% of women work because their husbands are in prison.

In relation to social welfare and assistance, the data shows that 81.8% of families have no social welfare assistance and that only 17.3% of families receive social welfare assistance.

The data also shows that out of these 17.3% who receive social welfare, 10.4% of receive it from UNRWA, while 3.6% receive it from government and 0.1% from NGOs,

1.7% from Al Zakat Committees, while from relatives and neighbors the percentage is 8.6% and from other sources it is 0.2%.

Refugees in general ad camp refugees in particular depend on UNRWA health services. In relation to common ailment 50.6% of families consult doctors, while 45.6% others. And 1.4% depend on books and magazines as their major source of health advice. In reference to health insurance, the data shows that 96.7% of the families depend on UNRWA insurance, 52.2% depend on government insurance, 2.8% have private insurance, and 2% other types of insurance. In comparison to FAFO's survey results, 96% of the surveyed sample in the Falcot study consulted doctors, with symptoms and psychological distress.

The data analysis of this study shows that 80% of the Dheisheh households use UNRWA health center, 10.4% use private clinics and 5.6% of them use governmental clinics.

The survey also provides data on the incidence of intestinal parasites (Ameba and Giardia) in which 9.7% of cases were children and 3% were adults. Candler et al (1990) also studied the incidence of amebiasis among the Cambodian refugees. The highest incidence of amebic dysentery was 63/1000 (6.3%) among children less than 2 years old. This reflects that the incidence of amebiasis among Dheisheh children is higher than that of Canlder Study of Cambodian refugees, which highlights a highly important environmental problem with the camp.

In relation to the data analysis of non-communicable diseases the data shows that 11.1% of the family members suffer from Diabetes, Hypertension and heart disease collectively. While 11.6% of the family members suffer from Diabetes, 18.14% suffer

from hypertension and 7% suffer from heat disease. This survey also resembles Yeskey (1999) on the Yugoslavia refugees, they also were assessed for the same health conditions, and as a result a pharmacy was established and it dispensed approximately 7600 medications especially for hypertension and diabetic cases. The prevalence of hypertension in this survey is 18.1% which is higher than the prevalence of hypertension in Tanji et al study which was 4.8% and 10.9% for boarder line hypertension.

The relatively high prevalence of hypertension among Dheisheh refugees can be explained by the effect of bad living conditions, pressures of the political conditions, poverty and the effect of other chronic diseases such as diabetes.

This can be explained clearly where the relationship between being diabetic and having hypertension was examined, data shows that being a diabetic can be a strong risk factor for having hypertension (chi square = 181.490). The same statistical test proved the association of smoking to hypertension (P value = 0.000) that reveals smoking as a major risk factor for people to develop hypertension.

The data on disabled persons shows that 12.3% of the households have at least one disabled person in the family, and the kind of disability could be either, physical, mental, blindness, deaf, mute or others.

Some of the households have more than one disabled person. The percentage of families with two disabled persons is 1.6%, with three it is 0.2%, with four it is 0.2% and who have on is 10.3%. This highlights the need for more health intervention with these families.

Data also shows the need to design urgent and immediate social welfare programs to assess and support those disabled persons and to support their families. In this survey

a hypothesis was that having a disabled family member has a direct effect on the family life as a whole.

Data shows that the presence of a disabled person among family members is strongly related to receiving welfare from different sources (Perhaps P value ranges from 0,000 to 0.008). This can be explained that those families need more support especially if:

- 1 more than one disabled person is present in the family.
- 2 The disabled person could be the head of the household which limits his ability to work and production.
- 3 Many disabilities limit work opportunities, which increase the incidence of poverty among camp household.

Many concerns should be provided for both disabled people and their families, plans should be prepared to meet their needs and their conditions and programs should be upgraded to address their psychological needs.

The data analysis shows against what was expected by the hypothesis hat assess an association between water availability, shortage and source, as evidence of Ameba and/or Giardia infections. It was rejected as no statistical test proves it, the P value for such a relationship was (0.396, 0.083, 0.378)

For the P value 0.398, there is no effect of water availability on the incidence of Ameba or Giardia infection. The same for 0.378 there is no effect for the source of water on the morbidity of the above mentioned enteric diseases. Logically, source of water is supposed to always affect Ameba and/or Giardia infections, but such relation was rejected here, maybe because the majority of water source was either pipe only, or pipe and tank collectively.

For the P value 0.083, a slightly significant relationship that can be noticed most properly because some of the households store water in wells only or in roof-tanks and wells together.

Wells are considered as a good media for parasite reproduction, especially when wells are not maintained and are neglected.

The data analysis shows that the desire of the mother to let her children play outside was found to be strongly associated with the morbidity of Ameba, Giardia infections, having the children play outdoors may increase the possibility of their exposure to environmental components in which the parasite live and contaminate and with the sewage pipes that sometimes flood and cause contamination.

The data analysis proved that smoking is a risk factor which is strongly associated to certain chronic diseases, especially diabetes (P value = 0.028), and hypertension (P value = 0.000), this highlights the need of conducting awareness campaigns on risks of smoking on health especially among people with chronic diseases.

The Data analysis show that answers of the household in relation to the most important services that are lacking in the camp for improved sanitation which can be through changing the work schedule of sanitations workers such as; workers coming later, workers coming twice a day, workers coming on Sunday, workers sweeping the streets and collecting garbage containers. A total of 784 persons suggested these improvements which is 23.8% of total response rate.

Other lacking services included the presence of more specialized centers, such as those for women, girls, children and environmental-awareness centers. Number of persons suggested this service was 626 persons, representing 19.01% of the total response

rate.15.22% suggested playing space and parks for children. Another 10.24% suggested improved water supply, while 9.84% suggested improved medical services. 5.89% suggested improved streets, while 5.22% suggested improved sewage systems. Another 4.95% suggested improved electricity supply, other 2.58% suggested improved social welfare services. Another 1.49% suggested creating more work opportunities. 1.37% suggested a library, 0.67% suggested more kindergartens, 0.58% suggested more camp supervision programs. 0.64% suggested help with housing, 3.0% suggested improved schools and 0.97% others than all the mentioned above.

This shows the community of Dheisheh refugee camp where most of the households are reaching an understanding of their rights to having better living conditions and trying to cooperate with the local institutions to create developmental projects that provide better and safer community.

5.2: Recommendations:

- 1- Distribute study results at the national level to encourage further needs assessment surveys on other camps in the West Band and Gaza Strip.
- 2- Conduct Awareness programs for the refugees on risk factors of chronic diseases such as smoking.
- 3- Implement developmental programs on the camp which fulfill people's needs
- 4- Support the existing camp organizations in carrying out their current activities that aim to benefit the camp residents.

5.3: Conclusion:

A house to house survey was conducted using a sample of 1321 households in Dheisheh camp, attempting to assess Palestinian refugee's needs in the camp. The Data was gathered through interviewing housewives and filling out the questionnaire.

The results of the study indicate that there is no direct relationship between the source of water, its availability or shortage with the incidence of Ameba and/or Giardia infections. On the contrary with certain variables such as mother's desire of children to play outdoors. The effect of certain factors such as smoking and presence of disabled persons among family members were studied and examined with certain chronic diseases.

This study summarizes the existing information on the health and environmental life of Palestinian refugees including social conditions, demography, health conditions and health services. Despite the different types of insurances available, people depend mostly on UNRWA health services. However, Palestinian refugees in Dheisheh camp are increasingly demanding better care with improved sanitation as their main priority. This study also presents a scope on children's health issues with an emphasis on the need of conducting further research in the area of children's health in camps.

In summary, this study survey presents the basic findings of a house to house survey conducted in Dheisheh Camp community in Bethlehem district. Besides providing data on general socio-economic conditions of the community in the Camp, this study also provides data on household's present disability and type of disability with an emphasis to conduct further research on documenting the whole conditions of persons and households. In addition, it may assess their needs because it was proved in this study that

the existing of the disabled has negative effect; psychological and emotional, on family members.

Last but not least, my professional point of view concerning the results that there is an urgent need for developing activities by all concerned groups and institutions to improve the conditions of the disabled. The study lists many needs felt by the residents of the Camp, by fulfilling them, their living conditions would be improved.

APPNDIX 1:

Dheisheh Refugee Camp Survey

1. INTRODUCTION
1.1. Date
1.2. Household number/code:
1.3. Family name:
1.4. Village of origin: husband: wife:
1.5. Number of family members: inside Dheisheh: # : outside: # :
1.6. Age of the family members:,,,,,,
1.7. Relationship of interviewee to head of household: :
2. ENVIRONMENTAL CONDITIONS
2.1. Size of the house: number of rooms (except kitchen):
(If more than one family in the same house: number of rooms the family uses).
2.2. Water supply:
2.2.1. Water source: a) water pipe b) tank car c) rain d) spring e) other:
2.2.2. Availability (average): a) always b) at least once a day c) 4-7 days/week
d) 1-3 days/week e) less.
2.2.3. Longest period during the last three years without water: days.
2.2.4. Water storage: a) rooftop tank # b) well c) other d) no storage.
2.3. Toilet facilities:
2.3.1. Type of toilet: a) flush connected to sewage system b) flush connected to septic
tank c) no flush (Arabic)/sewage system d) no flush (Arabic)/septic tank
e) uncovered /outside) f) others.
2.4. Electricity/Appliances:
2.4.1. Is there electricity in the house? Yes No
2.4.2. Do you have a refrigerator? Yes No
2.4.3. Do you have a washing machine? Yes No
2.5. Waste Disposal:
2.5.1. At what time do you put your garbage outside? (Evening/morning/time not fixed).
2.5.2. How do you leave your garbage outside? a) In plastic bags b) in a container
c) just like that d) plastic bags & container.
3. SOCIO-ECONOMIC CONDITIONS
3.1. Average monthly income of the household:
3.2. Number of breadwinner(s): who:
3.2.1. If other than husband why? Husband a) Has no work b) died c) divorced d) in
prison e) outside the country f) sick or disabled g) income is insufficient to
support the family.
3.2.2. Place of work of the breadwinner(s):
3.2.3. Occupation of the breadwinner(s):
3.2.4. Level of education of the breadwinner(s):
3.3. Does the family receive any kind of financial assistance? Yes No

If yes from: a) UNRWA b) Government c)NGOs d) Zakat e) neighbor/relative
f) other
4. GENERAL HEALTH
4.1. Health care services:
4.1.1. Who do you consult <u>most</u> for common ailments? a) Doctor b) pharmacist
c) friends/neighbors d) books/magazines/TV e) others
4.1.2. Type of health care institution used. You may choose more than one answer:
a) UNRWA b) Government c) NGO d) NPO e) private f) others
* most frequently used: .
4.1.3. Type of health insurance. You may choose more than one answer: a) UNRWA
b) Government c) private d) other
4.2. Communicable diseases:
4.2.1. Has any member of the family suffered from Amoebiasis or Giardiasis in the last
three years? Yes No who:
Consulted doctor? Yes No Treated? Yes No
4.3. Non-communicable diseases:
4.3.1. Does any of the family members suffer from Hypertension, Diabetes or a heart
disease? Yes No who: age: which disease:
If yes: 4.3.2. Does the person smoke? Yes No
4.3.3. Is the person overweight? Yes No
4.3.4. Is there a family history for that disease? Yes No
4.4. Disability:
4.4.1. Is there a disabled person in the family? Yes No
If Yes: (Number of disables):
4.4.2. Sex: Male Female
4.4.3. Kind of disability: a) physical b)mental c)blind d)deaf-mute e)lose of one eye.
COUNT DEFINE LIFE
5. CHILDREN'S LIFE
5.1. Do your children under 6 go to kindergarten? Yes (#) No (#)
5.1.1. If no: why not: a) not yet b) no need c) economic reason d) others
5.2. Do all your children over 6 go to school? Yes (#) No (#)
5.2.1. Those don't go: why not: a) married b) can't afford c) must work d) no need
e) failed f) finished school g) job training.
5.3. Is there space for your children to play at home? 1) Inside: Yes No
2) Outside: Yes No
5.4. What do your children do after school? a) play outside b) play inside c) study
work e) watch TV f)hang around g)other .
5.5. (Only for mothers) What would you prefer your children do? a) Play b) study for
school c) learn a skill outside school d) work for money e) volunteer f) do anything.

6. OTHERS6.1. What are in your opinion the two most important services that lack in Dheisheh Camp?

5.6. Do your children take part in activities outside the camp? Yes No

APPEDIX 2:

استمارة مسح صحي لمخيم الدهيشة

المقدمة	.1	
يخ:	التار	
ر االرقم المتسلسل للأسرة	الرمر	
الأسرةا	إسم	
ة الأصل: للزوج للزوجة	البلد	
أفراد الأسرة: المقيمين داخل المخيم المقيمين خارج المخيم	775	
(في حال إقامة أكثر من أسرة داخل نفس المنزل: عدد الأفراد + عدد الأسر		
أعمار أفراد الأسرة		
علاقة المشارك بالاستمارة برب الأسرة		
<u>الظروف البيئية:</u>	.2	
حجم المنزل، يتمثل بعدد الغرف بإستثناء المطبخ	2.1	
(في حال إقامة أكثر من أسرة داخل نفس المنزل: عدد الغرفة المخصصة لكل أسرة)		
میاه جاریة	2.2	
مصادر المياه	2.2.1	
أ. مياه بلدية ب. صهاريج ماء ت. مياه الأمطار ث. مياه ينابيع ج. غيرها		
توفر المياه (معدل)	2.2.2	
أ. بشكل دائم ب. على الأقل مرة في اليوم ت. $4-7$ أيام في الأسبوع ث. $1-3$ أيام في الأسبوع		
ج. أقل من ذلك		
أطول فترة إنقطاع للمياه خلال الثلاث سنوات الماضية: يوم	2.2.3	
تخزين المياه	2.2.4	
أ. خزانات مياه (عددها:) ب.بئر ت. غيرها ث. لا يوجد		
مرافق صحية	2.3	
نوع المرحاض	2.3.1	
أ. مرحاض إفرنجي مشبوك بشبكة المجاري العامة ب. مرحاض إفرنجي مشبوك بحفرة امتصاص		

ت. مرحاض عربي مشبوك بشبكة المجاري العامة ث. مرحاض عربي مشبوك بحفرة امتصاص

- 2.4 التجهيزات الكهربائية
- 2.4.1 هل يوجد كهرباء في المنزل نعم لا
- 2.4.2 هل يوجد ثلاجة في المنزل نعم لا
- 2.4.3 هل يوجد غسالة في المنزل نعم لا
 - 2.5 التخلص من النفايات
- 2.5.1 في أي وقت تنقل النفايات خارج المنزل: -صباحاً مساءً الوقت غير محدد
 - 2.5.2 كيف تتركاي النفايات في الخارج

أ. في أكياس بلاستيكية ب. في الحاوية ت. كما هي ج. أكياس بلاستيكية داخل حاوية

3. الأوضاع الاقتصادية-الاجتماعية

- 3.1 معدل الدخل الشهري للأسرة
 - 3.2 عدد المعيلين في الأسرة
- 3.2.1 في حال كون المعيل شخص آخر غير رب الأسرة (الزوج), لماذا؟ أ. لا يعمل ب. متوفٍ ت. مطلقة ث. معتقل ج. مقيم خارج البلاد ح. مريض أو لديه إعاقة تمنعه من العمل خ. العمل من أجل مساعدة المعيل
 - 3.4 هل تحصل الأسرة على أية نوع من المساعدة المادية: نعم لا في حال (نعم) من:
 - أ. وكالة الغوث ب. الحكومة ت. مؤسسات غير حكومية ث. لجنة الزكاة ج. جيران وأقارب ح. غير ذلك

4. الصحة العامة

- 4.1 المراكز الصحية
- 4.1.1 لمن يتم اللجوء في حال الحاجة لاستشارة طبية
- أ. طبيب ب. صيدلي ت. أصدقاء وأقارب ث. كتب ومجلات وتلفاز ج. غير ذلك
- 4.1.2 نوع المركز الصحي المستفاد منه (يمكنكم اختيار أكثر من إجابة) أ. وكالة الغوث ب. الحكومة ت. مؤسسة غير حكومية ث. مراكز تابعة لأطر سياسية
 - ج. مراكز خاصة ح. غير ذلك
 - (الأكثر استخداماً)
 - 4.1.3 نوع التأمين الصحي (يمكنكم اختيار أكثر من إجابة) أ. وكالة الغوث ب. الحكومة ت. قطاع خاص ث. غير ذلك 4.2 الأمراض السارية

4.2.1
4.3
4.3.1
4.3.2
4.3.3
4.3.4
4.4
4.4.1
4.4.2
4.4.3
:1-11 <i>=</i>
<u>5. الطة</u> 1. ح
5.1
5.2
3.2
5.3
٠.٠

- 5.4 كيف يقضي أطفال الأسرة وقتهم بعد الدوام المدرسي؟ أ. يلعبون بالخارج ب. يلعبون بالداخل ت. يدرسون ث. يعملون ث. يتسكعون ج. غير ذلك
- 5.5 ما هي رغبتكِ لكيفية قضائهم لوقتهم؟ أ. اللعب ب. الدراسة ت. تعلم مهارة خارج المدرسة ث. العمل من اجل المال ج. التطوع د. لا شيْ
 - 5.6 هل لأطفال الأسرة نشاطات خارج المخيم؟ نعم لا
 - 6. أذكر/ي أهم اثنتين من الخدمات التي يجب أن تتوفر في المخيم؟

APPENDIX 3:

أسماء القرى المدمرة التي ينتمي إليها سكان مخيم الدهيشة Original destroyed villages of Refugees living in Dheisheh

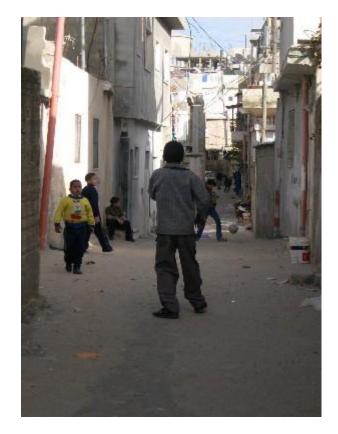
-]	خلدة – khulda
-2	Al-Joura – الجورة
-3	Kassla – کسلا
-4	خربة اللوز – Khirbet Al Lawz
-5	Lifta – انفتا
-6	المالحة – Al-Maliha
-7	Al- Qabu – القبو
-8	راس أبو عمار – Rass Abu Ammar
-9	صرعة- Sara'a
-1(صطاف -Sattaf
-11	صوبا – Souba
-12	السفلي – Al-Soffla
-13	خربة النتور – Khirbet Al Tannour
-14	الولجة - Al-Walaja
-15	Al Burayj – البريج
-16	دير أبان – Dair Aban
-17	دير الهوى – Dair Al Hawa
-18	دير الشيخ – Dair Al Sheikh
-19	دیر رفات – Dair Rafat
-20	دیر یاسین – Dair Yassin
-21	Ishwa – إشوع

- Iraq Al Manshiyah عراق المنشية 22
 - Essleen عسلين 23
 - Jrash جراش 24
 - 11lar − علار 25
 - Artouf −عرتوف −26
 - Ein Karem عين كارم 27
 - Beit Itab بیت عطاب 28
 - Beit Mahssir بیت محسیر –29
 - -30 عجور عجور
 - Beit Nattif − بيت نتيف −31
 - Beit Jibreen بیت جبرین –32
 - Al- Dawaymeh الدوايمة 33
 - Deir Al Dubban دير الدبان 34
 - Kidna کدنا –35
 - Mghaliss مغلس 36
 - Tel Al Safi تل الصافي 37
 - Zakariah زکریا 38
 - Zikreen زکرین –39
 - -40 قطرة − Qattra
 - Al- Qasstina القسطينة 41
 - Tel Il Turmous تل الترمس 42
 - Al- Falouja الفالوجا 43
- Al- Majdal (Ashkelon) المجدل –44
 - Al-Qubaibeh القبيبة 45
 - Al- Teena التينة –46

APPENDIX 4:



Young students from Dheisheh UNRWA girl's school.



Children play in the alleys of the camp.⁴

 $^{^4\,}$ Source Ibdaa cultural center- Dheisheh camp. Date 3-2003.



A child working in the construction of his house.



View of the camp streets.

² Source Ibdaa cultural center- Dheisheh camp. Date 3-2003.



Other views of the camp streets.





Some of Dhiesheh women buying vegetables. 8

-

³ Source Ibdaa cultural center- Dheisheh camp. Date 3-2003.



A woman selling vegetables



Hard living conditions.

-

 $^{^{\}rm 4}$ Source Ibdaa cultural center- Dheisheh camp. Date 3-2003.



No comment.



View for one of the camps houses.

-

⁵ Source Ibdaa cultural center- Dheisheh camp. Date 3-2003.



General view of the camp.



Overcrowded housing.

⁶ Source Ibdaa cultural center- Dheisheh camp. Date 3-2003.

REFERENCES:

- Aday, L.A. (1994). University of Texas School of Public Health, Houston 77225.
 Annual –Review of Public Health; 15487-509
- Ambassador Dr Mahmoud Karen, (1998) "explanation of vote by the delegation
 of the Arab republic of Egypt on the resolution on anti-personnel landmines"
 Egyptian ministry of foreign affairs, policy document.
 American Journal Board –FAM-Pract, 7, (2), 105-9.
- Andersson N, Da Sonsa P, Paredes S. Socialcost of land mines in four countries: Afghanistan, Bosnia, Cambodia and Mozambique. British medical journal, 1995, 311(1001):718-721.
- Annual report 2001, Ministry of health. Palestinian National Authority, 2002
- Babille, M. (1994). Disasters. Instituto Superiore di Sanita, Rome, Italy, 18(1), 58-75.
- Badil Resource Center for Palestinian Residency and Refugee Rights. (2003).
 Survey of Palestinian Refugees and Internally displaced persons in 2002.
- Badil resource Center for Palestinian Residency and Refugee Rights. (2001). the Right's of Return. A durable solution for Palestinian refugees.
- Badil resource Center for Palestinian Residency and Refugee Rights. (2002).
 UNHCR "Palestinian Refugees durable Solution. Brief issue, NO (7).
- Badil resource Center for Palestinian Residency and Refugee Rights. (2001).
 Palestinian Refugees and the right's of Return and International law and analyses.
 Brief issue NO (8).
- Baughan, D.M., Pickwells. Bartlone, J., Wong, S. (1990). Emotional and Physical dysfunction of Cambodian Refugees. Journal of Family-Practices, 30(5), 565-8.
- Bhutta. ZA. Children of war: the real casualties of the Afghan conflict. British medical journal, 2002.324(7333):349-52.
- Borderline C. coping with the humanitarian impact of sanctions: an OCHA
 perspective. New York. United Nation Office for the Coordination of
 humanitarian Affairs. 1998.

- Bradshaw. (1972). The concept of social need. New Society 30 March 1972.
- Candler. (1990). Southeast Asian. Journal of Tropical-Medicine-Public Health, 21(4), 574-9.
- Doyal, L and Gough, I. (1992). A Theory of Human Need. Hampshire and London: Macmillan Press Ltd.
- Elias, L.J., Alexander, B.U., Sockly, T. (1990). Role of Epidemiological Surveillance and investigation in the control of infectious diseases in long term refugee camp. American Journal of Public Health, 80 (7), 824-8.
- FAFO, institute for applied social science. (1993). Falcot, Summary of a Survey of living conditions of the Palestinian society.
- FAFO, institute for applied social science.(1997). Living conditions among Palestinian refugees and displaced in Jordan. FAFO report 237.
- FAFO, institute for applied social science. (2002). Living conditions among Palestinian refugees and displaced in Jordan. FAFO report 357.
- Fox, P.G., Gowell, J.M., Montgomery, A.C. (1994). Public Health Nursing, 11(3), 195-201.
- Garfield R. the impact of economic sanctions on health and well being. Relief and Rehabilitation Network. London, Overseas Development Institute, November 1999.
- Goude, C.B., Gyork, T.W. (1990). Canadian Journal of Public Health, 81 (3), 191-5.
- Health impact assessment: a comparative assessment of the impacts of the current crisis on health and health. System delivery in the west Bank and Gaza A Joint initiative of the Palestinian Ministry of health and the World health Organization, August 2001 (unpublished report available from the Emergency and Humanitarian Action Unit, WHO Regional Office for the Eastern Mediterranean, Cairo).
- Impact of the UN sanctions against Libya Excerpts from the report transmitted to the Secretary-General by the Libyan Mission to the UN, 1996.
- In galls j. "smart" sanctions on Afghanistan: the real target in peace, as Afghans suffer, Z magazine, March 2001.

- Institute of Public Health of Serbia, Institute of Public Health of Montenegro,
 United Nations Children's Fund,. Multiple Indicator Cluster Survey, Federal
 Republic of Yugoslavia. (1996)
- Knowledge, Attitude and Practices, Survey of Palestinian Refugee Women in the West Bank, Jerusalem: UNRWA, 1993: 40pp>
- Kuwaiti ministry of planning, statistics and information sector, edition 34, 1997.
- Landmine Monitor Report 1999. available at: http://wwwicbl.org/im/
- Landmine monitor report 2000. Iran: key developments since March 1999. Available at: http://www.icbl.org\\im\.
- Levy BS, Sidel VW, eds. (1997), War and public health. New York, oxford university press.
- Machel G.(2000) the impact of armed conflict on children: a critical review of progress made and obstacles encountered in increasing protection for waraffected children. Report presented to the international conference on waraffected children.
- Magar, V. (1990) Nursing Outlook, 38 (5), 239-42.
- Ministry of Health –HMIS. (2001). the Status of Health in Palestine 2000: Annual Report. Ramallah: Ministry of Health.
- Mooney G. (1994). Key Issues in Health Economics. Hemel Hempstead: Harvester Wheatsheaf.
- Murphy, A.W (1994), Ireland medical Journal, 87 (6), 174-5.
- Murry CJL et al. armed conflict as a public health problem. British medical journal, 2002, 324(9): 346-9.
- Natural disasters and sustainable development: understanding the links between development, environment and natural disasters. Background paper no. 5, department of economic and social affairs. New York, united nations, 2002.
- Noji EK, Ed. (1997) The public health consequences of disasters. New York, oxford university press.
- Palestinian Central Bureau of Statistics. (1996). Demographic Survey for the
 West Bank and Gaza Strip: Preliminary report 1996. Ramallah, Palestine., 109pp

- Palestinian Central Bureau of Statistics. (1999). Secondary Health Care Status in the Palestinian Territories: Preliminary Report 2000. Ramallah.
- Palestinian Central Bureau of Statistics. (2000). The Health Survey (2000):
 Main findings: Executive Summary Ramallah, Palestine.
- Picken C and St. Leger S (1994). Assessing Health Needs Using the Life Cycle Framework. Buckingham. OUP.
- Popal G. landmines situation in the EMR. Paper presented to the 16th meeting of the regional director with WHO representatives and regional office staff, 27 June-1 July 1999, Alexandria, Egypt.
- Public Health Perspectives for Palestine Refugees: Technical Justification, Italian cooperative, Rome, January 1997: 15pp.
- Robinson J and Elkan. (1996) The Management of Diabetes in Adolescents and young adults: a preliminary care study. Journal of Clinical Nursing 4: 249-265.
- Robinson, J., Elkan, R. (1996). Health Needs Assessment. Theory and Practice (Churchill Livingstone.) Department of Nursing and Midwifery Studies U.K.
- Salgado, D.S. Corvantesrc., Padll, AM. (1990) Acta-Psiguiatr-Psicol –AM-Lat, 36-(3-4), 137-145.
- Schriever, S.H. (1990) Journal of Palliative Care, 6 (1), 42-9.
- Stewart F, (2002) root causes of violent conflict in developing countries. British medical journal, 2002, 324(9):310-1.
- Survey by the landmines struggle center (Cairo) covering the period of 1 January 1998 to 1 January 2000 in the two main mined areas in Egypt and other governorates next to those areas.
- Tanji, J.L. Arevalo, J.A. Paleischeskey, M., Leel, Akalde. (1994).
- The convention on the rights of the child. The UN and human rights: a background note on human rights in general. 1990. available at: http://www.unicef.org\crc\crc\htm.
- The Impact of sanctions: a study of UNICEF'S perspective. Consultant report February 1998.
- Thonnean, P., Gralton, J., Desrosiers, G. (1990), Canadian Journal of Public Health, 81 93), 182-6.

- Todd, .R, Gelbiers. S (1990) Prevalence of Dental Carries in Vietnamees Children. "Journal of British Dentists, 6, 168.
- Toole, M.G., Waldman, R.G. (1990), Gama. 236 (24), 3296-3302.
- UNICEF. A child rights guide to the 1996 mines protocol. Available at: http://www.unicef.org\landmine.
- United nation relief and works agency (UNRWA) for Palestinian refugees in the near east, Annual Report 2002.
- United Nations mine action service (UNMAS). Joint assessment mission report; Jordan, June 1999.
- United Nations mine action service, executive summary; Yeman assessment mission report. 1998.
- United Nations. (2001). Report of the Commissioner General of the United Nations Relief and Work Agency of Palestine Refugees in the Near East. General Assembly official records fifty- sixth session Supplement. No. 13 (A-56-13).
- UNMAS, joint assessment Mission Report, Lebanon, 7 June 1999.
- UNRWA (2000). Statistical Data on Palestinian Refugees, Palestine.
- UNRWA (2001). Annual Health Report. UNRWA Health Department.
- UNRWA (2002) Annual Health Report. UNRWA Health Department.
- UNRWA Emergency Appeal for 2002.
- UNRWA, (1986): A Brief History "1950-1982" "United Nations Relief and Work Agency of Palestine Refugees" Headquarters in Vienna International Center, Austria.
- UNRWA. (1994) Guide to UNRWA: 10.
- Vulnerability and humanitarian implications of UN Security Council sanctions in Afghanistan. 2000.
- Vulnerability and international health response in the West Bank and Gaza Strip: an analysis of health sector, Jerusalem, World Health Organization, 2001.
- Westermeyer, J., Callies, A., Neider. (1990), Journal of Neuro-Mental Disorders, 178 (S).
- WHO Afghanistan, Annual Report 2001.

- WHO Strategy in the Afghan crisis, November 2001-March. 2002. jointly
 prepared by the Regional Office for the Eastern Mediterranean, Regional Office
 for Europe, Division of Emergency and Humanitarian .Action, Who
 headquarters.2001.
- Williams A (1993) Economics, Society and Health Care Ethics, p 829-842. In
 Gillon Rand Lioyd A Principles of Health Care Ethics. Chiclester: Wiley.
- World Health Organization (WHO). (2002). World Health Surveys. Available http://www.who.int/whs
- World health Organization. Violence and -injury pervention/landmine/puplicheath.htm.
- Yeskey, K.M.D. (1999) Assessment of Health Status among Kosovo Refugees.