



**United Nations Relief and Works Agency
For Palestine Refugees in the Near East (UNRWA)**



**ANNUAL REPORT
OF THE
DEPARTMENT OF HEALTH**

2004

Contents

	<u>Page</u>
• Message from UNRWA Commissioner-General	(iii)
• Foreword by UNRWA Director of Health	(iv)
• Executive Summary	(v)
• Demographic and epidemiological profile of the Palestine refugee population	1 - 6
• Programme management	7 – 20
• Programme of emergency humanitarian assistance in the occupied Palestinian territory	21 – 30
• Medical care services	31 – 44
• Health protection & promotion	45 – 76
• Disease prevention & control	77 – 90
• Environmental health	91 – 96

Annexes

Fact sheet

Abbreviations

Senior staff of the Department of Health



Message from UNRWA Commissioner-General

Having reviewed the annual report of the Department of Health for the year 2004, I was impressed by the amount and quality of work accomplished in spite of the modest resources allocated to the health programme by all regional and international standards.

The year 2004 brought about new challenges and placed additional demands on all Agency programmes including preparations for the UNRWA/Stakeholder Geneva Conference on meeting the humanitarian needs of the Palestine refugees, preparation of the medium term plan for the period 2005-2009, preparation of the programme of work for the biennium budget 2006-2007 and responding to the humanitarian crisis that has been ongoing since September 2000 in the occupied Palestinian territory.

In spite of these demands and challenges, the health programme was able to sustain and improve core programme activities, undertake a series of self-evaluations and health services research, and pursue reforms including refinement of its intervention strategies, development of management information systems and investment in capacity building.

The Agency's health programme had traditionally been an example on how properly managed health care systems could achieve notable outcomes with modest expenditure by choosing effective and affordable interventions.

However, it should be realized that the capacity of the health care system has been stretched to the limits and unless additional resources could be made available, little progress should be expected in addressing priority needs that were overtaken by other competing priorities.

A handwritten signature in black ink, appearing to read "Peter Hansen".

Peter Hansen

March 2005

Foreword

During the last few years, the health programme continued to operate under extremely difficult circumstances of rising costs, rising expectations and limited resources. Changes in the demographic and epidemiological profile of the refugee population have been associated with the arrival of the whole group of noncommunicable diseases on top of the persisting threat of communicable diseases and nutritional deficiencies. The limited financial and human resources allocated to the programme continued to thwart our attempts to expand health infrastructure of primary facilities or to offset excessive workloads.

In addition, the ongoing crisis in the occupied Palestinian territory since September 2000 continued to overtax the health care system.

These new emerging needs and priorities required that the health programme should adapt its strategic approaches to cope with changing situations in order to preserve the sustainable investment achieved in primary health care and prevent breakdowns in service delivery and quality.

In spite of these challenges, the health programme was able to make tangible progress during 2004 as measured by the notable outcomes of its maternal and child health and family planning services, disease prevention and control activities and its contributions to sustainable developments in refugee camps.

This progress was made possible because of the heavy investment in staff development and capacity building, development of appropriate planning and evaluation mechanisms and monitoring system performance by close follow-up on implementation of the approved intervention strategies and planned activities under each programme component.

It is readily acknowledged that major challenges still persist and that new needs and demands will undoubtedly emerge. Nevertheless, I am confident that with the support of the international community, the programme will address these challenges within the means that could be made available.

I take pleasure in transmitting this report to Mr. Peter Hansen, UNRWA Commissioner-General and Dr. H.A. Gezairy, the Regional Director of the World Health Organization, Eastern Mediterranean Office, whose constant encouragement and support had assisted my colleagues and myself to maintain the tireless efforts to promote the health status of the refugee population and contribute to their wellbeing and future development.

Acknowledgment is readily made of the key role played by the former Directors of Health in the development of programme policies and strategic approaches over five decades, as well as of the efforts of the dedicated UNRWA health staff.

Dr. Fathi Mousa
WHO Special Representative
& Director of Health, UNRWA

March 2005

EXECUTIVE SUMMARY

The Annual Report of the Department of Health of the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) for the year 2004 comprises a chapter on the demographic and epidemiological profile of the Palestine refugee population, a chapter on programme management, a chapter on the programme of emergency humanitarian assistance in the occupied Palestinian territory, and four chapters describing the progress achieved under core programme activities, namely medical care services, health protection and promotion, disease prevention and control and environmental health services. Each chapter starts with defining programme objectives followed by a brief description of programme activities and full account of the progress made during the year. The Agency provided comprehensive health services to the registered Palestine refugees in Jordan, Lebanon, Syrian Arab Republic, Gaza Strip and the West Bank at a budget of USD 62 million. Services were provided through a network of 125 primary health care facilities, outsourced secondary care at governmental and nongovernmental hospitals and environmental health services in camps.

Demographic and epidemiological profile of the refugee population. By the end of 2004 the total number of Palestine refugees registered with UNRWA was 4.2 million of whom 1.6 million (38.6 per cent) were in the occupied Palestinian territory of Gaza Strip and the West Bank, while the remaining 2.6 million were registered in Jordan, Lebanon and the Syrian Arab Republic. Of the total registered refugees less than one third (29.6 per cent) only lived in camps.

The demographic profile of the refugee population is that of a young population with 39.4 per cent below 18 years of age (48.3 per cent in Gaza Strip), and 24.6 per cent women of reproductive age with no gender disparities in the population structure. The growth rate of the registered population was 2.3 per cent.

The epidemiological profile of the refugee population is characterized by increased morbidity, disability and mortality from noncommunicable diseases such as diabetes mellitus and cardiovascular diseases, which come on top of communicable diseases that survived the 20th century. In addition, the prevalence of psychosocial problems and micronutrients deficiencies among children and women of childbearing age is high, especially in the occupied Palestinian territory. This double burden of disease continues to overtax the scarce Agency resources.

Programme management - The Chapter provides information on the organization structure of the health programme, human and financial resources allocated to the programme and describes the progress made towards development of human resources for health, development of appropriate information systems and conduct of self-evaluations to assess system performance. The Chapter also provides information on external cooperation and partnerships with the Host Authorities, United Nations organizations and nongovernmental organizations. In 2004 the health programme employed more than 3,700 staff in the various professional and support categories at an average expenditure of less than USD 20 per user, all inclusive of medical care, food aid and environmental sanitation which is very cost-effective by any regional or international standards.

Programme of emergency humanitarian assistance in the occupied Palestinian territory - The chapter describes the impact of the humanitarian crisis in the occupied Palestinian territory on the socio-economic, health and nutritional conditions of the population as well as the impact of access problems on service delivery and quality. The chapter also provides information on the Agency emergency interventions comprising food aid, cash and in-kind assistance, employment generation, emergency medical care, and reconstruction and repair of conflict-damaged infrastructure. Under emergency health, additional medical supplies were made available to meet the increased demand on the Agency medical care services and a programme of psychological counseling and support was implemented, both in Gaza Strip and the West Bank. Arrangements were made to serve population affected by access problems in the West Bank including maintaining the services of five mobile medical teams, and expanding the scope of hospitalization schemes.

Since October 2004, UNRWA requested funding at USD 739.2 million through its emergency appeals and received USD 399.2 million.

Medical care services - The chapter provides information on the progress achieved, in upgrading and expanding health infrastructure of primary care facilities, the trends in utilization of diagnostic and curative medical care services including out-patient care, hospital care, oral health, laboratory services and pharmacy operations.

The chapter also outlines the results of the studies conducted to assess workloads and productivity of laboratory and oral health services, cost-benefit analysis of hospital services and trends in prescribing antibacterial medicines.

During 2004, UNRWA health personnel attended to 8.2 million medical consultations and more than 600,000 dental consultations. Workloads continued to be exceptionally high with an Agency-wide average of 112 consultations per doctor. In addition, more than 62,000 patients were assisted through UNRWA hospitalization schemes.

Health protection & promotion - The chapter describes the progress achieved under the various programme components including expanded maternal health and family planning services, surveillance of infant, child and maternal mortality, school health services, nutrition and psychosocial support. The chapter also provides information on the efforts exerted to improve data collection and management, assess system performance and measure outcomes of care as well as information on the main findings of the anaemia survey which was conducted in the five Fields of the Agency's area of operation among preschool children and women of reproductive age, as well as information on the findings of a study on adolescents' knowledge and attitudes towards family and reproductive health and information on the joint activities and special programmes pursued in collaboration with the Host Authorities, United Nations Organizations and NGOs. During 2004, the Agency provided antenatal care to approximately 85,000 pregnant women representing 68.7 per cent of the expected pregnancies among the registered refugee population, as well as, family planning services to more than 100,000 women and regular care and monitoring to approximately 235,000 children 0-3 years of age.

Disease prevention & control - The chapter provides information on incidence trends of communicable diseases, immunization coverage, disease outbreaks and joint immunization campaigns implemented in collaboration with the Ministries of Health and

UNICEF. Zero incidence of poliomyelitis and neonatal tetanus was maintained and immunization coverage was close to complete. During 2004, a large-scale outbreak of mumps took place in northern areas of the West Bank, which spread out to other districts and did not subside by year-end. UNRWA also participated in a national immunization campaign against measles in collaboration with the Ministry of Health and UNICEF.

The chapter also provides information on the Agency' strategic approach for prevention and control of noncommunicable diseases, the burden of these diseases and the outcomes of care, in terms of control status, complications and mortality.

More than 121,600 patients suffering from diabetes and/or hypertension received regular care and monitoring at UNRWA primary health care facilities, of whom more than two thirds were women.

Environmental health services - The chapter describes the progress achieved in the sub-sectors of water, sewerage and drainage and solid waste management through planning for and implementing developmental projects to improve camps' infrastructure, in particular, the progress achieved under the special environmental health programme in Gaza and the progress in implementation of funded projects in Lebanon and Syria Fields. By the end of the year 51 out of 58 camps Agency-wide were connected to municipal water networks, 44 served by underground sewerage systems and 41 served by UNRWA mechanized refuse collection and disposal equipment. However, the conditions of water and sanitation remains particularly poor in refugee camps in Gaza Strip and Lebanon.

The report ends with a Fact Sheet providing data on demographic indicators, UNRWA's health infrastructure, budgetary and human resource indicators, health status indicators, indicators of coverage with primary health care as well as performance indicators.

Conclusions and future direction:

- The programme is very cost-effective. UNRWA spend on health is half the minimum reckoned by WHO for meeting basic health needs.
- The widening disparity between UNRWA and Host Authority standards over the last few years affect the quality of care and limit the Agency's ability to address unmet needs.
- Subject to availability of additional financial and human resources, future priorities comprise:
 - Preserving the sustainable investment achieved in primary health care with special emphasis on women's and children's health and disease prevention and control,
 - Addressing priority unmet needs including early detection and management of disabilities and cancers,
 - Promoting the psychosocial wellbeing of refugees,
 - Combating micronutrient deficiencies and,
 - Contributing to sustainable development in refugee camps.



Mr. Peter Hansen
Commissioner-General
UNRWA

Dr. H. Gezairy
Regional Director
WHO/EMRO

Dr. F. Mousa
Director of Health
UNRWA

Dr. David Nabarro
A/DG, TAC



Launch of WHO technical assessment of UNRWA Health Programme

I. DEMOGRAPHIC AND EPIDEMIOLOGICAL PROFILE OF THE PALESTINE REFUGEES

The experience of the Palestinian society reflects the ability of the Palestinian people to steadfast and resist all attempts of alienation and submission, based on peoples belief in their freedom and legitimate rights endorsed by international resolutions. This state of steadfastness and resistance reflects the Palestinian peoples liveliness in creating means for decent living and resisting ever increasing challenges, thus creating a unique empowerment case in human history.

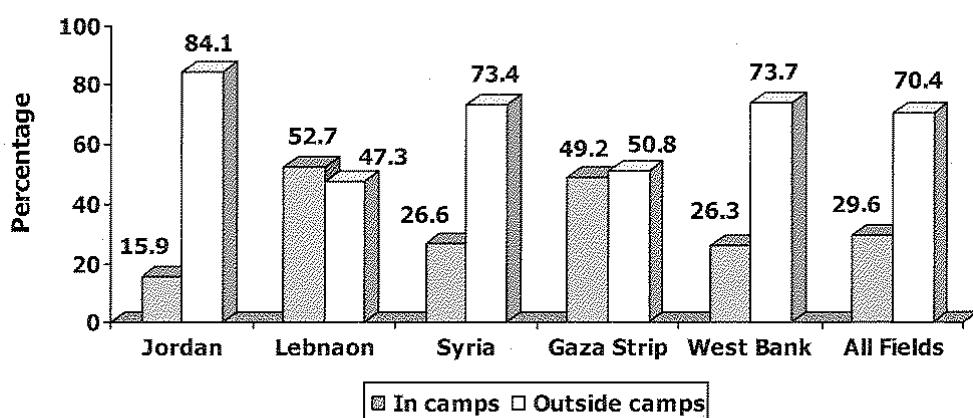
Palestine Human Development Report, 2004

DEMOGRAPHIC CHARACTERISTICS

1. By the end of 2004, the total number of Palestine refugees registered in the Agency's area of operation according to UNRWA registration statistics was 4,232,510, which represents an overall increase of 2.3 per cent over 2003 registered population, Agency-wide. The registered population was distributed as follows: Jordan 1,776,669, Lebanon 399,152, Syrian Arab Republic 421,737, Gaza Strip 952,295, and the West Bank 682,657.

Approximately one third of the registered refugees live in 58 official camps and the remaining population lives in unofficial camps, towns and villages side to side with host country population. The distribution of camp refugee population varies significantly from one Field to another, with the highest rates in Gaza Strip and Lebanon and the lowest in Jordan. (See figure 1 below):

Figure 1, Distribution of the refugee population in and outside camps



The registered refugees who were internally displaced or took refuge in neighbouring Arab countries had increased by more than five times since 1948. However, the overall camp population, who traditionally had higher fertility rates, showed a slow growth over the last decade which is inconsistent with real growth rates among the general refugee population, mainly because of migration of refugees owing to increased urbanization and high population density in camps.

The findings of the general population census conducted in Jordan in 2004 revealed that the population growth rate dropped to 2.5 per cent from 2000 level of 2.8 per cent.

Growth rates continued to be high in Gaza Strip and the West Bank. According to the Palestine Human Development Report, 2004, the population in the West Bank and Gaza Strip has reached 3.7 million, of whom more than 42 per cent are registered refugees. 56.4 per cent of the overall population lives in urban areas, 28.5 per cent in rural areas and 15.1 per cent in camps. Moreover, the population density in Palestine is considered to be high in general, but especially high in Gaza Strip, which is considered as the highest populated area on the earth with 1.3 million people living on an area of 365 sq.km. The population density is 428 persons/sq.km in the West Bank and 3,853 persons/sq.km in Gaza Strip.

2. UNRWA registration statistics are the main source of data on the registered Palestine refugees in the Agency's area of operation. However, because these statistics are based on voluntary registration, they are incomplete in the two extremes of age, which makes it difficult to assess crude birth and death rates. All rates and indices had therefore, to be calculated based on country data, assuming that the refugee population have, more or less, birth and death patterns similar to the population of the host countries.

Furthermore, the Agency does not have the means to validate or update information on the actual places of residence of the registered refugee population, both in and outside camps or within and outside the Agency's area of operations because UNRWA registration statistics are based on de-jure not de-facto statistics.

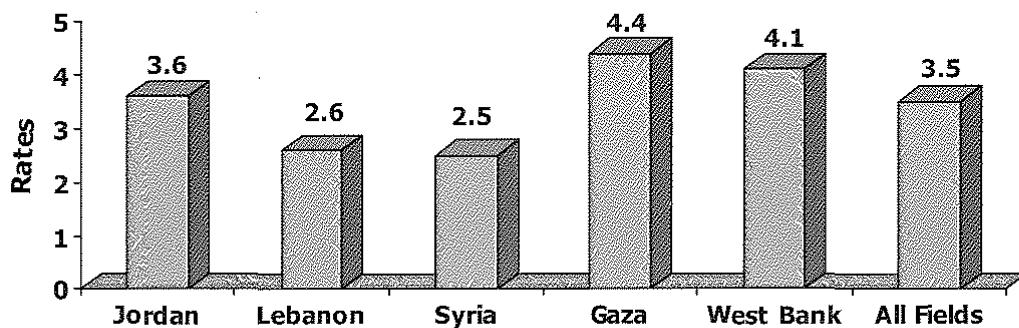
This presented an additional difficulty for estimation of denominators regarding access, coverage and utilization of services. It is contemplated that the IUED study planned in spring 2005 will provide interim data on the demographic profile of the refugee population until the Palestine Refugee Records Project (PRRP) is completed.

However, it could be said that the demographic profile of the registered Palestine refugees is that of a young population with children below 18 years of age constituting 39.4 per cent of the total population, Agency-wide. This rate is as high as 48.3 per cent in Gaza Strip. Distribution of the population by age group as at end of 2004 according to UNRWA registration statistics was as follows:

• Children below 18 years	39.4% (48.3% in Gaza Strip)
• Adolescents 10-19 years	22.4%
• Women of reproductive age 15-49 years	24.6%
• Adults above 40 years	25.7%

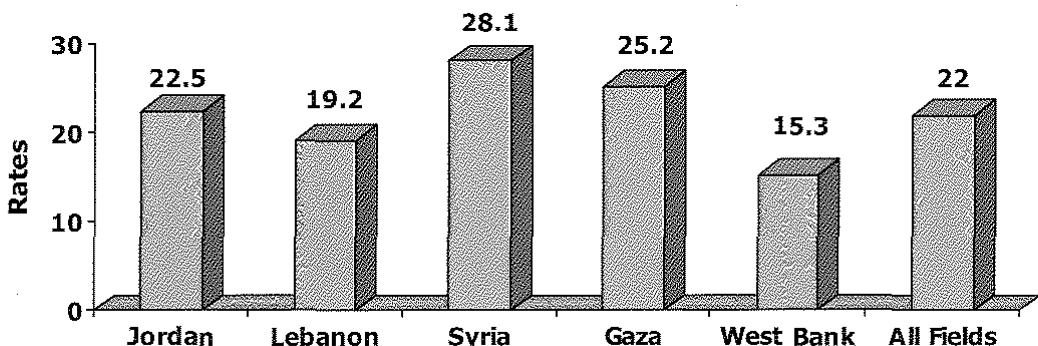
3. Total fertility rates among the refugee population showed a significant decline over the last two decades. According to an UNRWA study (2000), total fertility rate, was 3.5, Agency-wide with the highest rates of 4.4 and 4.1 in Gaza Strip and the West Bank respectively whereas, the lowest rates of 2.5 and 2.6 where in Syria and Lebanon respectively (see figure 2).

Figure 2, Total fertility rates by Field



- Similar to host country populations, infant and child mortality rates showed a significant decline over the last two decades. According to an UNRWA study conducted in 2003 and released in 2004, infant mortality rates were 22.5 deaths per 1,000 live births in Jordan, 19.2 in Lebanon, 28.1 in Syria, 25.2 in Gaza Strip and 15.3 in the West Bank.

Figure 3, Infant mortality rates by Field



Considering that more than two-thirds of infant mortality among Palestine refugees take place during the neonatal period, one of the main reasons which could explain the relatively lower IMR in Lebanon and the West Bank is the availability of intensive neonatal care units at UNRWA contracted hospitals, which contribute to survival of very low-birth weight and premature newborns.

In addition, it should be noted that the reference period for these studies was year 2001. The rates in the West Bank therefore, do not reflect the impact of the humanitarian crisis which has been ongoing since September 2000.

- The favourable changes in fertility rates, the decline in infant and child mortality rates, the increased life expectancy, increased poverty and unemployment rates will most likely result in higher dependency rates (measured as children below 15 years and elderly above 65) among the Palestine refugee population in future years.

As a matter of fact, the findings of a household survey conducted by the Palestinian Central Bureau of Statistics and Natural Resources (PCBS) in collaboration with UNICEF in refugee camps in Lebanon revealed that dependency rates reached 64.8 per cent compared to 68 per cent for Palestinians in Syria and 84 per cent for Palestinian in camps in Jordan.

A study funded by ECHO and conducted by the United Medical Group in collaboration with UNRWA, 2004 in twelve refugee camps in Lebanon revealed that the mean age of the population surveyed was 27.3 years with an average family size exceeding 4 members per household in all camps (mean 5.2 and SD 2.5) and a high crowding index of 3.1 persons per room. The study also revealed that only 6.1 per cent of the population surveyed works on full-time basis, 11.7 per cent works on part-time basis, whereas the remaining population, i.e., 82.2 per cent are either children, currently unemployed or never worked before.

6. There are no gender disparities among the refugee population, as males and females account, more or less, for 50 per cent each of the general population. An identical pattern is noticed among children enrolled in UNRWA schools as well as among children under supervision in the Agency's primary health care facilities.

Furthermore, practices harmful to women, such as female genital mutilation, are uncommon among the refugee population. However, according to UNRWA data, more than one third of women who receive ante-natal care are either at high or moderate risk and about 48 per cent still register after the first trimester, while more than 98 per cent are assisted by trained personnel during delivery. The prevalence of modern contraceptive is high with approximately 10 per cent of all women in reproductive age 15-49 years use modern contraceptive methods through UNRWA services. If this rate is calculated on the basis of married women of childbearing age, the rate will be much higher.

EPIDEMIOLOGICAL PROFILE

1. Similar to the morbidity profile prevailing nowadays in developing countries, the refugee population is passing through an epidemiological transition characterized by increased morbidity, disability and mortality from noncommunicable diseases such as cardiovascular diseases, diabetes mellitus and cancers. Increased life expectancy, progressive urbanization and changes in nutritional habits and life-styles, all contribute to the occurrence of these diseases.
Vaccine-preventable diseases are well under control. No cases of poliomyelitis or tetanus neonatum (both earmarked for eradication/elimination by WHO in 2005) were reported among the refugee population for the last ten years. Communicable diseases which still dominate the global health agenda have been eradicated (malaria) or are of low endemicity (tuberculosis and HIV/AIDS).
However, other communicable diseases especially those associated with poor environmental health conditions are still highly prevalent such as hepatitis, enteric fevers and intestinal infestations. The double burden of diseases continues to be a major challenge for the health care system.
2. Based on the number of noncommunicable disease patients who were under supervision at UNRWA primary health care facilities during 2004, the cumulative disease prevalence rates of the population who have either diabetes or hypertension or both was 4.4 per cent among the population served and 16.7 among the adult population 40 years and above. These rates however, relate to the refugee population who use UNRWA services and are detected or known by the health care system, but not actual prevalence rates among the general population. All studies among the population of the host countries reveal much higher rates. This suggests that the need to detect and manage these diseases

before having to deal with their complications and disabling effects will continue to be a major challenge in future years.

3. Studies conducted by UNRWA and other research institutions reveal that micronutrient deficiencies especially iron deficiency anemia among preschool children and women of reproductive age as well as vitamin-A deficiency, represent major problems that had persisted over the last few decades in spite of the interventions to combat them (for details, see chapter V of this report).
4. Likewise, studies conducted in the oPt and Lebanon, reveal that post-trauma stress disorders and other psychological and behavioral problems are widely spread among the population, especially children and youth. The Agency's medium term plan (2005-2009), places special emphasis on developing system-wide strategies to address psychosocial wellbeing among at risk groups, especially children and youth.

IMPLICATIONS ON UNRWA SERVICES

1. The demographic and epidemiological profile of the registered refugee population and the pattern of their distribution in and outside camp as well as the distribution of UNRWA's network of primary health care facilities, all have major implications on access to/and utilization of health services. There has always been a wrong perception that because UNRWA facilities are more accessible to camp population, the Agency services reach mainly camp population. As a matter of fact, UNRWA primary health care facilities in camps have a wider catchment areas that go beyond official camp boundaries. However, refugees living in urban or rural areas, where UNRWA facilities are beyond reach, have no option but to benefit from public sector services, where possible, or use services of other providers including the NGO and private sectors.

In addition, UNRWA health services are focused on primary health care with very selective use of secondary and tertiary medical care services which also affects the pattern of utilization of the services of the various care providers.

Owing to these factors, not all registered refugees have access to UNRWA services and actually use them.

According to UNRWA clinic records, refugee population who have access to UNRWA primary health care services both preventive and curative, were estimated at 3.28 million i.e., 77.6 per cent of the total registered population. Of this population 2.5 million attended UNRWA primary health care facilities during 2004, either for regular care and monitoring or for treatment of illnesses.

Table 1, Proportion of the user population from total registered refugees

Field	Registered population	Population served	%
Jordan	1,776,669	1,168,000	65.7
Lebanon	399,152	316,000	79.1
Syria	421,737	343,000	81.3
Gaza Strip	952,295	924,000	97.0
West Bank	687,657	535,000	77.8
All Fields	4,232,512	3,286,000	77.6

As can be seen from table 1, the highest utilization rates were in Gaza Strip, followed by SAR and Lebanon Fields and the lowest were in Jordan because refugees in Jordan have better access to public and private sector services through health insurance schemes, than refugees in the other Fields.

2. Another important observation that has been confirmed by various independent research studies, is that although UNRWA has a modest network of primary health care facilities compared to the public and NGO sectors, nevertheless, UNRWA's contribution to primary health care especially maternal and child health and family planning is high, when measured as a percentage from health care provided by all public, NGO and private sectors. This is not only due to the heavy workloads at UNRWA primary health care facilities but also because of refugees' satisfaction with the quality of care provided by the Agency. As a matter of fact, the study which was conducted in 12 refugee camps in Lebanon (see paragraph 3), revealed that 83.3 per cent of the surveyed population considered UNRWA as the preferred provider for treatment of acute conditions, 93.8 per cent for family planning services, 94.5 per cent for ante-natal care, 95.8 per cent for post-natal care, 92.9 per cent for child care, 98.6 per cent for vaccinations, 94.6 for hospitalization and 67.3 per cent for treatment of chronic illnesses.

Likewise, a recent study conducted by the USAID/MARAM funded project in Gaza Strip and the West Bank revealed that although UNRWA had the lowest number of primary health care facilities, its accomplishments in the areas of maternal and child health and family planning services ranked high as measured by coverage and quality indicators.

3. As noted earlier, increased rates of poverty, unemployment and dependency, and increased morbidity from noncommunicable diseases will have major implications on the pattern of the Agency's health expenditure in future years. The Agency has thus far been able to achieve good results in health with modest human and financial resources, because of its emphasis on preventive primary health care. The inevitable response to the growing challenge of increased disability and mortality from noncommunicable diseases and increased hospitalization costs could threaten the Agency's achievements in primary health care, if no additional resources could be made available to the programme.

The Agency has either to spend more on essential medicines that help to reduce mortality from cardiovascular diseases or meet the high cost of life-saving heart surgery at hospitals. Both options would involve additional expenditure and would draw on the Agency's scarce resources.

4. The fact that the Palestine refugees are generally young with two-thirds of the population are children and women of reproductive age, testifies for the appropriateness of the Agency's strategic approach of focusing its interventions on maternal and child health services. However, the Agency can not stand away from addressing the priority unmet health needs of women and children such as physical disabilities, mental and psychological well being, early detection and management of cancers, as well as prevention and treatment of micronutrient deficiencies, where major share of the effort will fall on the health care system and will require mobilization of additional human and financial resources that could not so far be made available.

II. PROGRAMME MANAGEMENT

In high-income and middle-income countries, primary health care is mainly understood to be the first level of care. In low-income countries, where significant challenges in access to health care persist, it is seen more as a system-wide strategy.

The World Health Report 2003

1. OBJECTIVE

The objective of programme management is to oversee all aspects relevant to planning, direction, supervision and evaluation of UNRWA's health programme and development of its policies and strategies consistent with WHO policies, concepts and strategic approaches.

2. ORGANIATIONAL STRUCTURE

- 2.1 The Department of Health at Headquarters, Amman comprises the WHO Special Representative and Director of Health and his Deputy, who are seconded from the World Health Organization to UNRWA on non-reimbursable loan basis. The Deputy Director of Health also assumes responsibility for the Division of Health Protection & Promotion. The Headquarters team also comprises two Chiefs Division, Head Health Information System, Senior Pharmacist, Senior Laboratory Services Officer and Reproductive Health Officer.
The Director of Health reports to the Commissioner-General, UNRWA on administrative and policy matters and to the Regional Director, WHO/EMRO on technical matters.
- 2.2 In each of the five Fields of the Agency's area of operations, i.e., Jordan, West Bank, Gaza Strip, Lebanon, and the Syrian Arab Republic, the Department is headed by the Chief, Field Health Programme who reports directly to the Field Director for Administrative purposes and to the Director of Health on technical matters. The Chief, Field Health Programme is assisted by his Deputy, Field Disease Control Officer, Field Family Health Officer, Field Nursing Officer, Field Sanitary Engineer, Field Pharmacist, Laboratory Superintendent and Senior Dental Surgeon. In addition, the Chief, Special Environmental Health Programme in Gaza seeks policy guidance from the Director of Health regarding the strategic orientation of the programme and co-ordination of technical assistance to other Fields.
- 2.3 Technical direction of the various components of the health programme is provided through a set of technical instruction series (guidelines), manuals and management protocols which are periodically revised and updated consistent with the basic principles and concepts of the World Health Organization, approved Agency policies and best practices in public health.

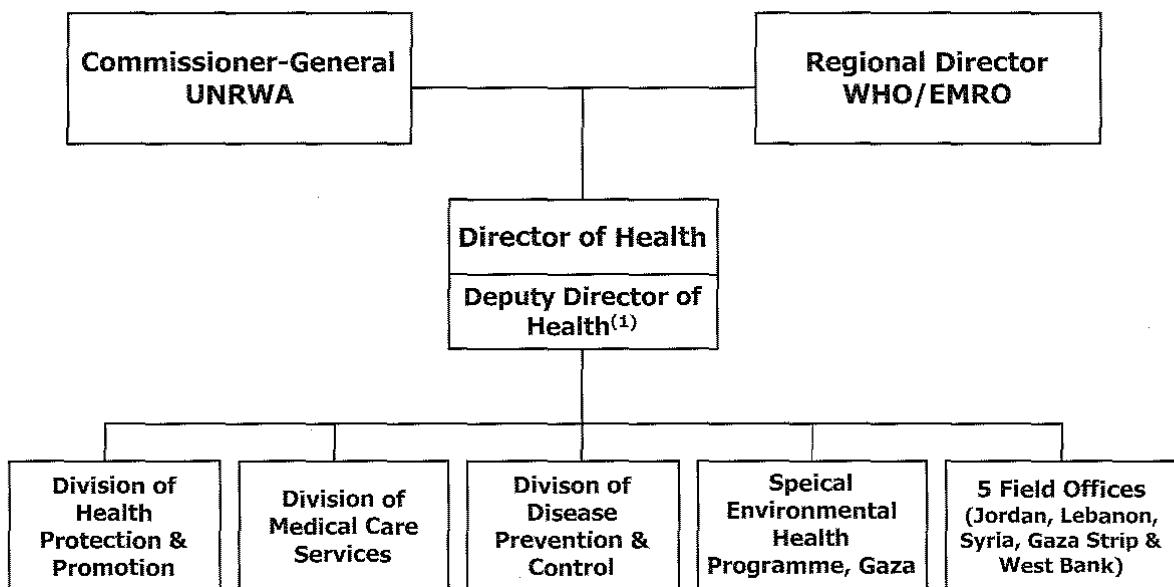
Implementation of the technical instructions and quality assurance is monitored through systematic assessment of outcomes based on measurable indicators and is fostered through regular visits of Headquarters staff to the Fields.

Changes to standing policies, development of plans of action and establishment of targets to achieve them are normally decided upon through periodic meetings of the Chiefs, Field Health Programme with Headquarters senior staff and through Divisional meetings of staff of the technical units in Headquarters and the Fields.

2.4 The functions of the various Divisions in Headquarters and the Fields comprise the following:

- Division of Health Protection & Promotion, expanded maternal health and family planning and child health services, school health, nutritional surveillance and food safety, and mental health.
- Division of Medical Care Services, out-patient medical care, pharmacy services, laboratory services, oral health services, physical rehabilitation, hospital services and other support services e.g. radiology.
- Division of Disease Prevention & Control, integrated control of communicable and noncommunicable diseases.
- Special Environmental Health Programme, project design, surveying, project implementation and environmental sanitation.

ORGANIZATIONAL CHART OF THE HEALTH PROGRAMME



(1) The Deputy Director of Health also assumes responsibility for the Division of Health Protection & Promotion.

3. HUMAN RESOURCES

3.1 During 2004, 3,781 professional, administrative support and other staff provided comprehensive health services to the registered Palestine refugee population utilizing UNRWA services in Jordan, Lebanon, the Syrian Arab Republic, Gaza Strip and the West Bank. The services comprised medical care, both preventive and curative, environmental health services in camps and supplementary feeding to nutritionally vulnerable groups.

The staffing table of the Department of Health as at end of 2004 is shown below:

Table 1, Health staff as at end of December 2004

	HQ	Jordan	Lebanon	Syria	Gaza Strip	West ⁽¹⁾ Bank	Total
AREA STAFF							
(A) Medical care services							
Doctors ⁽²⁾	4	91	51	48	90	64	348
Pharmacists	1	2	2	2	2	3	12
Dental Surgeons	0	24	17	16	16	13	86
Nurses	0	234	118	121	255	214	942
Paramedical ⁽³⁾	1	106	61	66	109	88	431
Admin/Support Staff	8	82	49	45	78	68	330
Labour category	0	84	57	64	113	65	383
Sub-total	14	623	355	362	663	515	2 532
(B) Environmental health services							
Engineers	0	1	1	1	1	23	27
Admin/Support Staff	0	33	26	10	22	53	144
Labour Category	0	298	193	107	190	288	1 076
Sub-total	0	332	220	118	213	364	1 247
INTERNATIONAL STAFF	2	0	0	0	0	0	2
Grand total	16	955	575	480	728	1 027	3 781

(1) Including staff of Qalqilia hospital

(2) Including senior managerial staff, specialists and school medical officers

(3) Including Laboratory Technicians, Asst. Pharmacists, X-Ray Technicians and Dental Hygienists

3.2 The staff/population ratios continued to be very low compared to national and regional standards, even if calculated on the basis of the user population, not total registered refugees. The ratios of staff in charge of service delivery per 10,000 users were as follow:-

**Table 2, Staff/population ratios, per 100,000 population
Host Countries and UNRWA**

Indicators	Jordan		Lebanon		Syria		oPt	
	Country	UNRWA	Country	UNRWA	Country	UNRWA	PA	UNRWA
Physicians	220	5	281	13	146	12	84	10
Nurses	280	13	300	29	197	29	141	32

Coupled with high utilization rates, the low staff/user ratios continued to be reasons for heavy workloads at UNRWA primary health care facilities. One of the major objective of the medium term plan is to reduce excessive workloads by recruiting additional staff and improving access to basic health services through expansion and upgrading of primary heath care facilities as means to improve the quality and outcomes of care. However, achieving these objectives will be much dependent on the level of income to the Agency's budget during future years.

- 3.3 Major problems continued to be encountered in recruitment and retention of qualified staff, both at the managerial and professional levels, because the Agency's working conditions have become no more competitive and because no career planning system was in place during the past ten years owing to discontinuation of external support for the Agency's post-graduate fellowship programme.

In addition, the cumulative effects of under-budgeting and under-funding over many years have generated a state of imbalance between the ever-growing needs and demands of the refugee communities and the resources that could possibly be mobilized by the Agency to address the problem of heavy workloads at its primary health care facilities.

In spite of the tireless efforts to upgrade the skills and capabilities of staff through in-service training, it is becoming increasingly difficult to preserve the sustainable investment achieved in primary health care unless additional resources become available to the programme because health systems can not function effectively without well trained and adequately paid staff.

4. FINANCIAL RESOURCES

- 4.1 The approved 2004 health budget under the regular programme was established at USD 61.8 million which represents USD 14.7 per registered refugee. Total expenditure amounted to USD 60.2 million and expenditure per registered refugee was USD 14.2. Even if a more conservative approach was adopted in estimation of the per capita budget and expenditure based on the number of population actually served by the Agency (approximately 3.2 million) rather than total registered refugees (4.2 million), the annual per capita allocations will still be lower than USD 20 per capita per year, Agency-wide, far below WHO standard of USD 30 - 50 per capita public sector spend for provision of basic health services.
- 4.2 The unaudited accounts for year 2004 reveal that total expenditure under the General Fund portion of the regular budget (which does not include expenditure under supplementary feeding or projects) was USD 54.8 million. Expenditure on staff costs amounted to USD 32.6 million which represents 59.5 per cent of total expenditure on health from the General Fund.

Expenditure on supplies (mainly medicines) and services (mainly hospital services) was USD 9.4 million each, i.e. 17.3 per cent each.

- 4.3 Table 3, below shows the 2004 approved budget allocations for health by sub-programmes.

Table 3, Breakdown of budget & expenditure by sub-programme, 2004 (Thousand USD)

Programme	Budget	Expenditure	Percentage expenditure from approved budget
Programme Management	3 177	3 320	105%
Medical Care Services			
(a) Laboratory services	2 141	1 983	93%
(b) Out-patient services	21 177*	21 506	102%
(c) Maternal & child health	2 713	2 540	93%
(d) Disease prevention & control	4 856	4 428	91%
(e) Physical rehabilitation	800	743	93%
(f) Oral health	2 099	1 953	93%
(g) School health	495	447	90%
(h) Hospital services	12 105	10 746	89%
Sub-total	46 386	44 349	96%
Environmental Health			
(a) Sewerage & Drainage	128	104	81%
(b) Solid waste management	7 821	8 491	109%
(c) Water supply	631	553	88%
(d) Special Environmental Health Programme, Gaza	274	240	88%
Sub-total	8 854	9 388	106%
Supplementary Feeding	3 422	3 133	92%
Grand total	61 837	60 190	97%

* Including staff costs for the maternal & child health and disease control sub-programmes.

- 4.4 The Agency has been traditionally able to provide cost-effective health services to the Palestine refugees because of its emphasis on primary health

care, with very selective use of hospital services. Allocations for hospital services in 2004 represented 19.5 per cent only of the total health budget. This pattern of health spend might be difficult to sustain in future years because of major shift in morbidity patterns towards chronic noncommunicable diseases, often associated with major complications, and because of rapid advances in medical technology leading to substantial increases in cost of hospital services in the Agency's area of operations. This will represent a major challenge to the Agency's health programme, which has to strive to preserve its notable achievements in primary health care while attempting to cope with increased hospitalization costs.

- 4.5 Unlike UNRWA, public health spend in the host countries is more focused on secondary and tertiary care at the expense of primary health care. This explains the wide disparity between UNRWA allocations for health and public health spend by the host authorities as seen below:

Comparative per capita expenditure on health from government sources and UNRWA (US \$)*

<u>Jordan</u>	<u>Lebanon</u>	<u>Syria</u>	<u>Palestinian Authority</u>	<u>UNRWA</u>
74	150	30	70	14.7

- 4.6 The pattern of financial resource allocations vary significantly from one Field to another depending on the ease of access of the registered refugee population to UNRWA health services and the degree of utilization of the services of other care providers.

Following is data on the Agency's per capita allocations in USD for health under the 2004 regular budget:

<u>Jordan</u>	<u>Lebanon</u>	<u>Syria</u>	<u>Gaza Strip</u>	<u>West Bank</u>	<u>All Fields</u>
7.3	34.3	14.2	18.0	19.0	14.7

As can be noticed, Syria is the only Field where the per capita allocations for health correspond to the Agency-wide average whereas; Lebanon is far above all other Fields owing to the heavy investment in secondary and tertiary care because refugees have no access to public sector health services and can not afford the cost of treatment at private sector facilities.

One of the major objectives of the 2006-2007 biennium budget and the 2005-2009 medium term plan is to reduce these disparities in resource allocations by implementing more equitable health policies across the five Fields.

5. PROGRESS IN 2004:

Major progress was made during the year to improve programme management including improving data collection and analysis methods, institutional capacity building, revision of technical guidelines and intervention strategies, assessment of system performance and evaluation of outcomes.

*Demographic and health indicators for countries of the Eastern Mediterranean, WHO/EMRO

5.1 Technical direction:

The technical guidelines on the two major programme components, namely maternal health and family planning and prevention and control of noncommunicable diseases were revised in order to improve surveillance, monitoring and response and to ultimately improve the quality and outcomes of care.

In addition, a new technical instruction was developed to define the procedures for estimation of the population served and service utilization rates.

Meantime, works were started for review and updating of the Agency's drug formulary, consistent with WHO's model formulary, as well as on updating the Agency's manual on basic laboratory and biosafety techniques.

5.2 Information systems:

The standard data collection and reporting formats on out-patient medical care, maternal and child health care and laboratory services were revised in order to improve feedback and facilitate planning, monitoring and evaluation of the various programme components.

Meantime, the new health management information system (HMIS), which was developed over the last three years to improve maternal health surveillance and measure outcomes of care, was expanded to all large and medium size primary health care facilities in the five Fields of the Agency's area of operation. Moreover, two pilot projects for computerization of individual maternal health and noncommunicable disease records were implemented on trial basis in one health centre in each Field.

The maternal health and family planning module of the HMIS was further refined during an inter-Field evaluation and planning workshop held in September 2004 whereas, the noncommunicable disease module will be evaluated early 2005.

In addition, a system for monitoring crisis indicators is being developed to assess changes in the humanitarian and health conditions in the occupied Palestinian territory and evaluate the impact of the Agency's emergency interventions.

5.3 Staff development:

- a) Special emphasis continued to be placed on upgrading the skills and capabilities of the various professional categories on implementation of the approved intervention strategies, technical guidelines and procedure manuals and a system was developed to assess the impact of in-service training on staff knowledge, attitudes and practices.

During the year, a total of 6,269 staff/days in-service training were implemented in the five Fields at an average of 6 training days per medical officer and 3 training days per nurse. The training covered all programme components including; management, maternal and child health and family planning, control of communicable and noncommunicable diseases, basic laboratory technique and rational prescribing of medicines:

Table 4, Breakdown of staff/days training by Field and staff category

Field	Medical	Nursing	Other	Total
Jordan	281	225	272	778
Lebanon	242	188	69	499
Syria	366	97	84	547
Gaza	790	1 917	114	2 821
West Bank	470	628	526	1 624
All Fields	2 149	3 055	1 055	6 269

- b) In addition to in-service training activities, the Agency supported post-graduate training in public health of 11 staff and midwifery training of 8 nursing staff at local universities as outlined in table 5 below:

Table 5, Basic and post-graduate training

Field	Staff category	No.	Course	Start Date	Duration	Sponsor
Jordan	Medical Officer	1	Master Degree in Public health	Sept. 2004	One year	AUB
	Sanitation Inspector	1	Master Degree in Public Health	Oct. 2004	2 years	Own expense
Lebanon	Medical Officer	1	Master Degree in Public Health	Sept. 2004	One year	AUB
	Sen. Staff Nurse	2	Master Degree in Public Health	Sept. 2004	One year	AUB
Syria	Medical Officer	1	Breast feeding in UK	April 2004	One month	Rida-Said Foundation
Gaza	Medical Officer	1	Master of Public Health	Sept. 2003		Own expense
West Bank	Medical Officer	2	Master Degree in Public Health Management	Sept. 2003	2 years	UNRWA
	Gyn./Obst.	1	Master Degree in Public Health Management	Sept. 2003	2 years	UNRWA
	Sen. Staff Nurse	1	Master Degree in Public health	Sept. 2003	2 years	UNRWA
	Midwife	3	Post-graduate Midwifery	March 2003	3 years	UNRWA
	Midwife	3	Basic Midwifery	March 2003	3 years	UNRWA
	Midwife	1	Basic Midwifery	March 2003	3 years	Al-Quds Univ.
	Practical Nurse	1	Basic Midwifery	March 2003	3 years	Own expense

5.4 Planning for health development

Major efforts were exerted during the year to develop action plans that address the immediate needs of the refugee population and respond to programme priorities while considering long-term development needs. These efforts comprised the following:-

a) Development of yearly planned activities for each programme component including family health, disease prevention and control, medical care and programme management. These plans were prepared during meetings of programme managers from Headquarters and the Fields. These meetings comprised the following:

- Ninth Field Family Health Officers' meeting, from 8 – 12 February.
- Chiefs, Field Health Programme & Deputy Chiefs, Field Health Programme meeting, from 23 – 26 February.
- Laboratory Superintendents' Meeting, from 22-24 November
- Evaluation and planning workshop on the Health Management Information System, from 28 – 29 November
- Tenth Field Family Health Officers' meeting, from 30 November – 3 December

Year-end reviews revealed that all planned activities with respect to each programme area were implemented on target except in the West Bank Field where the ongoing crisis and access problems have had their adverse consequences on system performance and outcomes.

b) Preparation of the results-based programme budget for the biennium 2006-2007 with special emphasis on improving access to and quality of health services, addressing the double burden of communicable and noncommunicable diseases, adjusting the imbalance in resource allocations between Fields, enhancing capacity building, improving camp infrastructure of environmental health facilities and addressing unmet priority needs including mental and psychological health, child disabilities and early detection of cancers.

c) Preparation of the health section of the medium term development plan 2005-2009 which aims at making progress towards achieving the United Nations Millennium Development Goals, building staff capacity, bringing parity in service provision to Palestine refugees to the level of national, regional and international standards, addressing unmet priority needs and implementing the recommendations of the Geneva Conference, June 2004 on "Meeting the Humanitarian Needs of the Palestine Refugees in the Near East, Building Partnerships with UNRWA".

The indicative resource requirements for health and health-related priorities during the 5 years period amounted to USD158.6 million, of which \$48.2 million in recurrent costs and 110.4 million in capital projects.

5.5 Research and evaluation

Special emphasis was placed on assessment of the health status of the refugee population as well as on assessment of system performance and outcomes. The progress achieved during the year comprised the following:

- a) Three major analytical reviews/self-evaluations were undertaken one on policies, utilization and cost-benefit of the current hospitalization schemes, another on assessment of utilization trends and productivity of medical care services at the primary level including laboratory services, oral health services and the medical supply operations, while the third review was focused on assessing compliance with the defined standards for provision of maternal and child health services.
In addition, a rapid assessment was carried out to assess immunization coverage and an Agency-wide study was carried out to assess current prescribing practices of anti-bacterial medicines.
- b) Comprehensive health centre assessments were carried out in all Fields to assess the physical condition of health premises, equipment, staffing and patterns of patient flow, with the main objective of assessing needs and priorities for re-organization and improvement of services at the primary level.
- c) A household survey funded by ECHO was conducted in collaboration with the United Medical Group during the period January-March to assess the health and socio-economic conditions of the Palestine refugee population living in 12 camps in Lebanon as well as to assess utilization of/and satisfaction of refugees with the health services of the various care providers.
- d) Health services research to assess the health status of Palestine refugee comprised conducting an Agency-wide study on the prevalence of anaemia among pre-school children, pregnant women and nursing mothers and a study to assess adolescents' knowledge and attitudes towards family and reproductive health.
- e) Arrangements were underway to undertake a comprehensive review of the Agency's health programme by a WHO team from Headquarters, Geneva and the Eastern Mediterranean Regional Office, Cairo early in 2005.

This will be the second major programme review since the last review was carried out in 1986.

Details on the findings of these self-evaluations and health services research are provided under the relevant sections of this report.

6. EXTERNAL COOPERATION AND PARTNERSHIPS:

- 6.1 Since 1950, under the terms of an agreement with UNRWA, the World Health Organization has provided technical supervision of the Agency's health care programme through the sustained support of the Eastern Mediterranean Regional Office and the cooperation of staff from WHO Headquarters as well

as by assigning to UNRWA Headquarters, on non-reimbursable loan, WHO staff members, including the Agency's Director of Health and Deputy Director of Health. WHO/EMRO also continued to cover the salaries and related expenses of Chiefs, Division at UNRWA Headquarters. WHO also assured participation of senior Agency programme managers in regional technical meetings, conferences and workshops and supplied the Agency with technical publications and periodicals issued by the organization. The collaborative links between UNRWA Headquarters and WHO office in Jerusalem were strengthened and arrangements were made to facilitate access of UNRWA Headquarters to the WHO/EMRO intranet.

- 6.2 The Agency's health programme maintained close collaborative links with other United Nations organizations, especially UNICEF. Co-operation with UNICEF was focused on relevant aspects of the Integrated Management of Childhood Illnesses (IMCI). UNICEF continued to meet Lebanon and Syria Fields requirements of vaccines and cold-chain supplies for the six major vaccine-preventable diseases. In addition, collaborative links were maintained between UNRWA and UNICEF country offices, for implementing national immunization campaigns including a mass measles immunization campaign and distribution of vitamin-A to children below 5 years in Gaza Strip and the West Bank, national polio immunization campaigns in Jordan, Syria and Lebanon and sustaining a programme for early detection and pre-marital counselling on thalassaemia and sickle cell diseases in Syria. The cooperation with UNICEF was further enhanced to cover future collaboration in promoting the concepts and principles of the Convention on the Rights of the Child (CRC) and psychosocial support. Arrangements are also underway to hold a joint UNRWA/UNICEF meeting to strengthen cooperation at the regional level consistent with the strategic approaches and priorities pursued by both organizations.
- UNRWA also maintained a system for exchange of information on compatible areas of work with UNFPA and UNAIDS.
- 6.3 UNRWA had historically maintained close working relationships with the public health departments of the host authorities. UNRWA senior health staff in Gaza Strip and the West Bank enjoy membership in all technical committees established by the Ministry of Health of the Palestinian Authority to review practical aspects of health policy and to co-ordinate action in the health sector. UNRWA also participated in the work of national committees on nutrition and food for formulation of policies and strategies on food security and micronutrients. The Ministry of Health of the Palestinian Authority provided all vaccines included in the expanded programme on immunization in Gaza Strip and the West Bank as in-kind contribution to UNRWA. Meantime the Ministry of Health in Jordan provided UNRWA with its requirements of contraceptives and vaccines used in the expanded programme on immunization. The Ministry of Health, Syria continued to meet UNRWA's requirements of vaccines that are not programmed by UNICEF such as hepatitis-B and haemophilus influenzae type b (Hib) vaccines. In addition, the joint UNRWA/UNICEF project on screening and counselling of population at risk of thalassaemia and sickle cell disease, which is implemented in collaboration with the Syrian Government and supported by Switzerland, was

maintained and further expanded in camps with high prevalence of haemoglobinopathies. In each of Jordan, Lebanon and Syria, the Ministries of Health met UNRWA's requirements of anti-tuberculosis drugs and provided advanced laboratory facilities for surveillance of vaccine-preventable diseases and HIV/AIDS.

- 6.4 The Agency's Health Programme maintained and further developed its cooperation with the United States Agency for International Development (USAID) especially the USAID/MARAM project in Gaza Strip and the West Bank.

Also the longstanding cooperation with the Palestinian Red Crescent Society (PRCS) was further enhanced especially in Lebanon where the Agency had maintained contractual arrangements for treatment of refugee patients at the five PRCS hospitals. Cooperation was also maintained with local universities especially the American University of Beirut and Beir Zeit University, for development of human resources for health.

- 6.5 Efforts were exerted to ensure active participation in the preparatory meetings, consultations and basic documents of the working groups for the Geneva conference on "Meeting the Humanitarian Needs of the Palestine Refugees in the Near East, Building Partnerships with UNRWA", which was held from 7-8 June. Co-sponsored by UNRWA and the Swiss Agency for Development and Cooperation, the conference brought together representatives from UNRWA, donors, host authorities, the PLO, UN agencies and NGOs, who helped to shape this event and agreed on several recommendations for strengthening UNRWA's capacity to provide essential assistance to Palestine refugees and enhance UNRWA/stakeholder relationships.

It is worthmentioning that the Chairman's summary on the proceedings of the conference concluded that health care was identified by the participants as an area in which UNRWA does remarkably well.

Further meetings were held thereafter by a core-group tasked to define the modalities of implementation of the recommendations of the conference.

- 6.6 During the year, the Director of Health, his Deputy and other senior staff of the Department of Health participated in the following meetings/conferences of the World Health Organization and other stakeholders:-

- Conference on Nutrition Programmes: Challenges and opportunities, held under the auspices of the Palestinian and Jordanian Ministers of Health, the MARAM Project, in cooperation with the Royal Jordanian Medical Services, Amman, 12-16 January.
- 113th session of the Executive Board of the World Health Organization, Geneva, 19-24 January.
- The Joint Global Fund to Fight AIDS, Tuberculosis & Malaria and WHO/EMRO Regional Meeting in collaboration with UNICEF/MENA and UNAIDS, Amman, 29-31 March.
- WHO/EMRO Inter-country meeting on emerging infectious disease (EID), Lebanon, 6-8 April.

- Jordan Assessment of National Health Preparedness/Workshop, Amman, 6 April.
- International Day for Solidarity with the Palestinian people organized by WHO/EMRO, Cairo 8 April.
- Workshop on the "Development of Food Security Systems for Improving Nutrition and Food Security (FIVIMS) in the WBGS", Ramallah – Palestine, 27-28 April.
- 9th Inter-Country Meeting of National Tuberculosis Programme Managers in the Eastern Mediterranean Region, Lahore, Pakistan, 26-29 April.
- World Health Assembly, Geneva, 17-23 May.
- WHO/EMRO 21st Intercountry meeting of National Managers of the Expanded Programme on Immunization, Cairo, 26-29 June.
- WHO/EMRO Intercountry meeting on measles accelerated control and elimination, Dubai, United Arab Emirates, 12-14 September.
- Fifty first session of the WHO Regional Committee for the Eastern Mediterranean, Cairo, 3-6 October.
- 20th Meeting of the Regional Director with WHO Representatives and Regional Office staff, EMRO Cairo, 27 November -1 December.
- WHO/EMRO Intercountry workshop on Adolescent Peer Education in Formal and Non-formal settings, Tunisia, 5-8 December.
- First WHO Inter-Regional Training course on Management of Public Health Risks of Disasters (MPHR-1),Tunisia, 12-17 December.
- WHO Regional Consultation on Gender issues in Health in the Socio Cultural Context of the Eastern Mediterranean Region, Jordan, 19-21 December.



House demolishing in Gaza Strip



Palestinian land isolated by the separation wall in West Bank

III. PROGRAMME OF EMERGENCY HUMANITARIAN ASSISTANCE IN THE OCCUPIED PALESTINIAN TERRITORY

Most of the morbidity and mortality associated with crisis stems from people lacking the essentials they need for life. Systems at local level that normally provide people with accessible food, water, shelter and sanitation, ensure personal security and protection from harm, and deliver health care, do not function and national systems are unable to compensate.

*Responding to health aspects of crises
WHO Document EB115/6*

HUMANITARIAN AND HEALTH CONDITIONS

1. Casualty toll:

Year 2004 has been a continuation of the violence, loss of life and by far the worst levels of destruction since the oPt was plunged into a severe humanitarian crisis since September 2000.

One indicator used to define crisis conditions is a death rate of more than one per 10,000 per day. The casualty toll during rounds of military incursions into camps was much higher among the population of the affected communities. According to the Palestinian Central Bureau of Statistics (PCBS), 3,633 Palestinians living in the oPt were killed from September 2000 to November 2004 with 1,467 dead in the West Bank and 1,887 in the Gaza Strip and 28,235 were injured. One particularly tragic aspect of these statistics has been the number of children killed during this period; 315 and 397 respectively in the two territories representing 19.5 per cent of total fatalities while over 12,000 were injured. Among those killed, 12 were UNRWA staff members and 155 UNRWA school children, of whom three were killed in 2004 by Israeli fire into UNRWA schools. In addition, a total of 1,539 children enrolled in UNRWA schools were injured, of whom 9 inside school premises. Since September 2000, Israeli losses have totaled 1,001 dead and 6,979 injured.

2. House demolishing:

Uprooting of trees and home demolition has been another tragic aspect of the crisis. The focus of home demolition as a result of military activity has been in the Gaza Strip where 1,304 homes have been destroyed from 1st January to 1st November 2004 with 13,350 persons affected. The cumulative number of homes destroyed since September 2000 has reached 2,389, making 22,963 persons homeless in total.

In Rafah, southern Gaza, the Israeli army has continued operations to clear the border line with Egypt of housing, whilst these operations reached their peak in May 2004, demolitions have continued since then, this has resulted in an inexorable rise in levels of destruction. The rate of home demolitions increased

form 15 homes per month in 2002, to 77 homes per month in the first nine months of 2004 in Rafah alone.

Late on 28 September 2004 large numbers of tanks, bulldozers and armored personnel carriers moved into Northern Gaza and launched a military operation, which was the largest since the start of the Al-Aqsa intifada in September 2000. Over the 17 days the Israeli army remained in control, approximately 36,000 Palestinians in different locations were under siege. Over 100 Palestinians were killed, including 27 children and over 400 injured. The dead included nine UNRWA pupils from six schools and two teachers.

According to investigations by UNRWA personnel, 675 Palestinians were made homeless during the operation, 91 homes for 143 families were destroyed. Over 90 per cent of those affected were refugees. The total cost of rebuilding these homes is estimated at around UDS 2.5 million. A further 101 homes sustained damage.

The West Bank has been affected to a lesser degree but nonetheless, 382 refugee shelters have been destroyed from the start of the *intifada* to the end of September 2004 and 298 suffered major damage.

3. Damage to infrastructure:

Israeli army incursions have seriously damaged water, sewage and power networks. For example initial estimates suggest that damage to the road network in Beit Hanoun alone amounts to more than USD 2 million. In Rafah, the cost of repairs of water pipes and installations destroyed during Israeli military activities amounts to approximately USD 250,000 every six months.

UNRWA engineers estimated that the damage to roads in affected areas as a result of the military operation in Northern Gaza will cost USD 240,000 to repair. Water, sewerage and electrical lines were also destroyed during the course of incursion. Total damage to infrastructure is estimated at USD 355,000. Between 1,000 – 1,100 dunums of agricultural land and 30 green houses were destroyed. In excess of 50 per cent of all arable land in Beit Hannoun has been destroyed since September 2000. It is worthmentioning that according to Jerusalem, BTselem, already in 2002, the settler planning zones had absorbed 41.9 per cent of West Bank territory and that total area confiscated for settlements, or designated as military zones, in the Gaza Strip amounts to 45 per cent of the Gaza territory. According to the World Bank, physical damage to the occupied territory water and waste water sector from Israeli military actions is valued at about USD 140 million.

4. Access problems:

The oPt is controlled by a dense network of fixed and flying checkpoints, road blocks, earth mounds and other measures used to monitor and restrict Palestinian movement. Over 700 closure measures currently restrict movement of Palestinian goods and people inside the West Bank, while the Gaza Strip is often divided into three sections by checkpoints.

In addition to closures, curfews had been another cause for mobility restrictions. Overall, according to the Palestinian Centre for Human Rights, the most affected city in this respect during the period June 2002 – February 2004 was Hebron, which was under curfew 40 per cent of the time, followed by Nablus (32 per cent), Tulkarem (31 per cent), Jenin (26 per cent), Bethlehem (18 per cent), Ramallah (17 per cent) and Qalqilia (15 per cent).

Severe restrictions are in place on entry and exit of residents, food commodities and building materials as well as the passage of children to schools outside.

In the Gaza Strip, 2004 has been the worst year by far since the start of the *infada* for the movement of both personnel and commodities. Restrictions on the movement of UNRWA international staff into, and around, Gaza have led to considerable disruptions to Agency operations. In the West Bank, incidents of denied and delayed access continue to affect Agency operations. Delivery of humanitarian assistance has been particularly affected in the 'seam' zone which lies between the Green Line and the wall/fence, as the Israeli army routinely require permits from UNRWA staff. Several cases have been recorded where access of food distribution teams and medical teams has been prevented altogether.

The wall/fence currently being constructed inside the West Bank is compounding movement restrictions, cutting Palestinians off from their land, work and trade opportunities in Israel. Israel began the construction of the wall/fence in June 2002 as a security measure. It comprises a system of fences, ditches, razor wire, groomed trace sands, an electronic monitoring system, patrol roads, and a "no-go" buffer zone. Over 185km of this system has already been constructed, and a further 70km is under construction. In many places, the wall/fence veers east of the 1948 armistice line and into the West Bank, isolating Palestinian families from their land, communities and services. With the barrier, Israel effectively will annex most of western aquifer system which provides 51 per cent of the West Bank water resources.

Unlike the trend which prevailed since the beginning of the crisis, the impact of large scale and prolonged military incursions as well as restrictions imposed on movement of vehicles, personnel and supplies had more negative impact on staff/days lost in Gaza Strip than the West Bank, as many UNRWA health personnel could not reach their designated duty stations or reached workplace after significant difficulties and delays. As a result, a total of 18,842 staff hours were lost in the Gaza Strip during 2004.

During the last closure of Rafah crossing in December 2004, many Gaza residents were trapped outside the Strip on their way back home. Among them 877 patients who had previously left to be treated in Egypt or Jordan. Among those, 42 children under 5 and 454 women. The main reasons for their referral abroad were cardiovascular surgery and radiotherapy for cancer. During the waiting period, 7 of those patients died and were buried in Al-Arish at the Egyptian border, as the Israeli authorities did not allow the transfer of the bodies into Gaza.

5. Economic conditions:

According to the latest figures available from the PCBS, unemployment in Gaza rose from 15.5 percent in the 3rd quarter of 2000 to 36.8 percent in the 3rd quarter of 2004. Unemployment in the West Bank rose from 7.5 to 22.3 percent in the same period. Inevitably, this has led to a sharp increase in poverty. Poverty rate in Gaza Strip as of 2004, based on World Bank data was 65 per cent. Subsistence poverty (those who can not afford or hardly afford the basics of survival) was 23 per cent. PCBS statistics show that in the latter half of 2004, 62.5 per cent of all households in oPt are living below the poverty line. In real terms this means that over 2.2 million people are attempting to subsist on less

than USD 2 per person per day which puts them below the World Bank's globally defined poverty line. Refugees are particularly hard hit as they have traditionally been more dependent on wage labour in Israel, have fewer assets that they can sell and have been hit by repeated Israeli army incursions into camps, leading to further depletion of their resources. Residents of Gaza Strip refugee camps, who are defined as extremely poor, as of February 2004, based on IUED survey, were 47 per cent.

According to the World Bank, the Palestinian economy has lost all the growth it achieved in the preceding 15 years, with real gross domestic product (GDP) now below its 1986 level. Cumulative Real GDP per capita change in the Gaza Strip showed a negative growth of 40 per cent between 1999 and 2004.

6. Food insecurity:

According to the UN's World Food Programme (WFP), as of mid-2004, approximately 1.3 million people in the occupied Palestinian territory, or 38 percent of the population, were food insecure. A further 26 percent of the population, or 586,000 people, were at risk of becoming food insecure. Again, refugees were more at risk; 39 percent of refugees were estimated to be food insecure against 36 percent of non-refugees. Food is generally available in Gaza Strip and the West Bank but access to food is limited due to physical (curfews, closures) and economic reasons (high unemployment, depletion of resources, exhaustion of coping strategies and strained social support networks).

7. Health conditions:

Notwithstanding that extra-ordinary efforts were exerted to prevent breakdowns in service delivery and quality, nevertheless there were indicators of deterioration of the health and nutritional status of the population.

UNRWA studies on the prevalence of iron deficiency anaemia among children 6-36 months of age, pregnant women and nursing mothers revealed that anaemia rates in Gaza Strip were as high as 54.7 per cent among children, 35.7 per cent among pregnant women and 45.7 per cent among nursing mothers. The corresponding rates in the West Bank were 34.3 per cent among children, 29.5 per cent among pregnant women and 23.1 per cent among nursing mothers.

It is worthmentioning that the high anaemia rates persisted in spite of UNRWA's interventions which comprise issue of medicinal iron supplements to vulnerable groups through its maternal and child health services, fortification of wheat flour with iron and folate and other public health measures.

A study conducted by USAID funded project revealed that 22 per cent of children were found to have low vitamin A plasma levels. The estimated prevalence would be considered to fall into the severe category ($\geq 20\%$) according to WHO criteria for judging that vitamin A deficiency in a community constitutes a public health problem.

A serological survey conducted by the Ministry of Health in collaboration with UNICEF and UNRWA for measles, rubella and hepatitis-B vaccines on children aged 9 months to 5 years revealed that about 33 per cent of children had low seroconversion rates to measles antibodies (more in Gaza Strip than in the West Bank).

Since December 2003, there was a large outbreak of mumps in Nablus area affecting a total of 2,278 refugee children mainly below 15 years of age, of whom 72.9 per cent were previously immunized. In total more than 4,000 children, both refugees and non-refugees were affected. The outbreak reached its peak during April – May 2004, subsided thereafter but spread out to other districts of the West Bank.

Both the low seroconversion to measles vaccine and the mumps outbreak were attributed to possible breakdowns in the public sector cold chain system due to frequent power cuts.

A study conducted by a USAID-funded project revealed that one out of a thousand pregnant women delivered while stranded at Israeli military checkpoints during labour. UNRWA data revealed that the progress achieved in family planning services over several years started to be reversed in Gaza Strip, which is a common phenomena under crisis situations. In addition, there was a drop in coverage of post-natal services.

In areas of the West Bank most affected by closures and movement restrictions, immunization coverage with full primary and booster doses of programmed vaccines was below the target of above 95 per cent achieved in other localities. The rates for infants below 12 months of age were 85 per cent in Jerusalem health centre and even lower in Hebron and Dheisheh. Likewise, immunization coverage with booster doses for children below 18 months of age was 75.6 per cent in Jerusalem health centre, and 79 per cent in Kalandia health centre. In spite of the sustained high immunization coverage, Field-wide, the decline in immunization coverage in certain localities is cause for concern because it leaves pockets of unimmunized children, which could cause disease outbreaks among highly immunized communities.

Similar to immunizations, non-attendance rates of noncommunicable disease patients to UNRWA clinics were higher in localities affected by closures and restricted movements such as Jerusalem and Hebron.

According to the latest report by IUED on Palestinian Perceptions of their Needs during the Second Intifada covering the period July 2003 to February 2004, 36% of parents reported aggressive behaviour among their children, 31% noticed bad school results, 25% mentioned that their children are bedwetting and 28% reported their children having nightmares.

All four types of behavioural problems are most explicit in the Gaza Strip in refugee camps and among the poor segments of the society. Adolescents (ages 10-19) are becoming more vulnerable than other groups to aggression, rebellion, risk-taking behavior, helplessness, frustration and withdrawal.

UNRWA's RESPONSE

1. Emergency appeals:

Since October 2000, UNRWA launched seven appeals to support its programme of emergency humanitarian assistance in the oPt, on top of its regular programme activities. Through these appeals, UNRWA requested funding at USD 739.2 million and received USD 399.2 million, as shown in table 1.

Table 1, Funding of emergency appeals (in USD millions)

	2000-2002 Appeals		2003 Appeals		2004 Appeal*		Grand Total	
	Amount	%	Amount	%	Amount	%	Amount	%
AmountAppealed	333.2		196.6		209.4		739.2	
Confirmed Pledges	230.4	60%	93.0	47%	98.6	47%	422.0	57%
Amount Received	226.5		87.7		85.2		399.2	
Total un-funded amount	102.8	31%	103.6	53%	110.8	53%	317.2	43%

*Includes the Supplementary Appeal for Rafah (amount appealed USD 15.8m, amount pledged USD 6.9m, amount received USD 3.6m).

In addition, UNRWA launched its eighth emergency appeal, to sustain the programme of emergency humanitarian assistance during 2005 at USD 186 million, which is less than the 2003 request because of integration of the cost of emergency medical supplies, hospitalization and psychological counseling and support into the regular budget.

2. **Programme of emergency assistance:**

UNRWA cares for almost half of the population of the oPt and is the largest humanitarian operation in the region.

According to WHO, speedy response to a crisis should be geared to ensuring the survival, and protecting the wellbeing of the affected population. Essential elements of the response include equitable access to adequate safe water, hygienic sanitation, and food and shelter, and protection of affected population from ill-health and violation.

The Agency neither has the mandate to pursue protection issues nor has control over natural resources nevertheless, UNRWA has developed a refined package of measures to mitigate the worst effects of the conflict on refugee communities within available means. These measures comprised employment programmes, cash and in-kind assistance, food aid, reconstruction and repair of conflict-damaged infrastructure, emergency medical care and psychological counseling and support.

a) Emergency employment

The objective of this programme is to contain and mitigate the socio-economic crisis facing the refugee population through temporary job creation using both direct hire (where UNRWA both funds and directs the programme of work) and indirect hire (where UNRWA funds and supervises activities implemented through community organizations). Maintenance of UNRWA's service levels and infrastructure is a secondary objective of the temporary job creation programme.

The programme has made a significant contribution to maintaining minimum levels of income for Palestine refugees during the emergency. Since the direct hire programmes began, over 4 million job days have been provided in the Gaza Strip and over 1 million job days in the West Bank. Likewise, indirect

hire programmes have created over 100,000 job days in Gaza and over 260,000 job days in the West Bank.

Additional staff were recruited under this programme in order to meet the additional demand on UNRWA's medical care services or to replace staff who could not reach their duty stations due to restrictions imposed on movement of vehicles and personnel. The table below provides information on additional health staff recruited under this programme.

	<u>Gaza Strip</u>	<u>West Bank</u>
Medical Officers	19	9
Dental Surgeons	11	8
Nurses/midwives	23	29
Lab. Technicians	25	11
Assistant Pharmacists	26	14
Physiotherapy Assistants	5	6
Other categories	204	20
Total	313	97

b) Food assistance

The objective of the emergency food aid programme is to combat malnutrition and micro-nutrient deficiencies and counteract the problems of physical and economic access to food by providing food security nets comprising a basket of six basic commodities that are not produced or are not available locally at an affordable cost. An indirect benefit of the programme also is that it frees up scarce household funds for other essential needs.

UNRWA's emergency food assistance programme has delivered almost four million food parcels in the West Bank and Gaza Strip since the start of the intifada. Food aid has been targeted at refugee households that have lost their income altogether and those whose incomes have been severely disrupted. The Agency coordinated aid activities targeting non-refugee with the Palestinian Authority's Ministry of Social Affairs and WFP in order to avoid duplication. Families in areas under curfew or closure and those facing crises, resulting for example from evacuation have also been assisted. In such cases, the Agency assists both refugees and non-refugees indiscriminately.

c) Cash and in-kind assistance

The objective is to enable the most vulnerable families most affected by the crisis to meet urgent needs. Since launching its Flash Appeal in October 2000, UNRWA has distributed over USD 12.5 million in cash assistance grants in Gaza Strip and over USD 9 million in the West Bank. In-kind assistance, in the form of tents, blankets, mattresses and kitchen kits was provided mainly to those whose homes have been demolished through Israeli military activity. Over 110,000 items have been distributed in the Gaza Strip and over 30,000 in the West Bank since the crisis began.

d) Reconstruction and repair of conflict-damaged infrastructure

The objective is to meet the housing needs of families made homeless, and repair damages caused to shelters, community infrastructure and UNRWA

installations. Since the *intifada* began in September 2000, UNRWA's rehousing programme has struggled to keep pace with the rate of destruction brought to bear. The Agency has so far been able to re-house only 505 families in 477 dwelling units and repair 1,043 damaged shelters in Gaza, due to a shortage of funds. An additional 190 dwelling units to accommodate 210 families are currently under construction. In the West Bank, the Agency has been able to rebuild a total of 339 shelters and rehabilitate 277 cases of major damage. Major re-housing projects undertaken by the Agency comprised reconstruction of Jenin camp in the West Bank and re-housing homeless refugees from Rafah and Khan Younis in the Gaza Strip.

e) Emergency health care

The objective is to meet the additional burden on the healthcare system owing to the newly emerging needs and challenges and facilitate access to health services in locations affected by closures and the wall/fence in the West Bank. This programme does not run in the Gaza Strip due to its smaller geographical size and the concentration of camp-based refugees who are able to access services locally.

Composed of a medical officer, practical nurse, laboratory technician, pharmacist and lab technician/driver, mobile health units visit villages on a weekly or bi-weekly schedule. The teams offered a full range of essential medical services including, immunization, control of communicable and non-communicable diseases, and provided first aid treatment for conflict-related injuries. A total of 112,966 patients were seen and 862 visits carried out during 2004.

During 2004 there were five mobile teams in the West Bank, each serving an average of 100 patients during each visit. In addition to maintaining the services of these teams, the Agency is seeking to establish two new mobile teams in Nablus and Hebron areas. These additions will enable 14,000 patients to receive essential health care every month.

In both Gaza Strip and the West Bank, additional medical supplies were made available to meet the increased demand on UNRWA treatment services and a two months stock reserve was maintained in each health centre to meet urgent needs in case of disruption of the supply chain. In addition, three hospitals were contracted in the West Bank to overcome access problems to Agency contracted hospitals, including hospitals in East Jerusalem.

Under its emergency psychological counseling and support programme, the Agency assigned counsellors to schools and health centres throughout the OPT. Armed conflict, the tight regime of closure and prolonged curfews are the sources of acute psychological stress for Palestinians, both adults and children. The signs of stress, particularly among children, are readily apparent. The Agency provided a range of services aimed at promoting the development of constructive coping mechanisms for refugees in crisis situations and preventing long-term psychological consequences. Programmes targeting schools, health centres, social services and community-based centres were underway throughout the reporting period.

Projects employing 120 trained counsellors in Gaza Strip and 82 mental health counselors and community mobilizers in the West Bank aimed to

provide psychological counseling and support to a population under severe stress.

Group guidance activities were undertaken in UNRWA schools. These included sessions providing recreational activities and role playing exercises that enabled children to express their fears and anxieties. To ensure that support could also be provided at home, group meetings were held with parents of school children, to help them deal with children suffering from trauma.

Health personnel, social workers and teaching staff received training on early detection and referral of persons who need psychosocial support and partnerships were maintained with community mental health institutions in Gaza Strip and the West Bank. The Agency is also seeking to enhance cooperation with other partners within the framework of the national mental health plan developed by the MOH in collaboration with WHO which assisted the Ministry of Health in establishing new community mental health centres in Ramallah, Hebron and Gaza.

UNRWA also participated in the measles and vitamin-A supplementation campaign, which was launched in June-July 2004 in collaboration with the Ministry of Health of the Palestinian Authority and UNICEF.

In total 34,459 children aged 9 months to 5 years were vaccinated by UNRWA health teams in the West Bank and 50,855 were vaccinated in the Gaza Strip. The overall national coverage was 98.2 per cent (97.3 per cent in the West Bank and 99.4 per cent in the Gaza Strip).

3. THE ONGOING CHALLENGE:

UNRWA is confronting the enormous hurdles brought on by economic suffocation and relentless violence to the best of its ability. Despite overwhelming desire to be an economically productive and self-sufficient, the refugee population can not, under the current conditions, support itself, or rebuild its communities⁽¹⁾. The main challenge to UNRWA during the crisis was to prevent breakdowns of essential services while addressing development needs with a seriously under-funded emergency budget for more than four years.

One of the major consequences of the current crisis in the oPt, is that it gradually diverted international support to the Palestinian people from development assistance to emergency response.

This change was inevitable under conditions of a near-collapse of the economy, exhaustion of coping mechanisms, destruction of infrastructure, stunting of civil society institutions, damage to public sector functions and services and implementation of strict separation and closure policies.

From a health perspective, crises are resolved when essential health systems function to their full capacity, when the major needs of the most vulnerable populations receive attention and when the health-care environment is secured for both patients and health personnel. The prevailing conditions are not as yet ripe to meet these pre-requisites, which makes the transition from conflict to recovery and development extremely difficult without a breakthrough in the cycle of violence, destruction and obstacles to humanitarian access.

⁽¹⁾ Peter Hansen, Commissioner-General, UNRWA

UNRWA's strategic objective is to ensure that developmental and socio-economic opportunities arising from any positive developments on the ground are effectively utilized to better the living conditions of the Palestine refugees in the oPt, through a mix of interventions:- Developmental, rehabilitative and crisis-related.

UNRWA maintained close collaboration with the Palestinian Authority and other United Nations Organizations for preparation of the Consolidated Appeal Process (CAP), as well as the medium term development plan and is intensifying its links with the World Health Organization's Programme of Health Action in Crises as well as with other local partners for strengthening technical cooperation in priority and commonly defined areas including nutrition, mental health, expanded programme of immunization, food safety and advocacy.

UNRWA's programme of cooperation with the University of Geneva's Graduate Institute of Development Studies (IUED) on data collection had thus far provided a tool for monitoring crisis indicators and assessing people's perceptions of their needs. It will also bring benefits during 2005 for the targeting of emergency programmes and strengthen the needs-based approach already adopted. The situation in the oPt is under constant review by UNRWA. Supported by the international community, the Agency will be prepared to act quickly in response to developments on the ground such as the Gaza disengagement plan as well as, impact of the Separation Wall and planned regime of access of the population within the West Bank, and between the West Bank and East Jerusalem through two controlled crossings in Kalandia and Bethlehem.

IV. MEDICAL CARE SERVICES

Evidence suggests that health systems with strong, integrated primary care are associated with better outcomes, probably because they provide for more comprehensive, longitudinal and coordinated care.

*World Health Report
2003*

OBJECTIVE

The objective of the medical care programme is to reduce disability and mortality from acute and chronic illnesses by provision of diagnostic and treatment services to the Palestine refugee population through the Agency's network of primary health care facilities and provision of essential hospital services at governmental or contracted institutions.

PROGRAMME ACTIVITIES

1. Curative medical care services are provided as an integral part of the Agency's comprehensive primary health care activities, whereby the physical, human and financial resources allocated to this programme are shared with and complement disease control and health prevention and promotion activities. The specific activities of this programme component comprise provision of out-patient medical care including issue of medicines, laboratory investigations, radiology services, oral health services, physical rehabilitation and hospital services. Services at the primary level are provided to the served population free-of-charge, whereas policies for cost-sharing are in place with respect to hospital services and other outsourced services such as advanced medical investigations and prosthesis.
2. Services were provided through a network of 125 primary health care facilities, Agency-wide. Of these facilities, five health centres located in the largest camps in Gaza Strip were operated on double-shift. Introduced 15 years ago, this unique arrangement was maintained because of the Agency's inability to establish additional health care facilities that would help to reduce excessive workloads resulting from rapid population growth, increased demand for services and integration of new activities within the Agency's primary health care services.
3. Owing to their critical socio-economic conditions, some 40,000 Palestine refugees displaced from Gaza Strip since 1967, continued to receive UNRWA health services in Jordan.

In addition, beginning 2004 health services started to be provided to some 12,000 Palestine refugees who are on the official records of the Lebanese authorities but are not registered with UNRWA.

Likewise, Bedouin tribes who took refuge in Syria since 1948 and were not previously registered with UNRWA have been included in Agency records.

PROGRESS IN 2004

1. Out-patient care

1.1 Upgrading primary infrastructure, projects for expansion, upgrading and rehabilitation of primary health care facilities during 2004 comprised the following:-

In Lebanon, Phase II of the project for reconstruction of Beddawi health center was completed in July 2004 and started operation in August.

In Syria, The projects for expansion of Palestine, Jalil, Douma and Hama health centres as well as expansion of the Field Pharmacy were completed during the last quarter of 2004.

In Gaza Strip, The premises of El-Nasser health centre, Khan Younis was handed over by the local community and started operation effective September 2004. This increased the number of primary health care facilities operated by UNRWA from 17 to 18. Meantime, works for reconstruction of Rimal health centre were completed by year end.

In the West Bank, Two health points which were established under the emergency programme in the Jordan Valley were integrated within the regular programme, which increased the total number of primary health care facilities from 34 to 36.

Operation of three additional clinics in Gaza Strip and the West Bank increased the number of Agency primary health care facilities from 122 to 125, Agency-wide.

1.2 Utilization trends, utilization of out-patient services in 2004, was more or less, at 2003 level with a total of 8.2 million medical consultations made by the served population to Agency primary health care facilities (see table 1).

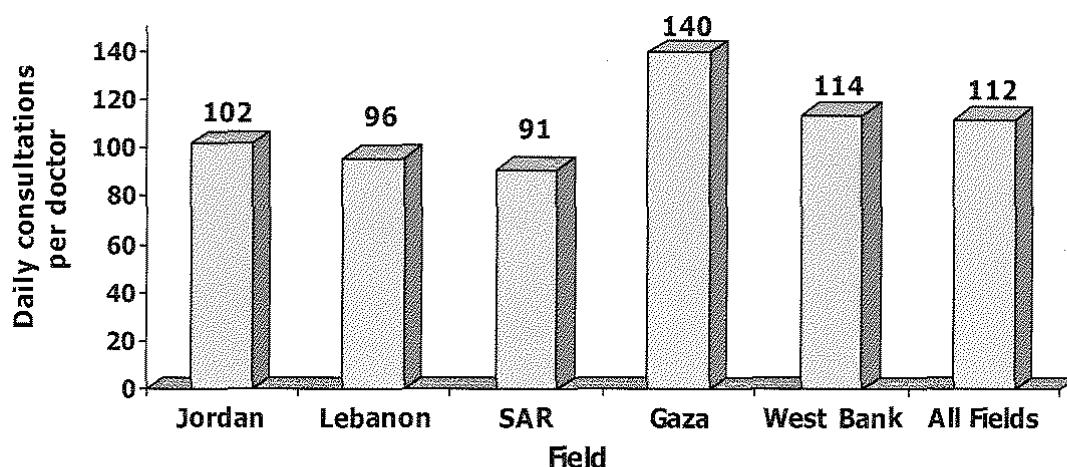
Table 1, Utilization of out-patient services, 2004

Field	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Registered refugees	1 776 669	399 152	421 737	952 295	682 657	4 232 510
a) Medical consultations:						
First visits	485 088	171 490	236 740	647 267	273 689	1 814 274
Repeat visits	1 653 373	765 038	749 118	2 180 755	1 032 681	6 380 965
Ratio repeat to first visits	3.4	4.5	3.2	3.4	3.8	3.5
Sub-total	2 138 461	936 528	985 858	2 828 022	1 306 370	8 195 239
b) Other services:						
Injections	43 782	27 695	31 241	438 409	67 957	609 084
Dressings	95 179	38 666	17 311	187 962	71 219	410 337
Sub-total	138 961	66 361	48 552	626 371	139 176	1 019 421
Grand total (a) & (b)	2 271 422	1 002 889	1 034 410	3 454 393	1 145 546	9 214 655
Daily workload per medical officer	102	96	91	140	114	112

The ratio of repeat to first visits increased from 3.2 in 2003 to 3.5 in 2004 mainly because of improved follow-up on patients suffering from noncommunicable diseases.

- 1.3 Staff workloads, the workloads at UNRWA primary health care facilities continued to be high with an Agency-wide average of 112 out-patient medical consultations per doctor per day. The highest workloads continued to be reported from Gaza and the West Bank in spite of recruitment of additional staff under the emergency job creation programme (see figure 1 below):

Figure 1, Average daily workloads, per doctor



2. In-patient (hospital) care:

- 2.1 Services provided, the Agency continued to provide assistance towards essential hospital services either by contracting beds at non-governmental and private hospitals or through partial reimbursement of costs incurred by refugees on their treatment at governmental or non-governmental hospitals. In addition, services were provided by the UNRWA run hospital in Qalqilia, West Bank.

In addition to outsourced services, UNRWA operates a 63 bed hospital in Qalqilia, West Bank, which accommodates 14 surgical, 12 medical, 20 paediatric, 15 maternity and 2 intensive care beds in addition to a 5 bed emergency department.

It is worthmentioning that the rate of the Agency contribution towards life saving treatment such as open heart surgery was increased in Lebanon Field beginning 2004 because the old rates of refugees' contribution towards such treatment were unaffordable.

Data on utilization of hospital services in 2004 is shown in table 2 below.

Table 2, Utilization of outsourced general hospital services, 2004

Indicators	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Patients admitted	15 675	18 372	7 092	3 148	12 856	57 413
Bed days utilized	34 933	12 003	10 787	12 003	36 501	139 162
Average stay in days	2.2	3.5	1.5	3.5	2.8	2.4

2.2 Utilization of trends, the trend in utilization of hospital services during 2004, both in terms of patients who benefited from the Agency supported schemes and number of bed days utilized, was almost identical to utilization trends in 2003 and the average stay in days remained unchanged at 2.4 Agency-wide with the highest rate of 3.5 days in Gaza Strip and the lowest of 1.5 in the Syria Field.

The average daily bed occupancy in the UNRWA run hospital in Qalqilia during 2004 did not exceed 44.7 per cent because of difficulties in access to the hospital after construction of the separation wall, which enclaved Qalqilia town from surrounding localities.

Table 3 below provides data on utilization of UNRWA Qalqilia hospital in the West Bank and maternity units in Gaza Strip.

Table 3, In-patient care, UNRWA facilities

Indicators	Qalqilia hospital, West Bank	Maternity units, Gaza
Number of beds	63	60
Persons admitted	4 794	2 741
Bed days utilized	10 317	3 942
Average daily bed occupancy (%)	44.7	17.9
Average stay in days	2.14	1.4

The low bed occupancy rate of approximately 18 per cent of UNRWA maternity units in Gaza Strip is due to the increased tendency on part of refugee pregnant women to deliver in hospitals. This raises the issue of the cost-effectiveness of maintaining the service and the possibility of phasing it out by redeployment of staff and physical space to reduce the overcrowding at primary health care facilities, which will improve maternal and child health and family planning services.

2.3 Age distribution of patients, analysis of the age distribution of patients admitted to hospitals during 2004, reveals that approximately one-fourth of hospitalized patients were children below 14 years of age (see table 4 below).

Table 4, Age distribution of patients admitted to hospitals – 2004

Field	No. of patients admitted	Age group (years)				All age groups
		0-4 %	5-14 %	15-44 %	45+ %	
Jordan	15 675	9.7	5.4	77.0	7.9	100
Lebanon	17 280	17.5	13.3	39.8	29.4	100
Syria	7 089	15.0	7.2	57.1	20.8	100
Gaza	4 467	1.8	5.8	62.8	29.7	100
West Bank ⁽¹⁾	17 650	18.3	8.6	50.2	22.9	100
All Fields	62 161	14.3	8.7	55.8	21.2	100

(1) Data includes patients admitted to Qalqilia and outsourced hospitals

2.4 Gender distribution of patients, almost two thirds of hospitalized patients were women, with the highest rate of 82.3 per cent in Jordan and the lowest of 53.8 per cent in Lebanon. These gender variations are mainly due to the pattern of resource allocations and the different referral policies implemented in each Field. (see table 5 below)

Special emphasis will be placed on adjusting such inequalities between Fields in future years with special emphasis on improving hospital services in Jordan and Gaza Fields, where the available provision is neither commensurate with the population size nor with the actual needs.

Table 5, Distribution of hospitalized patients by gender, 2004

Field	No. of patients admitted	Sex	
		Male %	Female %
Jordan	15 675	17.7	82.3
Lebanon	17 280	46.4	53.6
Syria	7 089	43.2	56.8
Gaza	4 467	38.8	61.2
West Bank	17 650	38.2	61.8
All Fields	62 161	35.9	64.1

2.5 Causes of admission, analysis of data on hospitalized patients by cause of morbidity and type of intervention reveal significant variations between one Field and another with predominance of surgical conditions in Syria and Gaza Fields, internal medicine in Lebanon and deliveries in Jordan Field.

Similar to gender distribution, these variations are not related to major differences in the prevailing morbidity patterns but are rather due to implementation of different referral policies and to the level of Agency assistance provided in each Field.

Table 6, Distribution of hospitalized patients by cause of admission, 2004

Field	No. of patient admitted	Surgical %	Internal medicine %	ENT %	Ophth. %	Deliveries %
Jordan	15 675	21.9	17.5	0.5	1.2	59.0
Lebanon	17 280	24.4	58.4	1.9	1.9	10.4
Syria	7 089	59.7	8.1	5.3	9.5	17.3
Gaza	4 467	56.2	16.5	0.02	0.02	27.2
West Bank	17 650	22.6	44.9	5.6	2.6	24.3
Total	62 161	29.6	35.5	2.6	2.6	28.6

The Agency's medium term plan includes special provision for implementation of more equitable hospitalization policies by increasing budget allocations for Fields where the available provision is inadequate especially in Jordan, Gaza Strip and Syria and rationalization of referral practices in each of Lebanon and the West Bank Fields. However, such major changes need to be implemented in a phased manner because of their financial and operational implications.

- 2.6 Budget and expenditure, a study on the trends of utilization and cost-benefit analysis of hospital services during the period 1999-2003 was undertaken in April 2004. Summary of the findings of this assessment are outlined in table 7 below. The table clearly shows that the budget appropriations for hospital services are high in each of Lebanon and the West Bank and low in Jordan and Gaza Strip. It also shows that while Gaza had the lowest bed provision and lowest number of patients treated, nevertheless it had the highest per bed and per patient cost.

Table 7, Resource indicators, hospital services

Indicator	Jordan	Lebanon	Syria	Gaza	West Bank	Agency-wide
No. contracted hospitals	0 ⁽¹⁾	11	9	1	11 ⁽²⁾	29
Percentage of budget appropriations for hospitalization of total medical care budget	7.3	37.8	13.9	11.7	41.5	23
Ratio of hospitalized patients per 1,000 registered population	8.5	43.8	16.0	3.4	16.0	13.9
Expenditure in US \$ per registered refugee on hospital services.	0.5	8.8	2.0	11.1	2.0	2.5
Cost per hospitalized patient in US \$	63.5	200.6	122.6	322.0	122.6	176.1
Cost per bed day utilized in US \$	26	85	73	85	73	72

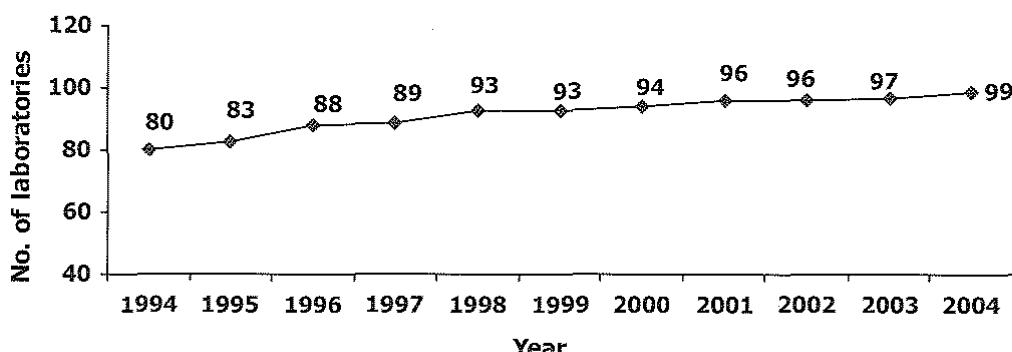
- (1) Jordan Field does not maintain any contractual arrangements and implements a system of individual patient subsidies (re-imbursement).
(2) In addition, three hospitals are contracted under the emergency programme

3. Laboratory Services:

3.1 In order to meet the increasing demand on basic laboratory services, two additional clinical laboratories were established one, in the newly operated Al-Nasser health centre in Gaza Strip and another in Douma health centre in Syria Field. Also one laboratory was upgraded from part-time to full-time service.

Figure 2 below shows the growth in number of laboratories in the five Fields during the period 1994 to 2004.

Figure 2, No. of laboratories integrated within UNRWA health facilities



3.2 Of the 125 primary health care facilities, Agency-wide 99 are providing comprehensive laboratory services. The remaining 26 facilities are providing basic laboratory support (blood glucose, blood haemoglobin and urine tests) by trained nursing staff using basic laboratory equipment. Additional 6 health centre laboratories started providing bacteriology services during 2004 increasing the total number of such laboratories from 10 to 16.

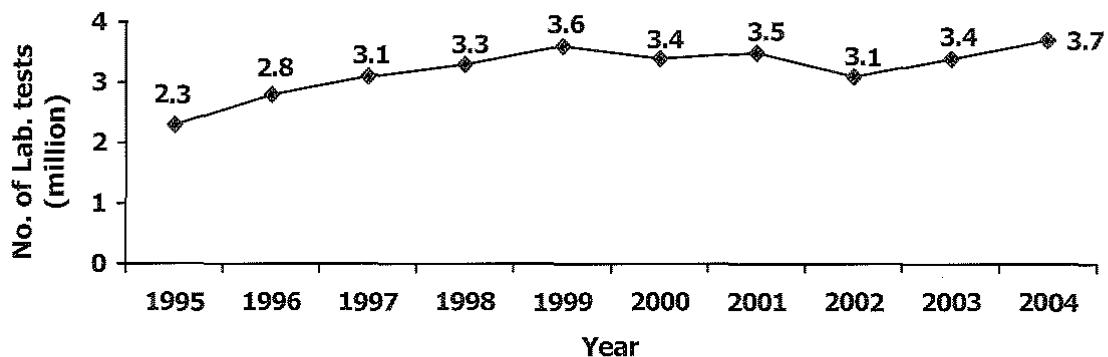
3.3 In order to enhance the capacity of the health care system for surveillance of communicable and noncommunicable diseases of public health importance, as well as to assess and monitor the health status of at risk groups and detect and manage morbidity conditions based on laboratory evidence, the following planned activities were undertaken:

- a) A laboratory support system for surveillance of sexually transmitted diseases, other than HIV/AIDS, was established based on the WHO guidelines on direct examination of urethral and vaginal discharges for neisseria gonorrhoeae, trichomonas vaginalis and candida albicans. Systems for referral and feedback between UNRWA and the public health laboratories of the host authorities, especially with regard to surveillance of poliomyelitis, measles, rubella, meningitis and HIV/AIDS, were maintained and strengthened.
- b) The joint project implemented by UNRWA, UNICEF and the government of the Syrian Arab Republic for surveillance of hereditary anaemias such as thalassaemia and sickle cell disease was maintained and further expanded.
- c) Automated laboratory equipment were introduced at large laboratories to replace the labour-intensive manual procedures as well as to increase productivity and efficiency. The out-of-date and unserviceable laboratory

equipments were replaced. Additional laboratory technician posts were established at laboratories where workloads are far above the productivity target.

- 3.4 Figure 3 below shows the trend in utilization of laboratory services during the period 1995-2004. Utilization during 2004 increased by 9.6% Agency-wide from 2003 level. The rates of increase were 19.8% in Jordan, 31.5% in the West Bank and 6.5% in Syria. A decrease in the utilization was observed in Gaza by 2% and in Lebanon by 6%, which was mainly due to performing simple urine tests by nurses at health centres where no laboratory is available instead of referring samples to other health laboratories.

Figure 3, Trend in utilization of laboratory services



The overall increase could be attributed to updating of the registration files of patients with noncommunicable diseases which required performance of laboratory tests as per the relevant technical instruction that was revised in the context of the overall revision of the intervention strategy.

- 3.5 As part of the policy to conduct periodic self-evaluations of the various programme components, a comparative study of workloads and productivity of laboratory services was undertaken on the basis of the 2004 statistical data. The analysis revealed that the productivity target of 50 units/hour was almost achieved in all Fields with the highest rate of 65.7 units/hour reported from Gaza Strip (See table 8).

Table 8, Actual productivity of laboratory services by Field, 2001-2004

Year	Jordan	Lebanon	Syria	Gaza	West Bank	Average
2001	43.3	58.4	60	66.3	48.7	55.3
2002	50.8	55	47.1	72.3	47.2	53
2003	54.2	49	47.9	76.6	58.4	58.7
2004	58.5	49.9	49.4	65.7	56.6	55.9

- 3.6 The cost of the Agency's laboratory services continued to be much lower than the official market rates. The non-staff cost per 100 workload units, Agency-wide was USD 3.5. It varied from USD 4.3 in the West Bank, to USD 3.1 in Jordan and Gaza, USD 3.7 in Syria and USD 3.5 in Lebanon. UNRWA's experience in integrating laboratory services remains very cost-effective compared to outsourcing of services.

- 3.7 Special emphasis was placed on in-service training in order to keep laboratory personnel updated on recent advances in technology. The manual on basic laboratory techniques for UNRWA personnel was revised and the fourth edition will soon be finalized and distributed. Training programmes on the new edition are planned during the year 2005.
- Special emphasis was also placed on monitoring the performance of laboratory personnel and proper provision and utilization of laboratory services. To this effect, a six-monthly quality control system under direct observation through all steps of the laboratory analytical process including pre-analytical, analytical and post-analytical was introduced and a periodic assessment of services provided is undertaken annually based on a standard checklist.
- 3.8 In response to the call of the WHO, Regional Office for the countries of the Region to conduct studies on antimicrobial resistance and based on the findings of the study conducted during 2003, measures were undertaken to address the problem including review of the Agency's list of essential medicines.
- 3.9 Analysis of data collected from all UNRWA laboratories in 2004 revealed that out of 111,483 stool examinations performed, 24,054 were positive for intestinal parasites i.e. 21.6 per cent. The most commonly prevalent intestinal parasites based on positive findings were: 48.9 per cent entamoeba histolytica, 29.4 per cent giardia lamblia, and 6.7 per cent ascaris lumricoides.

4. Oral health:

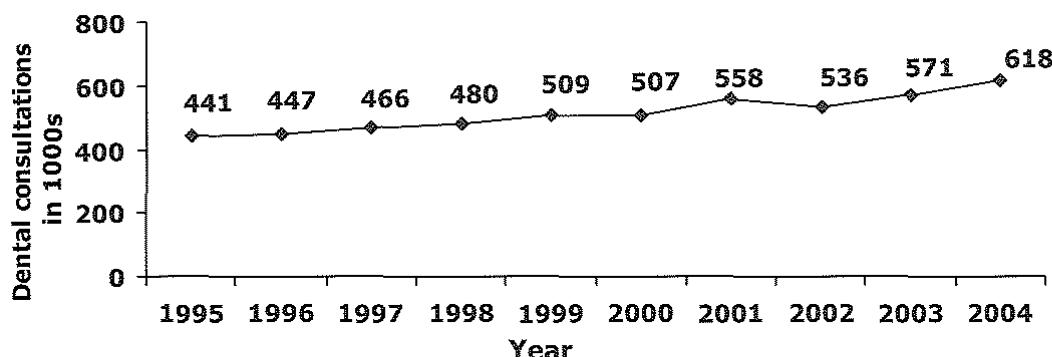
- 4.1 Plans for expansion of oral health services in 2004 comprised establishment of 5 additional dental clinics, one in the West Bank and two each in Gaza Strip and Syria Fields.
- 4.2 Analysis of the trends of utilization of dental services in 2004, revealed that there was 8.3 per cent increase in dental consultations over 2003 and 5.4 per cent increase in screening activities.

Table 9, Utilization of dental services, 2004

Indicator	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Dental consultations	168 175	120 637	74 708	148 065	106 433	618 018
Dental screening	36 775	30 426	28 042	87 786	29 952	212 981
Daily dental surgeon workloads	24	26	19	34	19	24

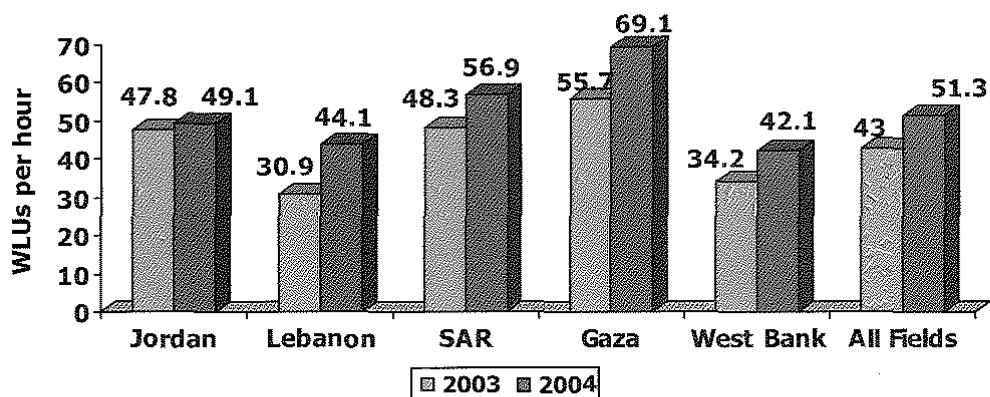
The steady increase in number of dental consultations over the last ten years is shown in figure 4 below:

Figure 4, Trend in utilization of dental services



- 4.3 Studies on workloads, productivity and efficiency of oral health services were conducted in the five Fields of the Agency's area of operation based on a standardized protocol. Comparative analysis of productivity rates in relation to the defined target of 50 workload units per hour are shown in figure 5 below which shows relative changes from 2003 data.

Figure 5, Productivity of dental services by Field



The data show that the highest workloads were in Gaza Strip and the lowest were from Lebanon and the West Bank.

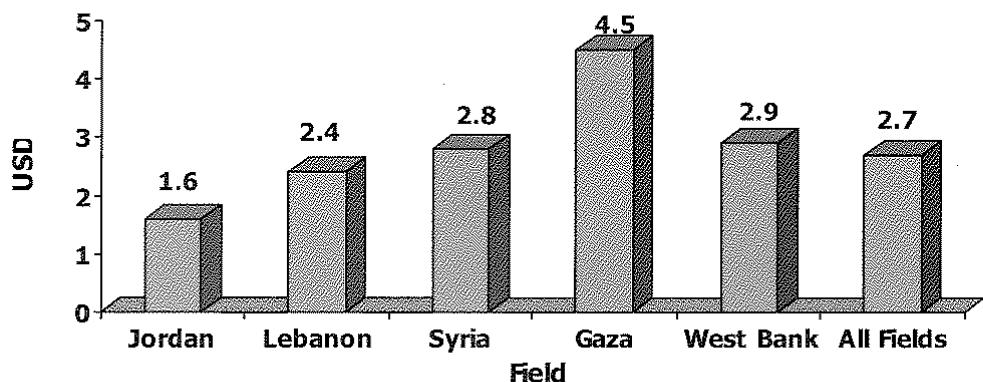
This assessment is carried out as part of the periodic evaluation of system performance and is used to assess staffing requirements and re-organization of services to obtain optimal utilization of available resources.

- 4.4 Studies on the prevalence of decayed, missing and filled teeth (DMFT) were conducted in Lebanon and Syria Fields. The results of these surveys revealed that the DMFT was 3.30 among children 12 years and 3.99 among children 15 years of age in Lebanon whereas in Syria the results were gender-segregated with prevalence rates of 1.75 among males and 2.1 among females aged 12 years and 2.35 and 2.93 respectively among males and females aged 15 years.

5. Medical supplies:

- 5.1 The spend on medical supplies and equipment represented the second highest line of expenditure in health after staff costs. Total expenditure on medical supplies and equipment from all funds (regular cash budget, in-kind contributions and emergency appeals) in 2004 was approximately USD 12.17 million representing a 2.3 per cent decrease from the rate of expenditure in 2003, which was due to decline in the level of in-kind contributions of emergency medical supplies to the oPt.
- 5.2 Similar to previous years, a study of the trends of utilization of medical supplies was carried out during 2004. Analysis of data on expenditure on medical supplies revealed the following:-
- Average expenditure on medical supplies per outpatient medical consultation was USD 1.4, Agency-wide. The highest rate of USD 1.5 per medical consultation was from Gaza strip and West Bank, followed by Jordan (USD 1.3) and was approximately USD 1.2 in Syria and USD 1.0 in Lebanon. The low rate of expenditure in Lebanon is due to the high rate of repeat visits (4.5 compared to an Agency-wide average of 3.5).
 - Average expenditure on medical supplies per registered refugee was USD 2.7, Agency-wide (see figure 6 below).

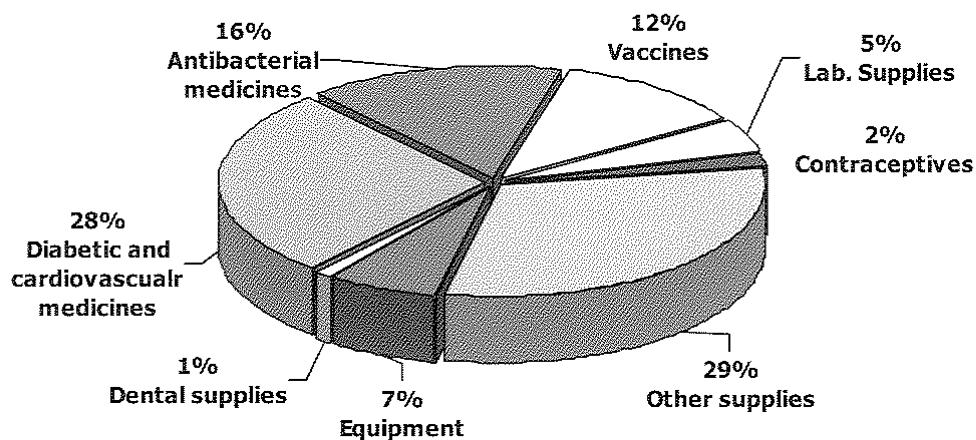
Figure 6, Expenditure on medical supplies per registered refugee



The highest rate of USD 4.5 per registered refugee was from Gaza, followed by USD 2.9 in the West Bank, USD 2.8 in Syria and USD 2.4 in Lebanon. The lowest rate was USD 1.6 in Jordan.

- As can be seen from figure 7, approximately 56 per cent of the total expenditure on medical supplies was on disease prevention and control activities, both for treatment of communicable and noncommunicable diseases. Expenditure on antibacterial drugs represented 16 per cent of total expenditure, with a significant increase over 2003, which could be attributed to indiscriminate prescribing of antibacterial medications.

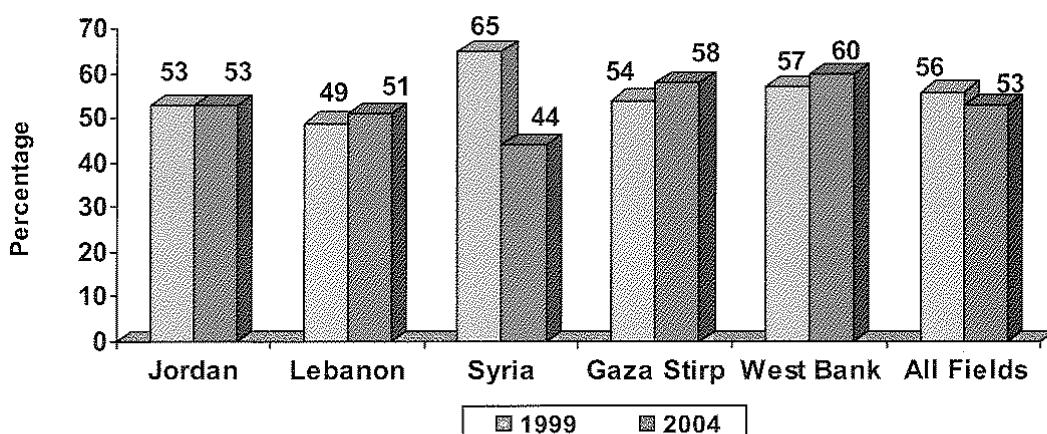
Figure 7, Breakdown of expenditure on various groups of medical supplies



A new group of antimicrobial medications was introduced to improve the quality of care and overcome high resistance among commonly used drugs. The introduction of these agents was accompanied by deletion of other old medicines which proved to be highly resistant through sensitivity studies. The need for upgrading the knowledge of medical personnel on rational prescribing of the antimicrobials is top on the plans for capacity building.

- 5.3 The new drug supply management system was implemented on trial basis during 2004 in all Fields of the Agency's area of operations. The programme supports and improves management of the medical supply operation including stock movements and inventory controls. By year end, the system had gone through a series of adjustments based on feedback received from the Fields. The system is expected to be fully operational in 2005.
- 5.4 Studies on antibacterial prescribing practices were carried out in all Fields during 2004. The studies revealed that in spite of the heavy investment in training of medical personnel on rational prescribing practices, indiscriminate use of antibacterial medicines is still common practice in all Fields, with more than 50 per cent of attendants visiting UNRWA out-patient clinics receiving antibiotics. The rates were particularly high in the West Bank and Gaza Strip Fields as well as among children. The rates of prescribing antibacterial medicines by Field are shown in figure 8 below:

Figure 8, Rates of prescribing antibacterial medicines by Field



- 5.5 Monitoring of Pharmacy operations at central and health center levels was carried out, Agency-wide according to standard checklists in order to identify and address needs for improving storage capacity, ensure safety precautions, upgrade equipment and assess performance.
- 5.6 In order to improve rational prescribing practices in accord with WHO recommendations and cope with the expansion of programme activities, the Drug Formulary was reviewed and updated to guide medical staff on proper selection and prescribing of medications. The fifth edition of the formulary will be released during 2005.
- 5.7 The following in-kind contributions of medical supplies were donated in 2004:
- a) The Ministry of Health of the Palestinian Authority contribution to Gaza and West Bank Fields amounted to USD 844,116 (USD 721,038 for Gaza and 123,078 for the West Bank) in the form of vaccines, disposable syringes, needles and cold-chain equipment.
 - b) The Ministry of Health, Jordan contribution to the Field amounted to about USD 548,300 in the form of vaccines and contraceptive supplies.
 - c) The Ministry of Health, Syria contribution to the Field amounted to USD 75,771 in the form of vaccines and cold chain supplies.
 - d) UNICEF contribution to UNRWA amounted to USD 57,827 (USD 24,729 for Lebanon, USD 7,515 for Syria and USD 25,583 for West Bank) in the form of vaccines, disposable syringes, needles and oral rehydration solutions.
 - e) RAM Pharmaceutical contribution to UNRWA amounted to USD 29,897 (USD 10,687 for Gaza, USD 10,760 for Jordan, USD 3,848 for Syria, and USD 3,626 for West Bank and USD 976 for Lebanon) in the form of antibiotics and other medications.
 - f) Gulf Pharmaceutical contributed USD 4,572 for Syria Field in the form of medications.
 - g) The local community in Lebanon contributed approximately USD 15,000 to the Field in the form of medical equipment.
 - h) Japan made a cash contribution of USD 845,315 to Gaza Field for the procurement of medical equipment and medications.
 - i) The Italian government contributed USD 844,118 in cash towards procurement of major equipment to the Italian Hospital in Syria where UNRWA maintains a contract for treatment of refugees.



Newly constructed Rimal Health Centre – Gaza Strip

V. HEALTH PROTECTION AND PROMOTION

Each year more than half a million women die from pregnancy-related causes and 10.6 million children die, 40 per cent of them in the first month of life. Almost all of these deaths are in developing countries. Many could be prevented with well-known interventions, if only they were more widely available.

*Dr. LEE Jong-wook
Director-General, WHO*

OBJECTIVE:

The objective of the Agency's health protection and promotion programme is to preserve the sustainable investment achieved in women's and children's health, promote their mental and psychological well-being and attain further progress in reduction of infant, child and maternal mortality through an integrated primary health care approach consistent with the health-related Millennium Development Goals (MDGs) as well as with the standards set out in the Convention on the Rights of the Child (CRC).

PROGRAMME ACTIVITIES:

1. UNRWA's health protection and promotion programme represents an integral part of the Agency's primary health care activities. The programme offers comprehensive maternal health care to women in reproductive age including family planning services, infant and child health care, school health services, and nutritional surveillance.
2. The strategic approach of the programme is based on full integration of services and continuity of pre-natal, natal and post-natal care, family planning services and infant and child health care.
A proactive system of risk assessment, surveillance and management is used with the main objective of providing preventive care to the majority of pregnant women whose condition is normal with special attention and care to those identified as at risk, throughout the course of pregnancy and during the post-partum period.
3. Special attention was placed during the last few years on improving data collection and management as a means to improve surveillance of maternal and child health, enhance system performance and improve outcomes of care.
These efforts comprised revision of the standard reporting formats, investment in developing a new management health information system to improve monitoring and response at the service delivery level, heavy investment in staff development and capacity building, as well as conducting health services research to assess the health status of women and children and assess outcomes of care.

PROGRESS IN 2004:

1. General:

- 1.1 The 10th Field Family Health Officers' meeting was held during the period 30 November – 03 December 2004. The main objective of the meeting was to review the progress achieved in implementation of the approved plan of activity and develop an annual plan of activities for the year 2005. The 2005 plan included a series of action-oriented activities, capacity building activities and a plan for expansion of the management health information system, and a system of periodic monitoring and self-evaluation of performance/outcomes based on measurable targets set for the biennium 2004-2005. Several quality measures were adopted to facilitate the implementation of the plan of activities, with special emphasis on appropriate training, structured supervision, monitoring, evaluation and operational research including study on anaemia among pregnant women, nursing mothers and children 6 months -3 years of age and a qualitative study to assess the family and reproductive health knowledge, attitude and practice of adolescents enrolled in UNRWA schools.
- 1.2 A standardized training plan covering both in-service and on-the-job training was implemented to enhance institutional capacity building at the service delivery level. Table (1) below shows number of staff-days training by category of staff trained.

Table 1, Family health training activities, 2004

Training subjects	Staff-days training by staff category		
	Medical	Nursing	Total staff
• Training on the new technical instruction on "Provision of Maternal Care and Family Planning"	129	196	325
• Training on child health care technical instructions.	42	57	99
• Orientation of newly recruited staff on family health activities.	0	52	52
• Management of growth retarded children, examination of newborn infants and nutritional counselling.	43	49	92
• Training on STIs/STDs	35	20	55
• Management health information system (MHIS).	50	67	117
• Training on computer skills	583	849	1432
• Training on data collection for the study on anaemia among children 6-36 months of age, pregnant women and nursing mothers.	46	16	62
• School health activities	24	22	46
• IUD insertion	31	24	55
• Orientation of staff on gender concepts	24	27	51

- 1.3 The technical instruction on maternal health and family planning was reviewed and implemented early 2004 after ensuring that staff are well acquainted with its contents through an initial workshop followed by periodic competency assessment of the knowledge of all medical and nursing personnel based on the standard KAP questionnaire relevant to the approved intervention strategies. Staff with unsatisfactory performance and newly recruited staff will be reassessed until all staff reach competency level in implementation of the various components of the strategy.
- 1.4 Health educational materials on the various programme components represent an integral part of the Agency's health education/health promotion activities. The annual requirements of these materials were reproduced and distributed to all Fields. In total 158,000 copies of 11 educational pamphlets were reproduced during the year and 73,000 copies of 2 additional pamphlets; one on care of the newborn and another on menopause will be reproduced early 2005.
- 1.5 As part of the self-evaluation process, the family health programme review exercise was undertaken in all health centres in all Fields to follow-up on the progress made towards addressing the identified health centre-specific strengths and weaknesses. A team of supervisors together with health centre staff conducted the programme review using the standardized tool. Through the problem-solving approach, corrective measures were taken to address areas that need further improvement at health centre and at Field levels. This exercise will be carried out annually to monitor progress.
- 1.6 Implementation of the maternal health and family planning module of the Management Health Information System (MHIS) Project started in April 2003. The main objective is to decentralize programme management, improve surveillance, monitoring and response at the service delivery level and enhance the problem-solving capacity of staff.

By mid 2003, the MHIS Project was expanded to 38 health centres. The staff in the selected health centres were oriented on the objectives of the project and were trained on recording and compilation of data on the standardized data collection sheets.

Early in 2004, additional 20 health centres implemented the MHIS bringing the total to 58 health centres, Agency-wide with the ultimate objective of expanding the project to the 86 large and medium size health centres in all Fields. In addition, 76 health centres were equipped with computers during 2004 in addition to the 10 health centres that are already equipped with computers.

In November 2004, an inter-Field planning and evaluation workshop was conducted, during which the results of the trial run were presented. The MCH/FP indicators at health centre and Field levels were presented and the plan of action for future expansion of the system was developed. Based on a CDC consultant' recommendation, a line-listing pilot trial was implemented in one health centre in each Field. This pilot was evaluated during the workshop and it was decided to expand the line-listing to a second health centre in each Field.

- 1.7 The results of data collected from the 58 health centres through the MHIS as measured by the selected maternal health indicators, are outlined in the relevant maternal health and family planning sections of this report.

2. Antenatal care

- 2.1 During 2004, UNRWA primary health care facilities cared for 84,690 pregnant women who accounted for approximately 68.7 per cent of all expected pregnancies among the refugee population based on the crude birth rates published by the Host Authorities with an increase in the overall coverage by 0.6 per cent. The highest coverage rates were in Gaza and Syria Fields and the lowest were in Jordan and Lebanon Fields. The high coverage rates could be largely attributed to the special efforts exerted in order to encourage early registration for pre-natal care whereas; the low rates are mainly due to over-estimation of denominators because of the disparity between UNRWA registration statistics and actual users of the Agency services in Jordan and Lebanon.

Table 2, Coverage of UNRWA's antenatal care, 2004

	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Registered refugees	1 776 669	399 152	421 737	952 295	682 657	4 232 510
Expected No. of pregnancies	51 523	9 180	9 700	33 806	19 114	123 323
Newly registered pregnant women	25 917	4 895	8 593	33 157	12 128	84 690
Coverage rate	50.3	53.3	88.6	98.1	63.4	68.7

However, there was a steady increase in the number of pregnant women who registered for antenatal care from 70,282 in 2000, to 78,985 in 2002, 82,018 in 2003 to 84,690. The number of pregnant women registered during 2004 increased by 3.3 per cent over the number in 2003 with an increase of 7.6 per cent in Lebanon Field, 4.6 per cent in Gaza, and 4.1 per cent in Jordan Fields whereas, there was no change in the number of pregnant women registered for antenatal care in the West Bank and a drop of 1.4 per cent in Syria which could be attributed to the high prevalence of contraceptive use.

- 2.2 According to UNRWA risk scoring system, 12.1 per cent of pregnant women were classified in the high-risk category and 23.5 per cent were alert (at moderate risk). This meant that more than one third of pregnant women under supervision needed special attention and care, including assistance during delivery.

Table 3, Proportional distribution of pregnant women according to risk status through rapid assessment and MHIS, 2004

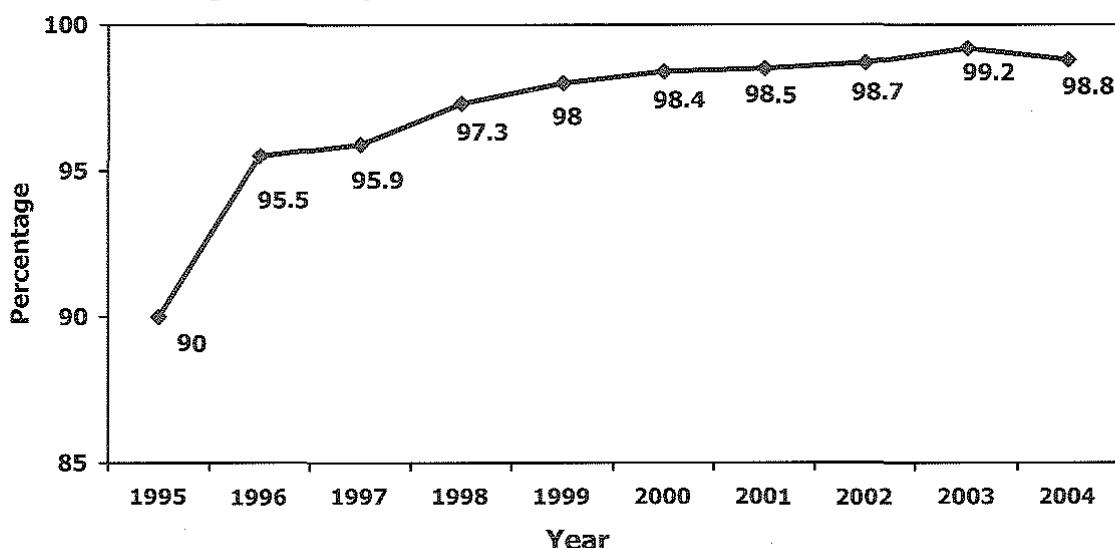
Field	Risk Status					
	High		Alert		Low	
	Rapid Ass.	MHIS	Rapid Ass.	MHIS	Rapid Ass.	MHIS
Jordan	11.3	13.3	23.3	22	65.4	64.7
Lebanon	6.7	12.1	22.1	22.8	71.1	59.4
Syria	9.1	12.5	24.9	26.3	66.0	61.3
Gaza	13.9	16.9	22.9	25.8	63.2	57.2
West Bank	13.1	17.2	25.3	26.4	61.7	56.5
All Fields	12.1	15.2	23.5	25.1	64.4	59.7

The rates varied from one Field to another as shown in table 3 with the highest high-risk rate of 13.9 per cent in Gaza Strip and the lowest rate of 6.7 per cent in Lebanon.

Data from the management health information system (MHIS), as shown in table 3, revealed almost similar results with minor variations which could be due to the fact that the rapid assessment is conducted in all 122 health centres, whereas the MHIS was implemented in 58 health centres only.

- 2.3 Similar to previous years, a rapid assessment was carried out to assess the level of protection of pregnant women against tetanus based on current and past immunization record. The assessment revealed that optimal immunization coverage continued to be maintained and that 98.8 per cent of pregnant women could be considered as protected according to the current criteria. It is worth noting that there was a drop in the overall coverage from 99.2 per cent in 2003 to 98.8 per cent in 2004. However, there was an increase in immunization coverage in all Fields from the figures of 2003 except in Gaza where immunization coverage dropped from 99.7 per cent during 2003 to 97.6 per cent during 2004 due to incursions and curfews. While there was no drop in the overall immunization coverage in the West Bank, there was a drop in the coverage in some health centres in Jerusalem area owing to access problems.

Figure 1, Pregnant women protected against tetanus 2004



- 2.4 Data from the MCH/FP module of the management health information system provided indicators for quality of antenatal care. These indicators are outlined as follows:

- a) No. of antenatal visits:

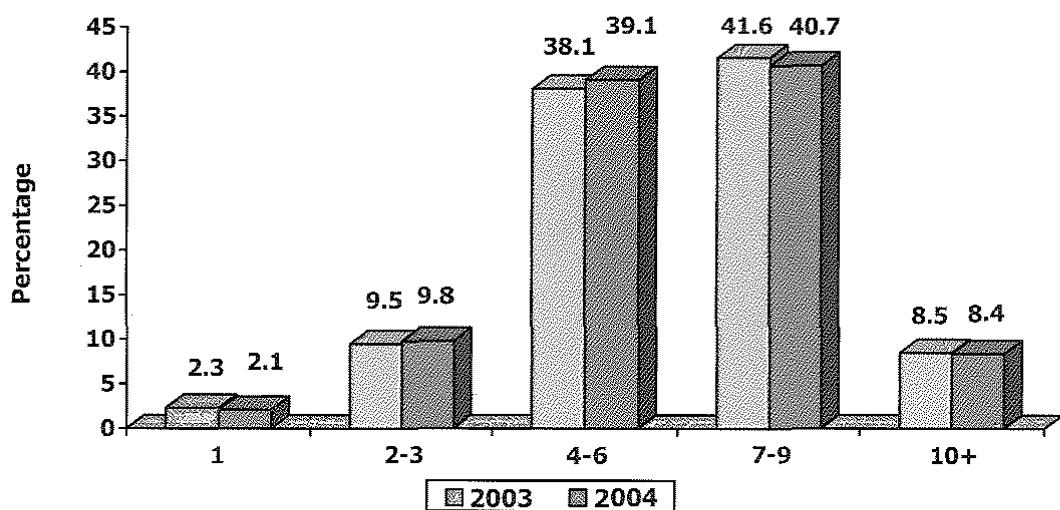
A key objective of the maternal health care programme is to ensure that women register for antenatal care early in pregnancy in order to allow ample time for risk identification and management and meet the WHO recommended standard of 4 visits or more during the antenatal period.

Table 4, Proportion of pregnant women according to number of antenatal visits, 2004

No. of Antenatal visits	Jordan	Lebanon	SAR	Gaza	West Bank	All Fields
	%	%	%	%	%	
1	3	1.9	1.7	1.2	3.6	2.0
2-3	10.3	3.6	9.6	6.2	20.8	9.8
4-6	38.6	25.7	46	36.7	46.7	39.1
7-9	37.9	54	40.3	46.1	26	40.7
10	10.2	15.8	2.4	9.8	2.9	8.4
Total	100	100	100	100	100	100

Analysis of data revealed that the percentage of pregnant women, who paid 4 visits or more to UNRWA maternal health services, was 88.2 per cent, Agency-wide as shown in table 4 and figure 2. It was highest in Lebanon (94.5 per cent), followed by Gaza (92.6 per cent), Syria (88.7 per cent), Jordan (86.7 per cent) and was lowest in the West Bank (75.6 per cent). The average antenatal visits ranged from 6 in Syria to 7.1 visits in Gaza giving an Agency-wide average of 6.7 visits.

Figure 2, Proportion of pregnant women according to the number of antenatal visits



b) Proportion of pregnant women who registered during 1st trimester:

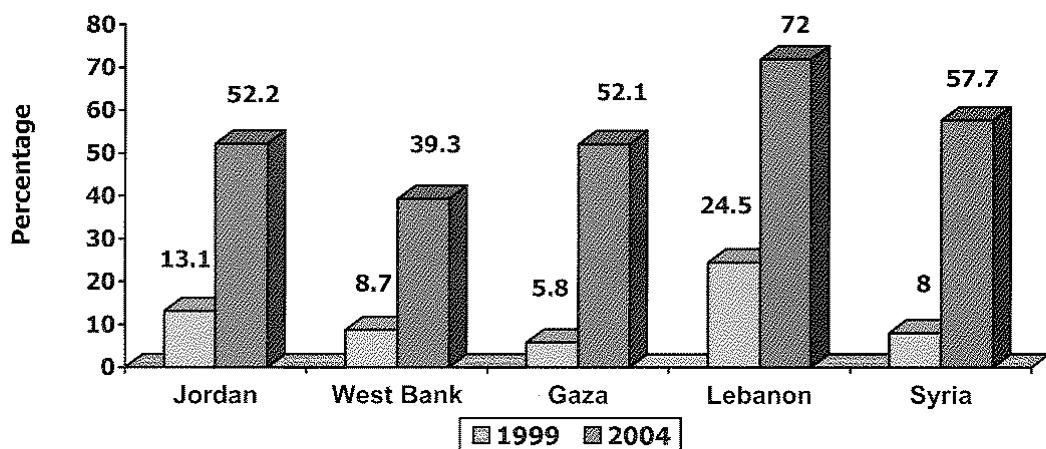
It can be seen from table 5 below that 52.2 per cent of pregnant women Agency-wide registered during the 1st trimester, while 44.6 per cent registered during the 2nd trimester and 3.2 per cent only registered during the 3rd trimester.

Table 5, Maternal health indicators, 2004

Indicator	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Distribution of pregnant women according to time of registration (%):						
During 1 st trimester	52.2	72	57.7	52.1	39.3	52.2
During 2 nd trimester	43.2	25.9	38.5	46.2	55.7	44.6
During 3 rd trimester	4.6	2.1	3.8	1.7	5	3.2
Percentage of pregnant women who paid 4 visits or more	86.6	95.6	88.7	92.6	75.6	88.2
Average No. of antenatal visits	6.3	6.7	6	7.1	6.7	6.7
Percentage of pregnant women delivered by trained personnel	99.3	99.9	97.4	99.9	99.2	99.3
Overall discontinuation rate among family planning users (%)	7.9	8.8	7.4	7.3	5.1	7.2

Figure 3 below, shows that the proportion of women who registered during the first trimester increased substantially in all Fields during the period 1999 to 2004.

Figure 3, proportion of pregnant women who registered during the 1st trimester (1999-2004)



3. Intra-partum care:

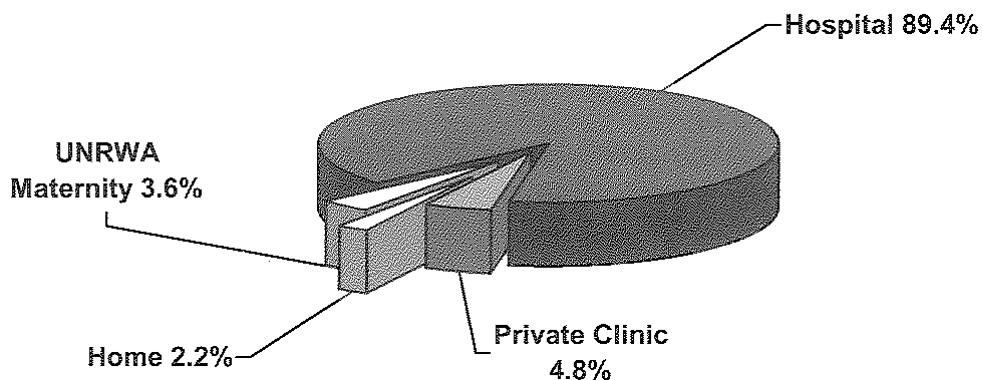
- 3.1 UNRWA subsidises the hospital delivery of pregnant women classified as high-risk either by referral to contracted hospitals or through reimbursement of costs. In addition, there are 6 maternity units integrated within the health centres in Gaza Field where only women without any identified risk factor are assisted by trained personnel during delivery. These units are supported by a system of emergency transportation in case of complications.

3.2 As shown in table 6 and figure 4 below, 89.4 per cent of the reported deliveries, Agency-wide took place in hospitals during 2004 compared to 85.4 percent in 2002. In Gaza Field deliveries at UNRWA maternity units dropped from 15.2 per cent in 2002 to 12.2 per cent in 2003 to 9.0 per cent in 2004. This drop was mainly due to the tangible increase in the rate of hospital deliveries from 72.4 per cent in 2002 to 79.9 per cent in 2004.

Table 6, Proportional distribution of deliveries according to place, 2004

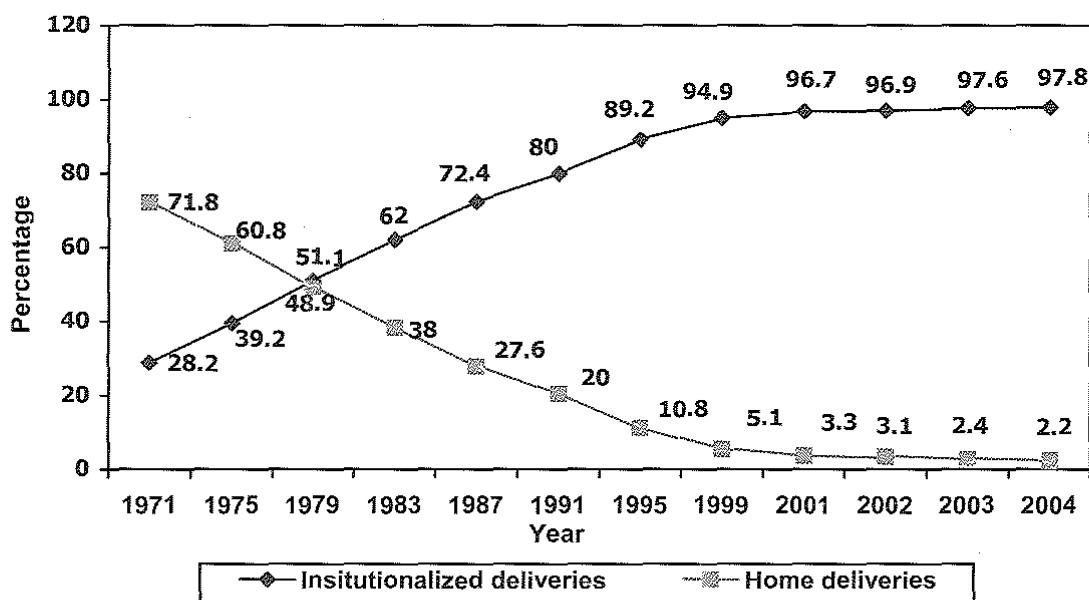
Deliveries Fields	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Total No. of reported deliveries	23 527	4 102	7 963	30 478	10 547	76 617
Distribution of deliveries according to place (%):						
(i) At home	1.2	2.1	11.5	0.5	2.1	2.2
(ii) At camp maternity	-	-	-	9.0	-	3.6
(iii) In hospital	98.6	97.1	84.7	79.9	97.2	89.4
(iv) At private clinics	0.1	0.8	3.8	10.6	0.7	4.8

Figure 4, Distribution of deliveries according to place, 2004



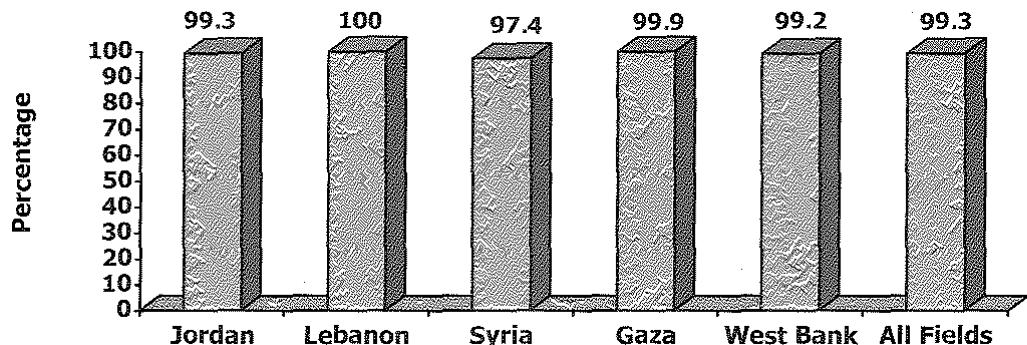
It can be seen from table 6 above that the highest rate of home deliveries was in Syria. It should be noted however, that the percentage of home deliveries in that Field had dropped from 15.4 per cent in 2000 to 11.5 per cent in 2004 and that a substantial proportion of home deliveries were attended by trained personnel. In general, 97.8 per cent of deliveries, Agency-wide were institutionalized deliveries including hospitals, maternity units and private clinics. The percentage of home deliveries continued to show a decreasing trend over the last three decades as shown in figure 5.

Figure 5, Trends of home and institutionalized deliveries



Data collected through the new management health information system indicate that, the percentage of women who delivered by trained personnel Agency-wide was 99.3 per cent with slight variations between Fields. This rate was 100 per cent in Lebanon, 99.9 per cent in Gaza, 99.2 per cent in the West Bank, 99.3 per cent in Jordan and 97.4 per cent in Syria. Data obtained from the routine system revealed that 2.2 per cent of women delivered at home. This indicates that the majority of women who deliver at home are attended by trained personnel.

Figure 6, Proportion of women who delivered by trained personnel, 2004



- 3.3 The total number of pregnant women who were expected to deliver during 2004 Agency-wide was 82,707. Active surveillance of the outcome of pregnancy of those women indicated that 77,274 delivered (93.4 per cent) and 4,091 aborted (4.9 per cent). The outcome of 1,342 (1.6 per cent) only who received antenatal care at UNRWA primary health care facilities remained unreported or unknown as shown in Table 7 below. While in 2002, and 2003 the outcome of 2.8 and 1.9 per cent of deliveries respectively was either unknown or unreported. The highest percentage of unknown outcomes was in the West Bank namely 5.9 per cent compared to 7.8 per cent in 2003 and to 9 per cent in 2002. This high percentage of unknown outcomes could be attributed to inadequate feedback due to curfews and restrictions imposed on movement of clients and staff.

Table 7, Outcome of pregnancy, 2004

Field	No. of expected deliveries during 2004	Known outcome						Unknown outcome	
		Deliveries		Abortions		Total		No.	%
		No.	%	No.	%	No.	%		
Jordan	25 246	23 959	94.9	1 234	4.9	25 193	99.8	53	0.2
Lebanon	4 505	4 102	91.1	403	8.8	4 505	100	0	0
Syria	8 455	7 963	94.2	422	5.0	8 385	99.2	70	0.8
Gaza	32 640	30 478	93.4	1 641	5.0	32 119	98.4	521	1.6
West Bank	11 861	10 772	90.8	391	3.3	11 163	94.1	698	5.9
All Fields	82 707	77 274	93.4	4 091	4.9	81 365	98.4	1 342	1.6

3.4 Analysis of data obtained through the new hospital management information system indicated that caesarean section rate among women assisted through UNRWA hospitalization schemes varied widely from one Field to another. These rates however, relate to women in the high risk category not all reported deliveries. Table 8 shows that the CS rate was highest in Syria 56.6 per cent while it was (72.5 per cent) in 2003. This reduction could be attributed to the new contracts concluded with University Hospitals, beginning 2004, which have a reputation of low CS rate. Although there was a reduction in the CS rate in Syria, nonetheless, it is still considered to be high even among high risk pregnant women. This mainly reflects the medical practice in contracted hospitals. The lowest rate was in Gaza (0.7 per cent) which is mainly due to lack of feedback from hospitals.

Table 8, C.S rate among UNRWA-assisted hospital deliveries of women in the high-risk category, and all reported deliveries through MHIS, 2004

Field	Assisted deliveries (high risk) (In-patients Reports)					All reported deliveries (MHIS)	
	Total deliveries	Vaginal deliveries		Caesarean section rate		Caesarean section Rate	
		No.	%	No.	%	%	
Jordan	9 245	7 390	79.9	1 855	20.1		12.1
Lebanon	1 803	1 197	66.4	606	33.6		19.3
Syria	1 228	533	43.4	695	56.6		21.2
Gaza	1 217	1 208	99.3	9	0.7		9.9
West Bank	4 284	3 318	77.5	966	22.5		13.6
Total	17 777	13 646	76.8	4 131	23.2		13.2

Data obtained through the management health information system reveals that CS rate among all pregnant women ranged from 9.9 per cent in Gaza to 21.2 per cent in Syria with an overall rate of 13.2 per cent, as shown in Table 8.

3.5 The prevalence of diabetes mellitus during pregnancy in 2004 was established at 1.7 per cent, Agency-wide. As shown in table 9 below, the prevalence rate varied

from 2.4 in Lebanon to 1.1 per cent in Gaza which indicates that it is still below the expected rate of 3 per cent. Further efforts need to be exerted in order to improve detection rate. Further analysis of data revealed that 32.0 per cent of women with diabetes during pregnancy were with pre-existing diabetes, 36.2 per cent had gestational diabetes and recovered after delivery, 17.5 per cent were diagnosed during pregnancy and did not recover after delivery, while 14.3 per cent were still pregnant at end of 2004.

Table 9, Prevalence of diabetes and hypertension during pregnancy, 2004

Prevalence rate (%)	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Diabetes during pregnancy	2.2	2.4	1.9	1.1	1.9	1.7
Hypertension during pregnancy	6.9	6.8	6.5	8.4	3.5	7.0

3.6 The prevalence of hypertension during pregnancy including pre-existing and pregnancy-induced was 7.0 per cent while it was 6.4 per cent in 2003 with wide variations between Fields as shown in table 9 above. The incidence of pregnancy-induced hypertension increased from 2.7 per cent in 2001 to 3.3 per cent in 2004 which indicates an improved detection rate. 47.3 per cent of hypertension cases were pregnancy-induced and recovered after delivery, 21.8 per cent of women had pre-existing hypertension, 18.0 per cent were identified during pregnancy and the condition persisted after delivery while 12.9 per cent were still pregnant at year end.

4. Post-natal care:

UNRWA's post-natal care services require that thorough medical investigation and examination be carried out both with respect to the mother and the newborn infant either at UNRWA primary health care facilities or at home, whichever is more accessible and convenient to the families.

Table 10, Post-natal care coverage, 2004

Field	No. of deliveries + unknown	No. women who received care	Coverage of Post-natal care (%)
Jordan	24 024	21 432	89.3
Lebanon	4 102	3 994	97.4
Syria	8 033	7 772	96.8
Gaza	30 999	28 796	92.9
West Bank	11 470	9 241	80.6
All Fields	78 628	71 235	90.6

Table 10 above indicates that, a total of 71,235 women received post-natal care during the year representing 90.6 per cent coverage rate of expected pregnancies, Agency-wide with the highest rates of 97.4 per cent in Lebanon, 92.9 per cent in Gaza Field and the lowest rate of 80.6 per cent in the West Bank. This low coverage could be attributed to the continued restriction of movements due to the prevailing emergency situation. It is worth mentioning that post-natal coverage in Gaza Field dropped from 96.0 per cent in 2003 to 92.9 in 2004, which could also be attributed to the prevailing situation in the oPt.

5. Family planning services:

- 5.1 A total of new 20,227 family planning acceptors were enrolled in the programme during the year. The total number of continuing users of modern contraceptive methods was 100,682 with an overall increase of 5 per cent Agency-wide.

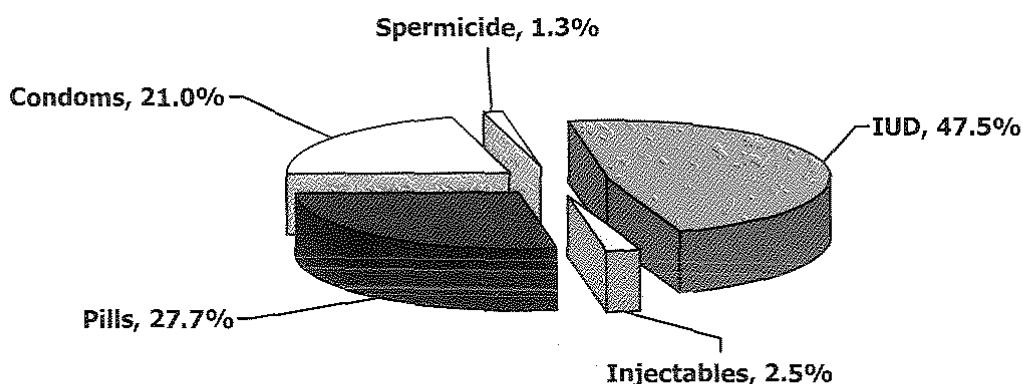
Table 11, Family planning services, 2004

	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
No. of new FP acceptors during the year	7 647	1 508	2 954	5 326	2 792	20 227
Total No. of continuing users at year end	26 923	10 290	17 551	30 765	15 153	100 682
Distribution of FP users according to method:						
(i) IUD	46.0 %	32.5 %	44.4 %	53.2 %	52.5 %	47.5 %
(ii) Pills	28.9 %	31.2 %	30.0 %	24.1 %	27.45 %	27.7 %
(iii) Condoms	19.9 %	34.3 %	21.8 %	19.1 %	16.5 %	21.0 %
(iv) Spermicides	1.9 %	1.0 %	1.4 %	0.9 %	1.1 %	1.3 %
(v) Injectables	3.2 %	0.8 %	2.5 %	2.6 %	2.3 %	2.5 %

It is worth mentioning that the number of new family planning acceptors in Gaza dropped from 6,091 in 2001 to 5,842 in 2002 to 5,338 acceptors in 2003 to 5,326 in 2004. The number of continuing users dropped from 30,466 in 2001 to 29,540 in 2003 and increased in 2004 to 30,765 which is the pre-Intifada level. This could be attributed to the increased desire among refugee population to have more children, which is not unexpected under conflict situations associated with high fatality toll. There was a minimal increase in the number of continuing users in the West Bank, whereas, there was an overall annual increase of approximately 10 per cent in the other Fields.

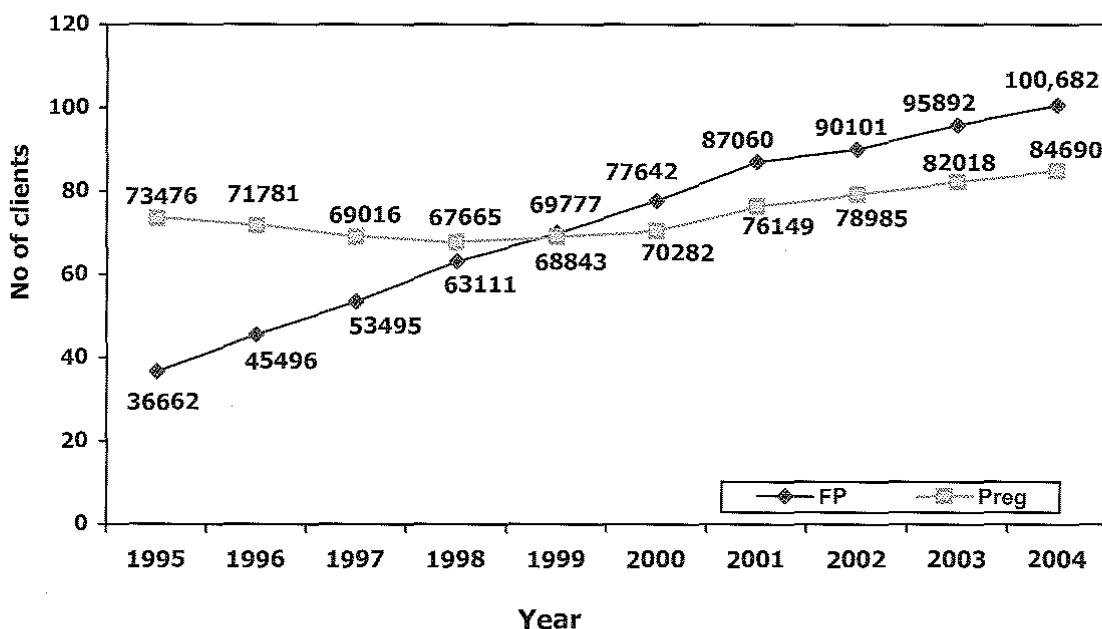
- 5.2 Distribution of family planning acceptors according to the contraceptive method used is shown in table 11 above and figure 7 below. It can be noticed that IUD continued to be the preferred method followed by pills except in Lebanon, where the preferred method was the condom.

Figure 7, Contraceptive method mix, Agency-wide, 2004



- 5.3 The tangible success of the family planning programme is demonstrated in figure 8 below, which shows a steady increase in number of family planning acceptors over the number of pregnant women cared for, since integration of family planning services into the Agency's maternal and child health care services in 1995.

Figure 8, Correlation between number of pregnant women and family planning acceptors (1995- 2004)



The figures show the obvious impact of the Agency's family planning programme on reproductive health practices where there was three folds increase in the number of women enrolled in the programme over the last 10 years compared to 15 per cent increase in number of pregnant women during the same period.

- 5.4 Couple-Years of Protection (CYP) is an output indicator used to estimate the number of clients (or couples) that the dispensed contraceptives protected in a year. Contraceptives dispensed during 2004 through the Agency's family planning services provided 101,606 CYP with variations between Fields as shown in table 12 below.

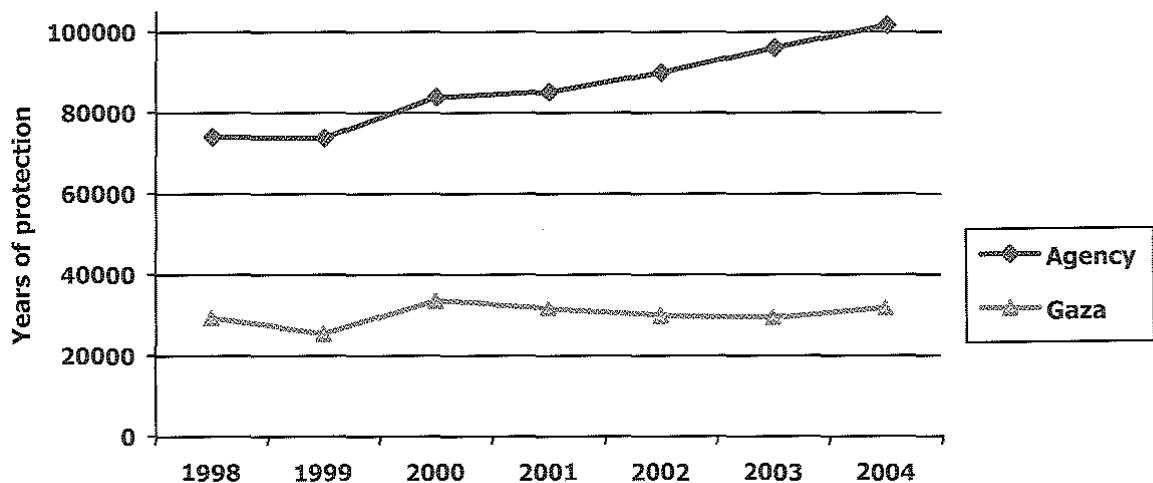
The table also shows that, the CYP provided during 2004, increased in all Fields except in Lebanon Field where there was a mild decrease. Although there was a mild increase in the CYP in Gaza Strip, it is still well below the pre-crisis level.

Table 12, Couple years of protection provided through the Agency's family planning programme, 2004

Couple Years of protection (CYP)	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
During 2000	12 261	7 865	18 895	33 685	11 179	83 885
During 2002	20 801	11 442	18 236	30 043	11 450	89 973
During 2003	23 654	12 608	16 172	29 559	14 956	96 049
During 2004	26 241	11 065	18 762	31 753	13 784	101 606

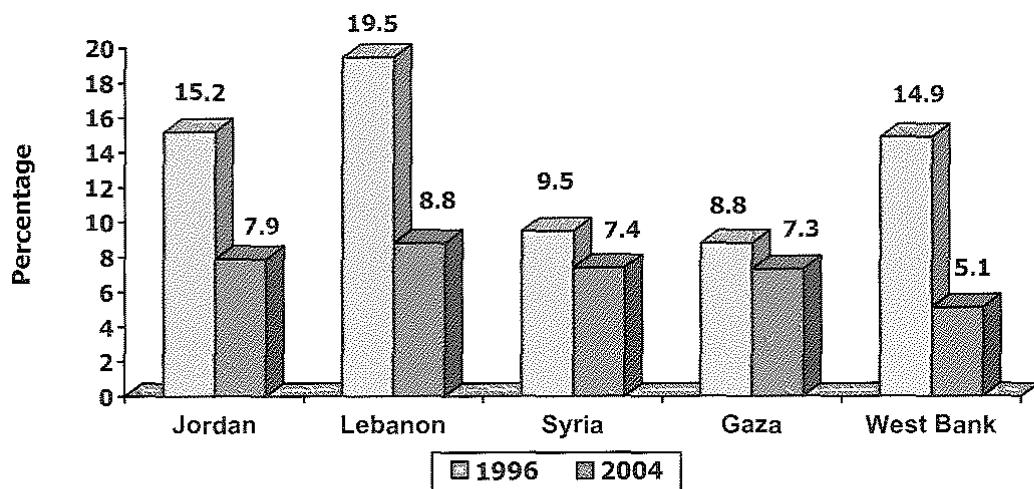
These significant variations between Gaza Strip and the other Fields as presented in figure 9 below could be due to a possible change in reproductive health practices in the Gaza Strip due to the current crisis.

Figure 9, Couple years of protection Agency-wide and in Gaza Strip, 2004



- 5.5 Data from the MCH/FP module of the MHIS revealed that discontinuation rate of modern contraceptives ranged from 5.1 per cent in the West Bank to 8.8 per cent in Lebanon. In 1996, a study was conducted to assess the discontinuation rate of modern contraceptives short after integration of family planning services within the Agency's maternal health programme. Figure 10 below demonstrates the accomplishment achieved as measured by the drop in discontinuation rates.

Figure, 10 Discontinuation rates of modern contraceptives (1996, 2004)

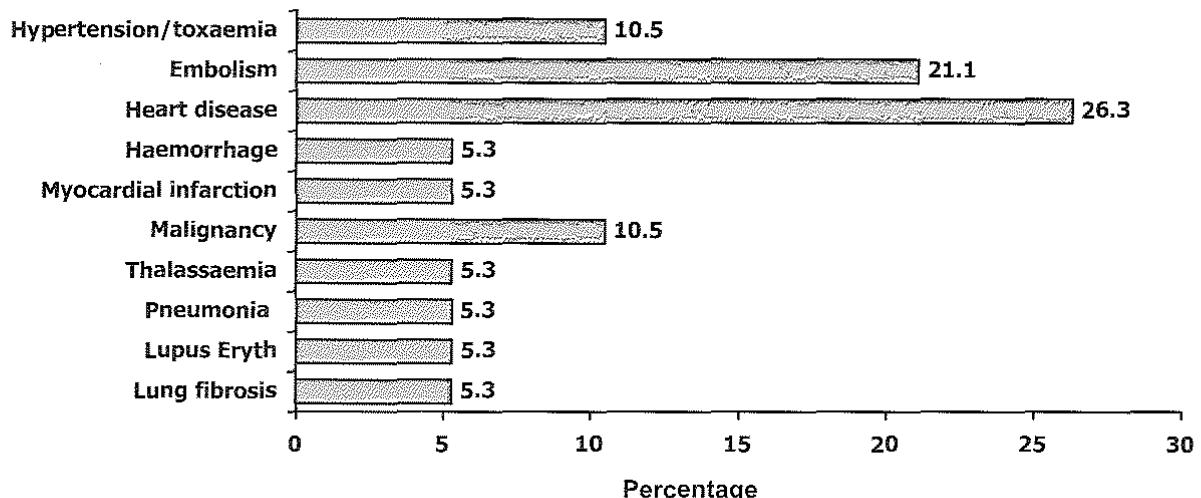


6. Surveillance of maternal mortality:

During 2004, a total of 19 maternal deaths were reported from the five Fields giving a maternal mortality ratio of 22.9 per 100,000 live births. 8 deaths were reported from Gaza Strip, 4 from Jordan, 3 from the West Bank, 3 from Syria and one from Lebanon.

4 maternal deaths out of the 18 were due to preventable causes including 2 cases of toxæmia/hypertension (10.5 per cent), 1 case of haemorrhage (5.3 per cent), and one case of pneumonia (5.3 per cent).

Figure 11, Causes of maternal deaths, 2004



The main direct causes of reported maternal deaths were; hypertension/toxaemia (10.5 per cent), haemorrhage (5.3 per cent), pulmonary embolism (21.1 per cent). Myocardial infarction accounted for 5.3 per cent of deaths whereas 26.4 per cent were due to associated diseases such as; malignancy, pneumonia, thalassaemia, systemic lupus erythematosus and lung fibrosis.

7. Infant and child health:

- 7.1 During 2004, a total 234,909 infants and children below 36 months of age received preventive care at UNRWA primary health care facilities including thorough medical examination, growth monitoring, immunization against vaccine-preventable diseases and identification of children with special needs. These activities were supported by health education and counselling of mothers on appropriate feeding practices and baby care.
- 7.2 During the first year of life, mothers normally take special care in registering their newborn infants for preventive care because they are concerned about their growth and development and are keen to provide them with the full range of primary immunization series. The attendance becomes less regular during the second and third years of life because children would have received all primary and booster series of immunization early during the second year and because the intervals between scheduled visits become longer and the health condition of the child would have stabilized.
- 7.3 Attendance during the first year of life was estimated at 90 per cent of all infants registered, Agency-wide with the highest rate of 100 per cent in Lebanon and Gaza Fields. The attendance rates were 75 per cent during the second year and 50 per cent during the third year of life.
Service coverage rates were estimated as the number of infants below 12 months of age registered for care as a percentage of the expected number of surviving infants based on the best estimates of crude birth rates as published by the Host Authorities.

Table 13, Infant and child health care, 2004

Field	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Registered Refugees	1 777 000	399 000	422 000	952 000	683 000	4 233 000
Estimated No. of surviving infants *	50 364	9 004	9 428	32 955	18 809	120 560
Infants below 1 year registered	29 099	4 320	8 439	29 532	11 414	82 804
Coverage of infants (percentage)	57.8	48.0	89.5	89.6	60.7	68.7
% regular attendance	81	100	91	100	80	90
Children 1-<2 years registered	28 049	4 192	8 153	26 307	11 577	78 278
% regular attendance	78	99	90	64	73	75
Children 2-<3 years registered	26 366	4 001	6 878	25 415	11 167	73 827
% regular attendance	44	90	78	39	61	50
Children 0-3 years under supervision	83 514	12 513	23 470	81 254	34 158	234 909

* No. of surviving infants = Population X crude birth rate X (1-IMR)

Services coverage was 60.5 per cent in 2001. It increased from 62.3 per cent in 2002 to 68.2 per cent in 2003 and reached 68.7 per cent in 2004, with the highest rate of 89.6 per cent in Syria and the lowest in Lebanon (48.0 per cent) as shown in table 13 above. This low coverage might be due to the difference between the de facto and de jure population statistics.

The low coverage in the West Bank could be attributed to the high crude birth rate reported this year by the Palestinian Authority resulting in over estimation of the number of surviving infants as well as obstacles to humanitarian access. In Jordan Field, the low coverage rate could be attributed to the availability of other health care providers and the low number of UNRWA facilities with several unserved communities outside camps.

However, if the rates were calculated on the basis of population served rather than as a percentage of the total registered population, the coverage rates would have been optimal in all Fields.

- 7.4 During 2004, the immunization coverage was optimal for infants below 12 months of age for all EPI antigens Agency-wide. The rates were; 99.6 per cent for BCG, 99.4 per cent for each of OPV and DPT, 99.1 per cent for Measles and 99.3 per cent for Hepatitis B. The Hib vaccine is provided for infants below 12 months of age in two Fields; Jordan and Syria and the coverage rates were 99.3 and 99.7 respectively. Likewise, the immunization coverage rate for booster doses was optimal namely, 98.4 per cent for OPV, 98.6 per cent for DPT and 98.1 per cent for MMR. (For more details, please refer to table 1, chapter VI of this report).
- 7.5 Analysis of the West Bank data by health centre indicate that although the overall immunization coverage was optimal, nevertheless, of concern was the low coverage of immunization in certain localities of Hebron and Jerusalem areas. In

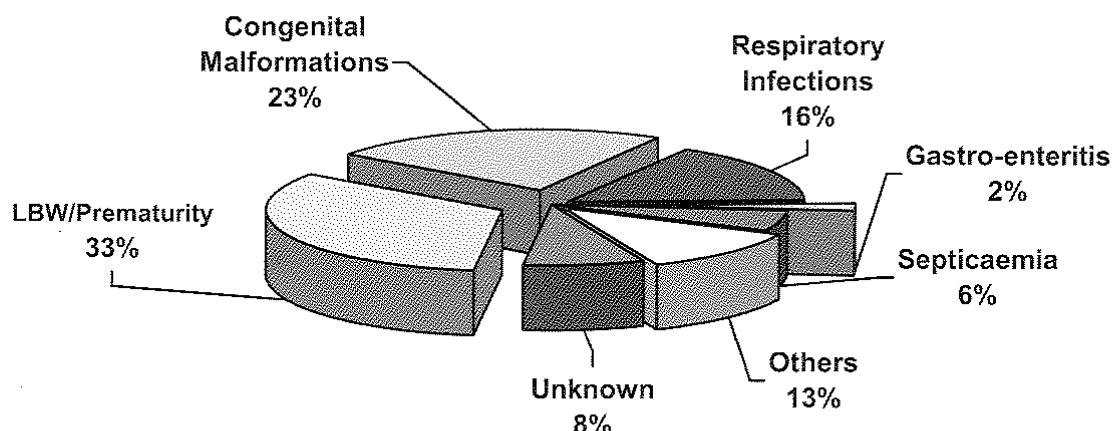
Hebron Town health centre the coverage rate of all vaccines for infants one year of age was 83.0 per cent, while in Jerusalem and Kalandia health centres the coverage rates were 85.0 per cent and 90.0 per cent respectively. The booster immunization was lowest at 75.6 per cent in Jerusalem health centre, 79.0 at Kalandia health centre and 89.7 per cent at Hebron Town health centre. It is worth mentioning that health centres in Jerusalem area such as Kalandia and Jerusalem were affected by construction of the separation wall. If continued, this trend might generate pockets of un-immunized children which may lead to disease outbreaks at any point in time.

8. Surveillance of infant and child mortality:

- 8.1 Analysis of data collected through routine reporting revealed that the pattern of infant mortality remained largely unchanged from that which prevailed during the last few years.

The leading causes of reported infant mortality in 2004 were low birth weight and prematurity (32 per cent), congenital malformations (23 per cent) and acute respiratory infections (16 per cent) as shown in figure 12 below. The cause of death in 8 per cent of reported cases could not be ascertained.

Figure 12, Leading causes of infant mortality in 2004



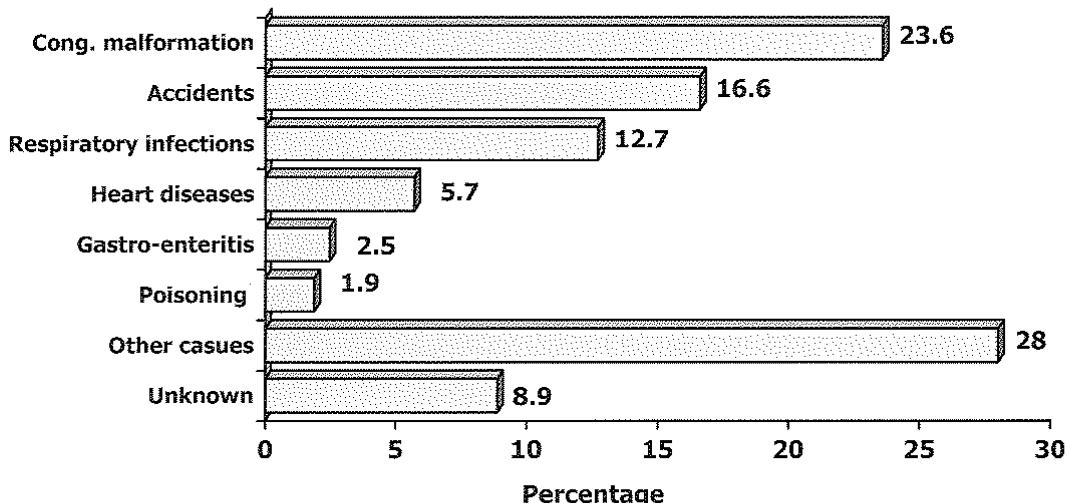
Further analysis of data showed that 60.3 per cent of reported infant deaths were during the neonatal period, the majority of whom were due to prematurity. Mortalities due to congenital malformations were more likely to occur during the early neonatal (0-7 days) and during the post-neonatal period while mortalities due to respiratory infections were equally distributed between the neonatal and post-neonatal periods.

Consistent with the universally accepted pattern, infant mortality was higher among males than females, 55.1 and 44.9 per cent respectively. This pattern was observed in all Fields.

- 8.2 As can be noticed from figure 13, congenital malformations ranked first among the leading causes of child mortality namely 23.6 per cent while respiratory infections ranked first in 2003, followed by accidents (16.6 per cent) followed by respiratory infections (12.7 per cent) and heart diseases accounted for 5.7 per cent of child mortality. Among children 2-3 years of age, 75.2 per cent of child

deaths took place during the second year of life, while 24.8 per cent took place during the third year. It is worth mentioning that four of the reported child deaths during 2004 were due to gastroenteritis. Therefore, more efforts need to be exerted to address respiratory infections, accidents and gastro-enteritis as preventable causes of child mortality. Similar to infant mortality, child mortality was higher among males than females namely 52.2 and 47.8 per cent respectively.

Figure 13, Leading causes of child mortality, (1-3 years), 2004



During 2003, UNRWA conducted a study to assess infant and child mortality rates among the refugee population. Results revealed that there was a substantial drop in the mortality rate across the Fields, however, if mortality is to be further reduced, specific targeted interventions should be implemented. Therefore, to further understand the underlining causes of these deaths, a system of an in-depth inquiry (verbal autopsy) of infant and children deaths was implemented. During 2004, a total of 260 in-depth inquiries were undertaken in the five Fields. The results revealed that the majority of deaths were due to congenital malformations 35 per cent, and low birth weight/prematurity 25 per cent which is consistent with data obtained from the routine reporting system.

9. School health:

- 9.1 During the school year 2003/2004, a total of 491,978 children were enrolled in UNRWA schools, of whom 50,464 were new entrants who received thorough medical examination and follow-up. The immunization coverage during the first semester was 96.0 per cent for DT/Td Agency-wide ranging from 98.6 per cent in Jordan to 98.4 per cent in Lebanon, 96.5 per cent in Syria, 100 per cent in Gaza and 72.9 per cent in the West Bank. In Jordan Field 12,212 new entrants were vaccinated with OPV representing a coverage rate of 97 per cent. In the West Bank 2,812 new entrants were vaccinated with OPV representing a coverage rate of 45 per cent.
- 9.2 The main morbidity conditions detected among new entrants were: dental caries 41.8 per cent, vision defects 3.8 per cent, squint 0.9 per cent, physical disabilities

0.35 per cent with the highest rate of 0.9 per cent in Syria where there is a special programme for comprehensive screening for disability conditions and children with special needs. These children were assisted according to their conditions and available resources.

In the absence of an Agency-wide mechanism to detect hearing impairments, it was not possible to assess the prevalence rate. Subject to availability of resources, UNRWA contemplates to introduce programmes for early detection and management of disabilities especially hearing impairments.

- 9.3 Of the 56,331 students enrolled in the first preparatory classes 52,755 were screened for morbidity conditions during the year. Dental caries ranked the highest at 34.6 per cent followed by vision defects 11.4 per cent and thyroid enlargement 0.4 per cent while it was 1.9 in 2002. It is worth mentioning that iodized salt was introduced in all host countries few years ago which is expected to have contribute to the reduction of iodine deficiency disorders, however, this needs special research to assess the impact of this intervention.
- 9.4 In accordance with WHO recommendations and in order to improve the health status of school children, UNRWA made arrangements for implementation of a programme for de-worming of school children enrolled in its schools in all Fields using a single dose of a wide-spectrum anti-helminthic for 3 successive years. During 2004, the programme of de-worming was implemented in all Fields. The response rate was very high where approximately 96 per cent of students took the tablets. In addition, a health awareness campaign accompanied the distribution of the medicine. The Fields are at different stages of implementation of this programme where Jordan, Gaza and Lebanon are in the second year and Syria and the West Bank completed the third and final year of implementation. Upon completion of the three year campaign, only children in the first elementary classes will receive the medication until they complete the three years full treatment cycle.
- 9.5 The self-learning material on prevention of HIV/AIDS and tobacco use, were revised, reproduced and distributed to the target groups including preparatory school children and adolescents in the vocational training centres and science faculties. Approximately 110,000 copies of the booklet "Facts about tobacco" and 46,000 copies of the booklet "Facts about AIDS" were reproduced during 2004 to be distributed to school children.

10. Adolescent health

A qualitative study was carried out during 2004 to assess adolescents' knowledge and attitudes regarding family and reproductive health. The target group was boys and girls in the 9th grade in a representative sample from UNRWA schools inside and outside camps, of whom 51.6% were females and 48.4% were males. 52.4% of the students surveyed were in camps. 79.4% were less than 16 years of age, 5.4% have dead fathers, 1.6% have dead mothers and in 5.8% parents were not living together. The average number of children per family was 6, almost equally distributed between males and females, taking into consideration that these are almost completed families

8.1% of fathers and 13.2% of mothers only were illiterate, while 33.8% of fathers and 17.9% of mothers had post-secondary education. 24.4% of fathers were

unemployed while 89.2% of mothers were housewives.

21.7% of the surveyed students were involved, one way or another, in child labour of whom 8.4% were females accounting for 3.5% of the total surveyed females. Furthermore, 41.1% of the surveyed males were enrolled in child labour which is rather alarming.

7.3% of females and 5.4% of males only prefer marriage before the age of 20 years. 44.7% of females and 47.7% of males prefer marriage through own choice. 59.2% of females and 58.5% of males considered that the moral values are the most important determinant for spouse selection. 23.2% of females and 17.5% of males stated that education is the driving factor for their decisions, while only 3.2% of females and 1.6% of males considered financial status as the main criteria for marriage. Only 11.2% of females and 22% of males favoured marriage of relatives.

9% of females and 17% of males lack knowledge of family planning methods. 8.8% of females vs. 30% of males are planning to have more than 4 children. 92.2% of females and 91.8% of males prefer their future children to be of both sexes. Less than 20% prefer a birth interval of less than 2 years.

56.7 % only gave correct answers for the reason of the immunization given to 9th grade students while a negligible number of students gave correct answers for the exact type of the vaccine.

45.7% of the students surveyed thought that 2 years was an optimal breast feeding period and 12% of them have misconception about its benefits. 55.7% of females and 35.1% of males stated that pregnant women have to seek antenatal care immediately after conception.

More than 98% heard about AIDS, but there was lack of knowledge about other STDs. More than 80% of the students surveyed knew that sexual contact and blood transfusion are the main modes of transmission of these diseases.

25.5% of the adolescents (13.9 females and 37.9 males) have smoking experience either smoking cigarettes or argieleh, but only 3.3% smoke more than 5 cigarettes daily and 5.8% smoke argieleh regularly. There were variations in smoking practices among females according to the place of residence. Female students living outside camps smoke more than those living inside camps.

While marriage of relatives is common in the Palestinian society, about 90% of adolescents surveyed do not prefer such choice. This reflects that marriage of relatives is more of a socio-cultural behaviour than a real choice.

The study revealed that Palestinian adolescents have promising aspirations for higher education attainment. 76% of the target population, Agency-wide aspire for university or higher degree education and 61.3% aim at professional work. However, there is a wide disparity between future aspirations of adolescents, as expressed by their future desire for work, (93.5% among females and 97% among males) and the current available employment opportunities as reflected by the level of unemployment of their parents, (89.3% among mothers and 24.3% among fathers). This unfulfilled employment need of the new generation will lead to frustration.

As can be noted, the study revealed significant gender variations regarding adolescents' knowledge, attitudes and life-style behaviour with respect to various issues such as smoking, labour, antenatal care, marriage of relatives, breast feeding, family planning and puberty. Moreover, the study revealed major differences regarding the place of leisure which is home for females and with friends for males. Also there were differences with regard to main sources of information about adolescent health issues with parents being the main source of information for females while friends were the main source for males. The study also revealed that teachers are the last source for obtaining information on reproductive health issues.

In the absence of school curricula that address these issues and inadequate role of the mass media, there is an obvious need to develop appropriate life skill-based educational material targeting school children and youth in science faculties, as well as teacher and vocational training centres through close cooperation with the Department of Education.

11. Nutrition:

- 11.1 During 2004, more than 95,000 pregnant women and nursing mothers of those who received preventive health care and supervision at UNRWA primary health care facilities benefited from the Agency's food aid programme. Entirely funded through in-kind contributions, the programme aims at meeting the additional physiological and nutritional needs of women in reproductive age and preventing nutritional deficiencies associated with high fertility and short birth intervals.
- 11.2 The wheat flour distributed by the Agency in the context of its regular and emergency food aid programmes was fortified with iron and folate. In addition, UNRWA had joined efforts with WHO to encourage the Host Authorities in Syria, Lebanon and the Palestinian Authority to introduce programmes for iron fortification of bread. This measure was implemented country-wide in Jordan and is implemented on trial basis in Syria. UNRWA is also a partner in the national efforts pursued by the Host Authority in Jordan and the Palestinian Authority for development of appropriate nutrition and food strategies in collaboration with the World Health Organization and USAID/MARAM Project.
- 11.3 Efforts are being made to strengthen nutritional surveillance with special emphasis on management of infants and children suffering from growth retardation. Special emphasis in this respect is being placed on promoting breast-feeding and counselling mothers on infant and child nutrition including the appropriate use of food supplements. In order to improve detection and management of growth retarded children, several activities were implemented including the introduction of a new reporting format, staff training on identifying such children and physical checking of child health records to pick up missed cases. In addition, concerned medical officers and nursing staff were trained on nutritional counselling and provision of iron preparations to women and children as prophylactic and treatment measure.
- 11.4 The 2004 data indicate that the rates of growth retardation in some Fields were very close to the expected results while in others underreporting is still an issue especially in the West Bank. In Gaza Strip, not only that the prevalence rate was

low in spite of the generalized socio-economic hardship, but also the recovery rate was also low. The highest prevalence rates were reported from Syria and Jordan whereas, the recovery rates were highest in Lebanon and Jordan Fields (see table 14).

Table 14, Prevalence of growth retardation among children 0-3 years of age, 2004

Field	Growth Failure/retardation among 0-3 children			
	Incidence	Prevalence during 2004 (period prevalence)	Prevalence at year end, 2004	Recovery rate (%)
Jordan	4.1	6.0	2.3	56.6
Lebanon	3.8	5.9	2.1	58.5
Syria	3.3	6.8	3.5	41.3
Gaza	1.9	5.0	2.5	32.9
West Bank	1.5	2.8	1.2	49.3
All Fields	2.9	6.3	2.3	46.6

Considering that data is gender disaggregated, there was no gender disparity except in two Fields namely Syria and Lebanon. In Syria the growth retardation among females was 4.1 per cent compared to 3.2 per cent among males while in Lebanon the rates were 2.7 among females vs. 1.5 per cent among males. In Lebanon Field, a study was conducted during 2004 to assess the gender disparity, address the underlying reasons and identify ways and means to reduce it. The data is still under analysis.

- 11.5 Over many decades, a large number of epidemiological studies focusing on micronutrient deficiencies have been published. According to the scientific evidence, iron deficiency persists as the world's most common nutritional deficiency. Iron deficiency anaemia (IDA) affects nearly two billion people worldwide: that is, about one third of the world's population. The population groups with the highest prevalence are: pregnant women, infants and children aged 1-2 years, school children, non-pregnant women, adolescents and preschool children.
- 11.6 The Ministry of Health, Jordan in collaboration with WHO, UNICEF and CDC conducted a national baseline study on iron deficiency anaemia and vitamin A deficiency. The main objective of the study was to assess the prevalence of IDA among women of child bearing age and children 12-59 months of age as well as the prevalence of vitamin A deficiency among children 12-59 months of age. The study revealed that the overall prevalence of anaemia was 32.2% (+2.8), of which 22.5% (+2.6) was due to iron deficiency anaemia while the overall rate of iron deficiency (ID) was 40.6% (+3.7). Anaemia was significantly higher among married women than single women (37.6% as compared to 21.8%). The other important survey finding is related to vitamin A deficiency (VAD) among under 5 children, which was 15.2%. Accordingly, these results have underlined VAD as a public health problem in Jordan. In response, the Ministry of Health took recommendations to continue supplementation of school children with vitamin A in addition to the current programme of distributing multi-vitamins and to fortify bread with vitamin A in

addition to the iron and folic acid. Furthermore, there are plans to supplement infants and children 0-3 years of age with vitamin A including refugee children.

- 11.7 During 2004, a study was conducted by USAID/MARAM Project in the oPt to assess the prevalence of vitamins A and E deficiency among children aged 12-59 months in collaboration with the central laboratory of JUST University in Jordan. The results showed that the prevalence of vitamin A deficiency was 21.5 per cent and the prevalence of vitamin E deficiency was 18.5 per cent. Among the survey sample population, 39.2% of children were living in rural areas, 46.7% were from urban areas, and 12.1% were from camp areas in the West Bank and Gaza Strip.

Table 15, Vitamin A deficiency among children 12-59 months of age in camps and non-camps

Vitamin A intervals (μ /L)	Locality				Total	
	Camps		Non-camps			
	Freq	%	Freq	%	Freq	%
<200	43	27.6	200	21.0	243	22.0
200-299	71	45.5	526	55.3	597	53.9
≥ 300	42	26.9	225	23.7	267	24.1
Total	156	100	951	100	1107	100

When analyzed by camp and non-camp residence, data revealed that the prevalence of vitamin A deficiency among children 12-59 months was higher in camps (27.6%) than in non-camps (21%).

- 11.8 The USAID/MARAM study in the oPt also assessed anaemia rates among children 12-59 months of age. The study revealed that the overall prevalence of anaemia among children aged 12-59 months was 23%. Of the 254 children found to be anaemic, only 2 cases (0.2%) had severe anaemia (Hb < 7). The prevalence of anaemia varied significantly between the West Bank (17.4%) and Gaza Strip (31.2%). Moreover, prevalence rates of anaemia in the north, middle and south regions of the West Bank were 21.5%, 14.9% and 14.3% respectively, while the rates in the northern and southern regions of Gaza Strip were 30.7% and 31.8% respectively. The estimated prevalence of anaemia among the 42 children who were receiving iron syrup at the time of the interviews (for at least 3-4 weeks) was found to be 28.6% (a total of 12 children).

UNRWA surveys on anaemia:

- 11.9 Studies conducted in 1990 and 1998 revealed high prevalence of anaemia among infants, children, pregnant women and nursing mothers. Since then, different strategies were implemented to combat iron deficiency anaemia including; regular screening for anaemia, prophylactic supplementation to pregnant women, medicinal supplementation for anaemic children 6-36 months of age, fortification of flour, de-worming of school children and family planning services.

11.10 During 2004, UNRWA conducted a study to assess the prevalence of anaemia among pregnant women, nursing mothers and children 6-36 months of age in order to assess the impact of these strategies on the prevalence among pregnant women, nursing mothers and children. The findings of the study were as follows:

- a) As shown in Figure 14, the overall prevalence of anaemia among pregnant women varied from 35.7% in Gaza, to 29.5% in the West Bank, to 25.5% in Lebanon, to 22.4% in Jordan and 16.2% in Syria. Although, the overall prevalence of anaemia among pregnant women in all Fields dropped since the last assessment in 1998, these rates are still considered to be high. The reason for this drop could be attributed to the prophylactic iron supplementation which is provided for all pregnant women upon registration.

Figure 14, Prevalence of anaemia among pregnant women

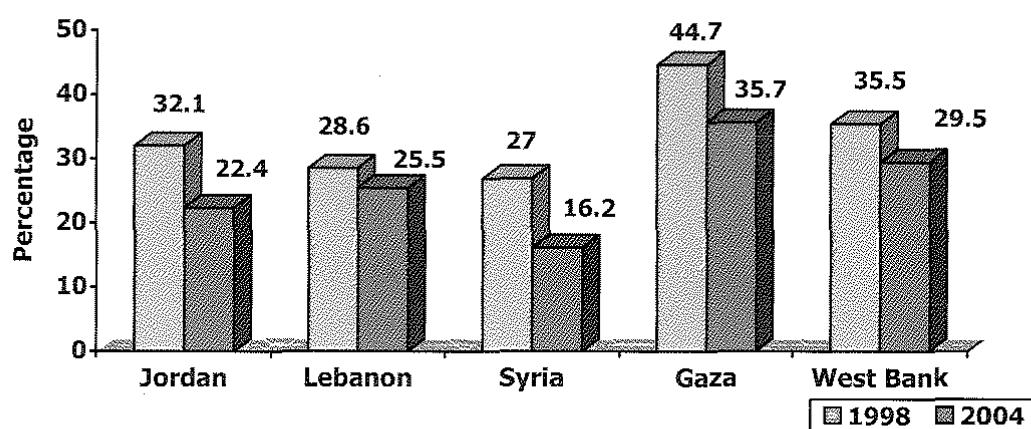


Table 16 below shows that there is a progressive rise in the prevalence of anaemia during the course of pregnancy, which confirms that iron intake during pregnancy, does not meet the increase physiological requirements.

Table 16, Prevalence of anaemia among pregnant women by trimester, 2004

Fields	1 st trimester		2 nd trimester		3 rd trimester		Overall prevalence	
	1998	2004	1998	2004	1998	2004	1998	2004
Jordan	19.7	7.8	29.5	22.7	37.5	29.2	32.1	22.4
Lebanon	11.2	14.2	28.9	30.4	32.4	29.5	28.6	25.5
Syria	10.6	8.6	25.0	18.5	30.8	20.4	27.0	16.2
Gaza	20.5	17.9	38.3	38.1	53.9	44.5	44.7	35.7
West Bank	21.6	19.1	34.7	32.5	38.4	35.6	35.5	29.5
All Fields		14.2		28.8		32.5		26.2

- b) The overall prevalence of anaemia among infants and children 6-36 months of age varied from 54.7% in Gaza, to 34.3% in the West Bank, 33.4% in Lebanon, 28.3% in Jordan and 17.3% in Syria. There was a drop in the prevalence of anaemia since 1998 except in Lebanon Field. This drop could be attributed to the fortification of flour distributed by the Agency with iron and folic acid in the context of the regular and emergency food aid programme. In addition, Jordan has fortified bread. Although, the drop in

Gaza and the West Bank Field is substantial still they are the most disadvantaged Fields due to the high unemployment and poverty rates.

Figure 15, Prevalence of anaemia among children by Field, 1998 & 2004

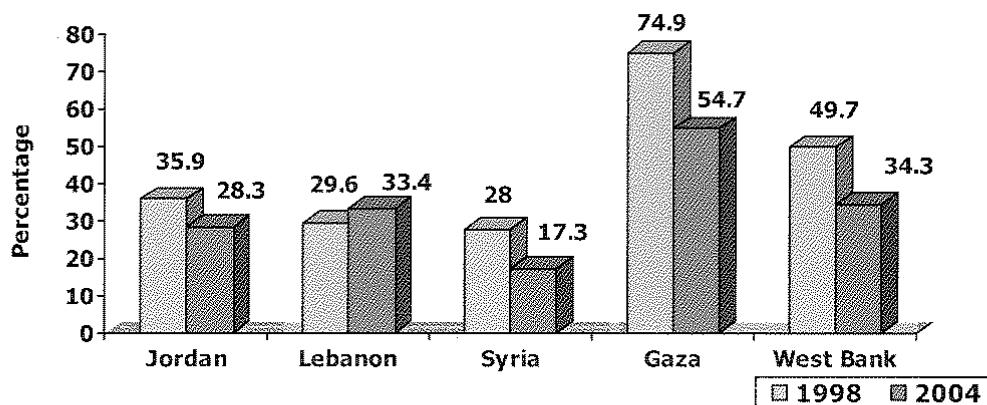
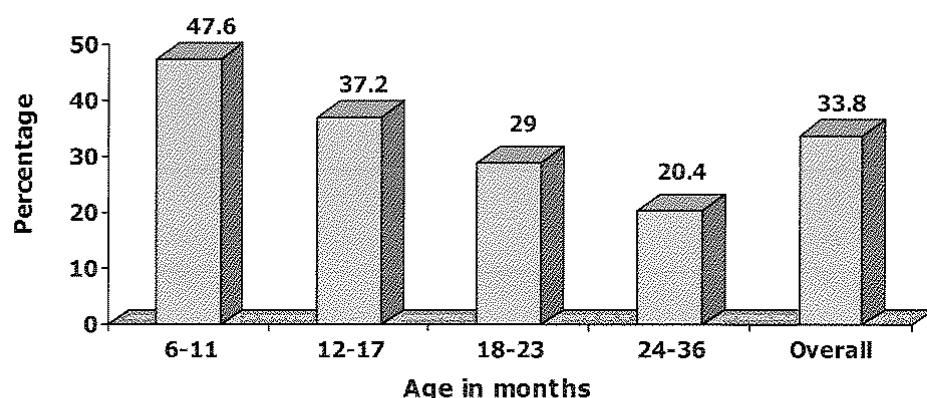


Table 17, Prevalence of anaemia among children 6-36 months of age

Fields	Anaemia rates by age (in months)				Overall prevalence	
	6-11	12-17	18-23	24-36	1998	2004
Jordan	45.2	26.2	22.4	17.2	35.9	28.3
Lebanon	44.9	37.8	32.0	20.3	29.6	33.4
Syria	20.1	23.4	15.6	11.2	28.0	17.3
Gaza	75.5	62.3	44.1	32.9	74.9	54.7
West Bank	46.9	38.4	30.5	19.8	49.7	34.3
All Fields	47.6	37.2	29.0	20.4	NA	33.8

As shown in table 17 and figure 16, the highest prevalence of anaemia among children in all Fields was among the 6-11 months of age with the highest rate of 75.5% in Gaza, 46.9 in the West Bank, 45.2% in Jordan and 44.9% in Lebanon, while in Syria the highest prevalence of anaemia was among children 12-17 months of age. Data also revealed that the lowest prevalence in all Fields is among children 24-36 months of age which could be attributed to the fact that children at this age will be more self-dependant in eating and in Jordan; children by this age will start eating fortified bread.

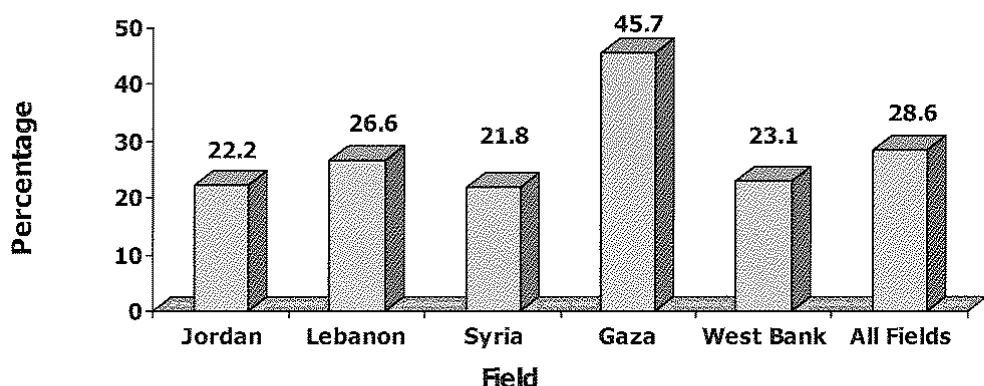
Figure 16, Prevalence of anaemia among children by age, 2004



The increase in the prevalence of anaemia among children in Lebanon Field and the minimal decrease in the prevalence among pregnant women is a reflection of the socio-economic status with high unemployment rates among the refugees living in Lebanon. The remarkable drop in Syria could be attributed to the fact that food is still affordable to the majority of the population.

- c) As shown in Figure 17, the prevalence of anaemia among nursing mothers ranged from 45.7% in Gaza, to 26.6% in Lebanon, to 23.1% in the West Bank, to 22.2% in Jordan and 21.8% in Syria. Severe and moderate anaemia ($Hb < 9\text{g/dl}$) contributed to a small proportion of the overall prevalence, while the greater proportion of nursing mothers were suffering from mild anaemia.

Graph 17, Prevalence of anaemia among nursing mothers, 2004



- d) In order to break the cycle of anaemia among women in reproductive age, the prevalence of anaemia among school girls will be assessed during 2005 and appropriate interventions will be considered in the light of the findings. The prevalence of anaemia among school boys will also be assessed, as a control group, to detect gender disparity, if any.

12. Mental health:

- 12.1 Mental disorders account for nearly 12 per cent of the global burden of disease. People with mental disorders face stigma and discrimination in all parts of the world. Developing countries are likely to see a disproportionately large increase in the burden attributable to mental disorders in the coming decades. The burden of mental disorders is maximal in young adults, the most productive section of the population.
- 12.2 Since the outbreak of the second Intifada on 28 September 2000, Palestinians have been subjected to harsh psychological threats. The daily suffering they are exposed to as a result of the continuous Israeli incursions into the Palestinian territories, and the harsh economic situation is continuing to leave an increased psychological distress for many Palestinians. Palestine refugees are among the most disadvantaged sectors of the population. Since 1948 they have been suffering from the trauma of displacement. The present experience of conflict and violence only adds up to the very many wounds and scars marked in their psyche over the last decades. Whereas 20% of the Palestinian population is in need for psychosocial support, the percentage rises to 44.9% among the refugee population, and 53% among camp population (IUED).

12.3 Several studies have shown that the refugee population are suffering from different psychological disorders that vary according to age, sex and place of residence. The most affected groups among the refugee population are children, women, adolescents, and the elderly.

- Children are suffering from: traumas, fears, nocturnal enuresis (bed-wetting), lack of concentration, low learning achievement, nightmares, sleeping disorders, aggressiveness, stuttering, nails cutting, withdrawal, thumb sucking, hyperactivity, and other symptoms of post trauma stress disorders (PTSD).
- Women are suffering from psychosomatic disorders, anxiety, depression, sleeping disorders, fears of attacks, divorce problems, family violence, phobia, tension, and many social problems related to poverty.
- Adolescents are suffering from: risk taking, lack of motivation, low achievement in school, violence, aggressive behavior, disability problems, odd behavior, and problems related to the current situation and have social background.
- Men are suffering from: unemployment, lack of motivation, family violence, depression, aggressive behavior, psychosomatic disorders, sleeping disorders, nightmares, chronic diseases, stresses, and other problems related to the economic situation.

12.4 UNRWA responded to the emerging psychosocial needs of the Palestine refugees by implementing appropriate community-based interventions. Two psychosocial support programmes; one in Gaza Strip and the second in the West Bank were funded through the emergency programme. The two programmes were implemented as system-wide activities involving the three departments; Health, Education and Social Services.

12.5 In the West Bank 20 mental health counsellors were recruited to provide direct counselling and support activities to refugees in need through UNRWA primary health care facilities, 15 community mobilizers were recruited to upgrade the community awareness in the mental health domain and facilitate group activities to refugees through community-based centres and 47 school counsellors were hired to provide students and staff in 95 schools with needed psychological interventions supported by a referral system. The programme placed special emphasis on training of UNRWA staff from all departments (Doctors, nurses, head teachers, teachers and social workers) on stress management and specific professional training in mental health, as shown in table 18 below.

Table 18, Activities of the psychological support programme in the West Bank, 2004

Activity	No.	Beneficiaries
Stress management training workshops	31	504
Professional staff training workshops	27	511
Individual counselling sessions	31 425	5 139
Group counselling sessions	3 925	141 869

12.6 During the first phase of the programme in Gaza Strip 119 counsellors were recruited to work for the three UNRWA programme departments (76 for Education, 24 for Relief and Social Services and 19 for Health). The deployment of counsellors to all UNRWA installations helped in reaching community target groups of refugees with special emphasis on school children.

The main components of the psycho-social support Initiatives in Gaza were guidance and counselling. Guidance sessions focus on prevention while counselling focus on professional intervention with identified individuals and groups suffering from certain psychological disorders, home visiting of families in need for counselling in case of loss of a family member or house demolishing or other reasons that make a family in need for professional intervention and identifying cases that need to be referred to specialized institutions.

Table 19, Activities of the psychological support programme in Gaza, 2004

Activity	Number	Beneficiaries
Group counselling sessions	4 750	44 618
Individual counselling sessions	2 185	1 907
Referrals	45	45
Home visits	254	709

12.7 A national mental health plan was developed by the Ministry of Health of the Palestinian Authority in collaboration with the World Health Organization and other stakeholders. The plan aims at enhancing the institutional capacity building of the health care system to deal with the burden of mental and psychological problems of the population with special emphasis on training of health personnel to detect and manage mental disorders and upgrade the mental health institutions at the primary, secondary and tertiary levels.

13. Gender mainstreaming:

13.1 Gender is a crosscutting issue to all core programme activities. For the last two years this issue has been addressed through different activities. During the last Field Family Health Officers' meetings, the concepts of gender mainstreaming were introduced to the participants, including; gender as a social construct and types of socialization processes; the personal dimensions of gender; the difference between gender-disaggregated and sex-disaggregated data; conceptual boundaries of gender-based violence; difference between gender equity and gender equality and women's empowerment.

13.2 During 2004, a total of 51 (24 medical and 27 nursing staff) were oriented on the concept of gender analysis with its five key elements which can serve as a systematic guide for assuring a gender perspective in data.

13.3 In addition, as part of gender mainstreaming, several data has been collected and analyzed as a gender disaggregated data such as infant and child mortality rates and growth retardation among children. Furthermore, the study which was conducted during 2004 on assessment of adolescents' knowledge and attitudes on family and reproductive health was gender-oriented.

13.4 In accordance with the UN policy on gender equity and equality, the Health Department has been encouraging the recruitment of female staff. Table 20 shows the percentage of women recruited in the different staffing categories. The overall rate, Agency-wide for the year 2004 was 29.6 per cent. The highest rate of females recruited was among Laboratory Technicians and the lowest was among Medical Officers. The highest rate was in Gaza Field 37.1 per cent followed by Syria 36.8 per cent, the West Bank 29.3 per cent, Jordan 23.9 per cent and the lowest was in Lebanon Field 20.8 per cent.

Table 20, Percentage of women employed in the Health Programme, 2004

Staff category	Jordan %	Lebanon %	SAR %	Gaza %	West Bank %	All Fields %
Specialists	0.0	11.1	75.0	33.3	9.1	20.8
Medical Officers	14.3	21.1	28.2	19.7	5.6	16.8
Dental Surgeons	25.0	17.6	33.3	31.3	7.7	23.5
Pharmacists	0.0	50.0	0.0	0.0	33.3	18.2
Asst. Pharmacists	32.8	20.0	30.3	50.0	58.1	38.4
Lab. Technicians	35.0	18.5	53.1	63.2	52.6	45.7
Dental hygienists	0	100.0	0	0.0	0	33.3
All categories (%)	23.9	20.8	36.8	37.1	29.3	29.6

14. Activities implemented in collaboration with host authorities, UN organizations, NGOs and other parties.

14.1 Thalassaemia and sickle cell anaemia in Syria:

In Syria, UNRWA in coordination with UNICEF, GAPAR and PRCS implemented a three year programme for screening of hereditary blood diseases. Funded by Switzerland, the programme continued to be running for the second year and comprised the following stages:

- a. Public awareness campaign which was carried out in the targeted camps where these disorders are common. The campaign was completed in four months (March – July 2003). UNRWA's medical officers were trained in this stage on genetic counselling for disease carriers.
- b. Screening of high risk groups including:
 - i. Families of known patients and carriers
 - ii. Patients with anaemia refractory to conventional treatment.
 This stage was completed in 6 months (July 2003-December 2004).
- c. Screening of infants at age 12 months and newly registered pregnant women in UNRWA health centers in the targeted camps.
- d. Screening of preparatory pupils in UNRWA schools in the targeted camps.
- e. In addition to these formal stages, local authorities were encouraged to refer all couples planning to get married to undergo screening for haemoglobinopathies.

The last two stages are still ongoing and will be continued during the third year.

During 2004, a total of 8,583 blood tests were performed. The tests were carried out by PRCS staff at Palestine Hospital. The screening revealed a high prevalence of haemoglobinopathy traits in the pupils of the targeted camps known to be at higher risk for hereditary anaemia.

Sickle cell trait was most common in Khan Dannoun camp whereas Beta-thalassemia trait was most common in Jaramana camp. These traits were also highly detected among suspect patients referred from UNRWA health centers. However these figures do not reflect the prevalence of these traits among the general refugee population in Syria since the screening has been conducted in special localities where these traits were thought to be high based on the established morbidity patterns.

Table 21, Preparatory pupils screened for hereditary blood diseases

Students screened	B thalasaemia trait		Sickle cell trait		Sickle cell & B thalasaemia		Normal		Total
	N	%	N	%	N	%	N	%	
During school year 2003-2004	183	8.8	117	5.6	42	2.0	1 736	83.5	2 078
During school year 2004-2005	683	21	86	2.7	93	2.9	2 381	73.4	3 243

People identified to be carriers were provided with genetic counseling and requested to encourage their family members to undertake the test, which partly explains the high rate among patients referred from UNRWA health centers as shown in the table below. A special ID was issued to all individuals who underwent the test and a new test (Hb A2 estimation) was recently introduced to confirm the results among the borderline cases.

Table 22, Patients referred from UNRWA health centers in 2004

Referred clients	B thalasaemia trait		Sickle cell trait		Sickle cell & B thalasaemia		Normal		Total
	N	%	N	%	N	%	N	%	
	882	25.0	742	21.0	778	22.0	1 121	31.2	3 523

14.2 Screening of newborns for phenylketonuria and hypothyroidism:

In Gaza, UNRWA in collaboration with the MoH of the Palestinian Authority started a screening test of newborns for early detection of phenylketonuria (PKU) and hypothyroidism. The programme was implemented since September 2000, the samples are collected at UNRWA health centres and tests performed at MoH central laboratory.

Management and follow up of all positive cases of PKU and hypothyroidism for all refugee and non-refugee newborns have been provided by the MoH.

During 2004, a total of 29,529 newborns were screened for phenyl ketone urea and thyroid deficiency. Out of whom, 15 were confirmed cases of PKU and 12 were diagnosed as hypothyroidism.

14.3 Activities with USAID/MARAM project in Gaza and the West Bank:

In 2002, two Gyn/Obsts, one from Gaza and one from the West Bank were sent by MARAM, to the United States of America, to attend a trainer of trainers (TOT) course of 28 days duration on Advanced Life Support in Obstetrics (ALSO) and neonatal resuscitation.

In 2003, 3 Senior Staff Nurses from UNRWA/Gaza received a training course on ALSO and neonatal resuscitation for 10 days. One senior staff nurse from Gaza, UNRWA was chosen to be one of the TOTs.

In 2004, one medical officer and 5 senior staff nurses were trained on the same subject.

14.4 Integrated management of childhood illnesses (IMCI) in Gaza and Lebanon Fields:

Supported by UNICEF, the IMCI strategy was adopted in Gaza Strip for the last 3 years. An IMCI committee was established which comprised representatives of different health providers including; MoH, UNRWA, and Terr Des Hommes.

The aim of this strategy is reduction of morbidity and mortality among children below 5 years of age by training all medical officers working at the primary level in Gaza Strip and the West Bank (Palestinian Authority, UNRWA, and NGO's) and training of medical officers in the emergency department of the Paediatric hospital.

Training workshops for implementation of this strategy started in October 2002 and each workshop lasted for 11 days.

By end of 2004, 250 medical officers, in Gaza Strip, were trained through several workshops, out of whom 28 medical officers working at UNRWA's primary health care facilities. During 2004, a total of 13 UNRWA medical officers were trained.

In addition, a total of 28 medical officers and 38 nurses in Lebanon Field were trained during 2004 on the strategy.

14.5 Detection of disabilities among school children in Syria:

Through multi-disciplinary initiatives, the Field started a screening programme to detect disabilities among school children as early as possible in order to take necessary action and alleviate the burden of disabilities.

Data collected during this activity identified 1,478 cases of disabilities out of 62,916 children enrolled in UNRWA schools, which gives a disability rate of 2.35 per cent. Of those identified 29.4 per cent had vision impairments, excluding children with corrected vision, 14.7 per cent were suffering from sickle cell anaemia, 10.5 per cent were suffering from asthma. 9.5 per cent were suffering from speech difficulties which could affect their educational achievement. 5.8 per cent were suffering from hearing impairments and 30 per cent were suffering from different health problems such as heart diseases, epilepsy, diabetes, cancer and endocrine diseases. 58 cases had disfigurement of one of the extremities, 8 cases had amputated extremities, 14 cases suffered from paralysis of one of the extremities and 7 had disfigurement of the vertebral column.

In response to this challenge, the Agency concluded a protocol with the United Medical Group, Lebanon, within the framework of VISION 2020 for detection and management of vision impairments among children enrolled in UNRWA schools in Syria. The project aims at screening of approximately 10,000 children during the school year 2004-2005, referral of suspect cases to specialists and issue of eyeglasses to those in need.



Introduction of IT technology to improve data collection
and management at the service delivery level, Gaza Strip

VI. DISEASE PREVENTION AND CONTROL

The well-documented epidemiological transition called the "double burden" that sees the arrival of the whole group of noncommunicable diseases with their shared risk factors on top of the persisting threat of communicable diseases, has real potential to hinder social and economic developments.

World Health Report 2003

OBJECTIVE

The objective of the Agency's disease prevention and control programme is to reduce morbidity, disability and mortality from communicable and noncommunicable diseases consisted with WHO targets and recommended intervention strategies.

PROGRAMME ACTIVITIES

1. UNRWA employs an active system of epidemiological surveillance of communicable diseases, including vaccine-preventable diseases and is committed to implementation of the United Nations Millennium Development Goals as well as WHO targets for eradication of poliomyelitis, elimination of neonatal tetanus, reduction of mortality from measles by half by year 2005. UNRWA is also committed to combating communicable diseases of public health importance including implementation of the WHO directly observed treatment, short course (DOTS) strategy for control of tuberculosis.
2. Close coordination is maintained with the Ministries of Health of the Host Authorities for surveillance of communicable diseases, supply of vaccines, exchange of information, participation in national immunization days and mass immunization campaigns, outbreak investigation and laboratory surveillance of HIV/AIDS and other communicable diseases which require advanced virological or immunological investigations that can not be performed at UNRWA facilities.
3. Integrated control of noncommunicable diseases is offered as an integral part of the Agency's primary health care activities with special emphasis on diabetes mellitus and hypertension. Special care for cardiovascular diseases is provided by specialists who visit health centres according to a weekly rotating schedule and advice on the management of patients referred to them by health centre medical officers.

UNRWA's approach towards prevention and control of noncommunicable diseases is based on the at risk strategy because the Agency does not have the means to embark on a population-based strategy of primary prevention as it has no control over effective means for dissemination of knowledge and public awareness including national educational curricula and mass media.

However, the Agency maintains targeted educational activities addressing risk factors such as smoking, obesity and physical inactivity. In addition, plans are underway to develop life skill-based educational activities in collaboration with the Department of Education.

PROGRESS IN 2004

Control of communicable diseases

1. Vaccine-preventable diseases

1.1 Incidence trends.

Similar to previous years, there were no cases of poliomyelitis, tetanus, diphtheria or pertussis among the refugee population during 2004. However, there was one case of acute flaccid paralysis reported from Lebanon, but none from the other Fields.

The incidence rate of smear-positive pulmonary tuberculosis dropped from 1.5 per 100,000 population in 2003 to 1.0 case per 100,000 population in 2004 with the highest rates of 5.5 and 3.0 per 100,000 reported from the Syrian Arab Republic and Lebanon Fields respectively. The rates in Jordan, Gaza Strip and the West Bank were very low, most probably due to inadequate epidemiological surveillance resulting in low detection rates.

The overall incidence rates of measles dropped from 0.7 per 100,000 population in 2003 to 0.5 per 100,000 in 2004 whereas the incidence of rubella increased from 0.3 per 100,000 population to 2.1 per 100,000 population with all cases reported from Jordan Field, where there has been an outbreak at country level.

Likewise, the incidence of mumps increased from 11.2 per 100,000 to 77.7 per 100,000 mainly due to a severe outbreak in the West Bank.

1.2 Tuberculosis control:

Close cooperation was maintained with the national tuberculosis programmes. A total of 111 cases of various forms were newly diagnosed in 2004 Agency-wide of which 42 (37.8 per cent) were smear positive, 11 (9.9 per cent) were smear negative and 58 (52.2 per cent) were extra pulmonary cases. Case detection rates of smear positive pulmonary tuberculosis were 85.7 per cent in Lebanon and 79.3 per cent in Syria, which reflects an active surveillance of the disease, whereas the detection rates in West Bank, Jordan and Gaza continued to be far below the WHO target of 70 per cent case detection rate.

While Jordan, Gaza and West Bank Fields still have to improve case detection rates, all Fields achieved the WHO target of 80 per cent cure rate of patients treated under the directly observed treatment, short course (DOTS) strategy (see table 1). UNRWA will seek technical assistance from WHO for assessing the tuberculosis control activities in the oPt and providing advice on ways and means of strengthening surveillance systems at the national level.

Table 1, The directly observed treatment short course strategy for control of tuberculosis, programme indicators, 2004

TB indicators	Jordan	Lebanon	Syria	Gaza	West Bank	Agency wide
Expected No. of cases based on WHO estimated incidence rates	88	20	42	47	34	212
No. of cases based on WHO target of 70% detection rate of expected incidence	62	14	29	33	24	148
Number of cases detected	4	12	23	1	2	42
Actual detection rate of TB smear positive cases (%)	6.5	85.7	79.3	3.3	8.3	--
Cure rate of new smear +ve (%)	100	100	100	100	100	100

1.3 Immunization coverage

Coverage of the expanded programme on immunization among children below 2 years of age was measured through the rapid assessment technique. The assessment revealed that the target of sustaining above 95 per cent coverage, both for primary and booster series, was achieved in all Fields, as can be seen from table 2 below:

Table 2, Coverage of the expanded programme on immunization 2004 based on the rapid assessment technique

Vaccine	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
1. Coverage rates as percentage of infants 12 months of age. (Sample size, 6697)						
BCG	99.6	100	99.7	100	98.5	99.6
Poliomyelitis	99.3	100	99.7	100	97.2	99.4
Triple (DPT)	99.3	100	99.7	100	97.2	99.4
Hepatitis	99.3	100	99.7	99.9	97.2	99.3
Hib *	99.3	NA	99.7	NA	NA	99.4
Measles	98.8	100	99.7	99.9	96.4	99.1
All vaccines	98.7	100	99.7	99.9	96.4	99.4
2. Coverage rates as percentage of children 18 months old, for booster doses. (Sample size, 6263)						
Poliomyelitis	97.6	99.4	99.3	99.9	96.1	98.4
Triple (DPT)	97.7	99.4	99.3	99.9	97.1	98.6
MMR	97.7	99.4	99.3	99.6	94.5	98.1

* Note: Hib vaccine is used in Jordan and Syria Fields only.

Despite the overall optimal coverage rates, there has been a decline in immunization coverage in localities most affected by closures and restrictions of movements in the West Bank, mainly East Jerusalem, Kalandia and Hebron. The drop in these localities ranged between 10-20 per cent below the contemplated target which gives reason for concern as it could result in accumulation of susceptibles and could lead to disease outbreaks with the risk of cross-border transmission.

1.4 Disease outbreaks

Mumps outbreak

An outbreak of mumps started during December 2003 at Askar and Balata refugee camps, north West Bank. By time, the outbreak spread to other localities, including: Fara'a camp, camp No. 1, Tulkarim city and Jenin.

The total number of cases reported by UNRWA health centres since the beginning of the outbreak till the end of December 2004 was 2,480 of whom 880 from Askar camp (35.5 per cent), 1041 from Balata camp (42.0 per cent), 100 from Fara'a camp (4 per cent), 160 from camp No. 1 (6.5 per cent), 268 from Tulkarim (10.8 per cent) and 12 from Jenin camp (0.5 per cent). In addition, cases were reported among non refugees. The total number of cases among refugees and non refugees was estimated at more than 4,000.

The age distribution of cases among refugee patients was as follows: children less than 2 years (2.3 per cent), children 2-5 years (11.9 per cent), children 6-10 years (30.6 per cent), children 11-15 years (39.8 per cent) and persons above 16 years (15.4 per cent).

More cases were reported among males with a gender ratio of 1.3: 1.0 male to female.

75 per cent of the infected persons were previously immunized and received one dose of MMR vaccine. About 50 per cent (1,242 cases) were from schools and kindergartens.

The peak of the outbreak was from April to beginning of June 2004, for Askar, Balata and camp No. 1. The outbreak did not subside and was out spread to other districts of the West Bank.

Complications were reported among 36 patients (1.5 per cent) of the total reported cases. The most common complications were orchitis 17 cases (0.7 per cent), pancreatitis 13 cases (0.5 per cent), aseptic meningitis 3 cases (0.12) whereas, 3 cases had combined complications, i.e. orchitis with pancreatitis, orchitis with meningitis and one case with encephalitis . About 7.8 per cent of the total cases had relapsed infection.

Laboratory investigation for IGM antigen was negative for known mumps strains, while IGG was high which indicates previous infection and/or immunization.

Viral genotyping revealed an 'H' genotype, similar to a virus previously isolated in the United Kingdom.

Contacts were maintained with the Ministry of Health of the Palestinian Authority as well as with WHO Headquarters and Regional Offices. Analysis of events raised the probability of a new strain of mumps virus causing the outbreak.

WHO technical advisors recommended that a second dose of MMR vaccine be administered as a routine in the expanded programme on immunization, as well as initiating an MMR vaccination campaign targeting at risk areas and special groups such as school pupils and university students.

1.5 Mass immunization campaigns

Studies conducted by UNICEF in collaboration with the Ministry of Health of the Palestinian Authority and UNRWA in Gaza Strip and the West Bank revealed low conversion rates against measles antigens among previously vaccinated children. Overall 33 per cent of children aged 9 months to 5 years had low seroconversion rates.

In response to these findings, UNICEF in coordination with WHO supported a mass immunization campaign against measles and distribution of vitamin A supplements. The campaign was conducted by the Ministry of Health in collaboration with UNRWA. In total 34,459 children aged 9 months to 5 years were vaccinated by UNRWA health centres in the West Bank and 58,855 were vaccinated in Gaza Strip. The overall national coverage rate was 98.2 per cent.

2. Other communicable diseases.

2.1 Data on the incidence of communicable diseases during 2004 is shown in table 3 below.

Table 3, Incidence rates of reported cases of communicable diseases per 100,000 registered population during 2004

Disease	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Registered population	1 776 669	399 152	421 737	952 295	682 657	4 232 510
Acute flaccid paralysis	0	0.25	0	0	0	0.02
Meningococcal meningitis	0	0	0	0.11	0.15	0.05
Brucellosis	4.39	2.25	122.6	0.1	0.73	14.4
Watery diarrhoea (children 0-3)	8 350	12 081	20 812	15 022	13 532	12 280
Bloody diarrhoea	193	207	452	806	365	386
Viral hepatitis	13	10	38	34	32	23
HIV/AIDS	0.06	0.25	0.24	0	0	0.07
Leishmaniasis	0	0	14.7	0	0.9	1.6
Measles*	1.13	0.5	0	0	0	0.52
Meningitis, viral	0.73	0.8	0	4.9	5.6	2.4
Meningitis, bacterial	0.11	0	0.23	0.2	2.8	0.6
Gonorrhoea	1.13	0	0.47	0	0	0.1
Mumps	43	4.3	9.2	3.5	357	77.7
Rubella*	5	0	0	0	0	2.1
Tuberculosis, smear positive	0.23	3.0	5.5	0.11	0.3	1.0
Tuberculosis, smear negative	0.2	12.5	0.7	0	0	0.26
Tuberculosis, extra pulmonary	0.4	2.8	8.1	0.4	0.3	1.4
Typhoid fevers	0.2	0	1.7	4.9	0.44	0.14

* No serological confirmation

No cases of poliomyelitis, cholera, diphtheria, tetanus neonatorum or pertussis were reported.

- 2.2 Unlike the zero incidence of HIV/AIDS in 2003, three confirmed AIDS cases were reported in 2004, one case each from Jordan, Lebanon and Syria Fields. The cumulative number of laboratory confirmed cases of HIV/AIDS reported Agency-wide up to end 2004 was 128 cases, 17 from Jordan, 22 from Lebanon and 12 from Syria. Whereas 20 and 57 cases were reported from Gaza and West Bank respectively both among refugees and non refugees. However, there are good reasons to believe that the actual prevalence of HIV/AIDS is higher than the reported cases due to weak surveillance system in general.
- 2.3 No cases of malaria were reported during the year and the incidence of brucellosis dropped from 16 per 100,000 in 2003 to 14.4 per 100,000 in 2004 with the highest incidence rate of 122.6 per 100,000 populations reported from Syria. The incidence of communicable diseases associated with poor sanitation, such as diarrhoea and hepatitis continued to be high, though mortality from diarrhoea do not represent a major cause of mortality among children nowadays.
- 2.4 In spite of the heavy investment in training of health personnel on the new procedures for isolation, identification, serological and antimicrobial sensitivity testing of salmonella, reporting of typhoid fevers, which are endemic in all Fields, was far below expectations mainly because of the difficulty in transporting stool samples to laboratories equipped with facilities for bacteriological testing.

Control of noncommunicable diseases

1. Diabetes and hypertension

1.1 Revision of the strategy:

The emphasis of the Agency's noncommunicable disease programme is focused on early detection of these diseases among at risk groups and providing proper management to control the health status of patients according to defined standards in order to avoid the development of early complications as well as to prevent the development of these conditions into irreversible end-stage organ damage.

To achieve these objectives, the relevant Technical Instruction and Management Protocols on prevention and control of noncommunicable diseases were revised in order to strengthen surveillance, monitoring, evaluation and response as well as to rationalize laboratory investigations. Furthermore, the patient registration files were revised and all old patient records were updated in accord with the revised format. The revised instruction will be implemented beginning 2005 after intensive training of health personnel at all levels. In addition, arrangements are underway to ensure that the NCD module of the new Health Management Information System is implemented in all Fields during 2005 in order to improve outcomes of care.

1.2 Patients under supervision:

Analysis of data collected from the five Fields of the Agency's area of operation revealed that there were 121,647 noncommunicable disease patients under supervision at UNRWA primary health care facilities at end of 2004 compared to 112,195 at end of 2003, i.e. 8.4 per cent increase. Of these patients 24,755 (20.3 per cent) were suffering from diabetes mellitus both types, 57,033 (46.8 per cent) were suffering from hypertension and 39,859 (32.7 per cent) were suffering from both diseases (see table 4).

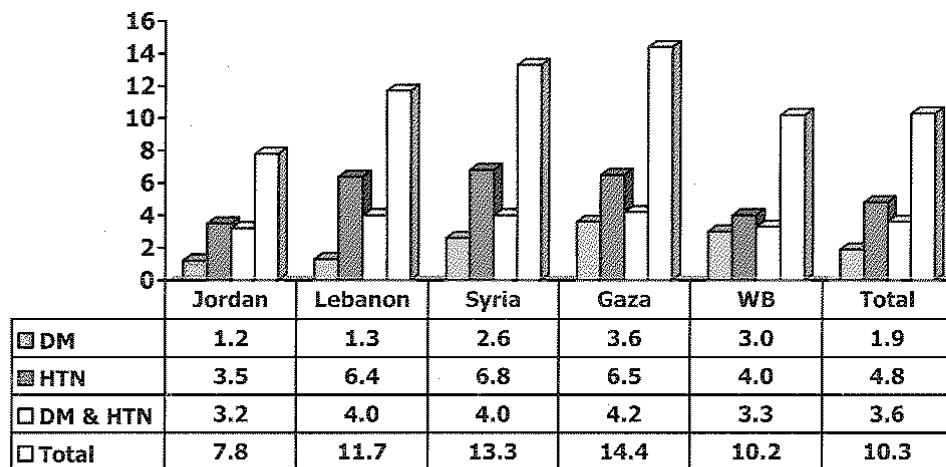
Table 4, Distribution of NCD patients by Field and type of morbidity

Morbidity type	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
Diabetes mellitus type I	882	162	308	635	448	2 435
Diabetes mellitus type II	5 887	1 822	3 124	7 763	3 724	22 320
Total Diabetes	6 769	1 984	3 432	8 398	4 172	24 755
Hypertension	17 672	9 060	8 366	14 133	7 802	57 033
Diabetes mellitus & hyperten.	14 992	5 272	4 758	8 611	6 226	39 859
Total	39 433	16 316	16 556	31 142	18 200	121 647

1.3 Prevalence rates:

The prevalence rates of noncommunicable diseases among the registered population aged 40 years and above by type of morbidity and Field are shown in figure 1.

Figure 1, Prevalence rates of noncommunicable diseases among population ≥ 40 years by type of morbidity and Field, 2004



The data suggests that the overall prevalence of diabetes mellitus alone without associated conditions was 1.9 per cent with the highest rates of 3.6 per cent and in Gaza Strip and 3.0 per cent in the West Bank.

The prevalence of hypertension was 4.8 per cent with the highest rates of 6.8 per cent in Syria, 6.5 per cent in Gaza and 6.4 in Lebanon, whereas the prevalence of co-morbidity (diabetes and hypertension combined) was 3.6 per cent with the highest rate of 4.2 per cent from Gaza.

The overall prevalence rate of noncommunicable diseases (all categories) was 10.25 per cent with the highest rate of 14.4 in Gaza and the lowest of 7.8 in Jordan.

However, it should be noted that these rates relate to the patients, who received special care at UNRWA primary health care facilities and do not reflect the actual prevalence among the general population, as all studies conducted in countries of the region had revealed much higher rates.

1.4 Age and gender distribution of patients:

Table 5 provides data on the breakdown of noncommunicable disease patients who were under supervision in 2004 by age group, gender and type of management.

Table 5, Distribution of NCD patients by age group, gender and type of management

	Diabetes mellitus Type I	Diabetes mellitus Type II	Total Diabetes mellitus	Hyperten.	Diabetes & hyperten.	Total
No. of patients at end of 2004	2 435	22 320	24 755	57 033	39 859	121 647
	%	%	%	%	%	%
Age distribution of patients						
a) Below 20 years	29.0	0.1	2.9	0.2	0	0.7
b) 20 – 39 years	54.5	9.2	13.6	8.8	2.7	9.4
c) 40 – 59 years	15.2	59.0	54.7	45.4	43.8	48.3
d) ≥ 60 years	2.1	31.8	28.8	45.5	53.4	41.5
Total	100	100	100	100	100	100
Sex distribution of patients						
a) Male	50.2	40.2	41.2	34.0	33.6	35.3
b) Female	49.8	59.8	58.8	66.0	66.4	64.7
Total	100	100	100	100	100	100
Type of management						
a) Life style only	0	11.9	10.7	14.1	4.3	10.2
b) Oral hypoglycaemic agents	0	64.4	58.1	0	9.8	15.0
c) Insulin	100	15.7	24.0	0	5.4	6.6
d) Combined OHA+ Insulin	0	8.1	7.3	0	3.4	2.6
e) Antihypertensive agents	0	0	0	85.9	10.6	43.8
f) Antihypertensive and antidiabetic agents	0	0	0	0	66.6	21.8
Total	100	100	100	100	100	100

It can be noted from this table that the highest proportion of patients (48.3 per cent) were in the age group 40-59 years, and that 64.7 per cent were females.

However, it should be taken into account that gender distribution of patients is largely affected by the attendance pattern to UNRWA health facilities, not to significant variations in morbidity patterns.

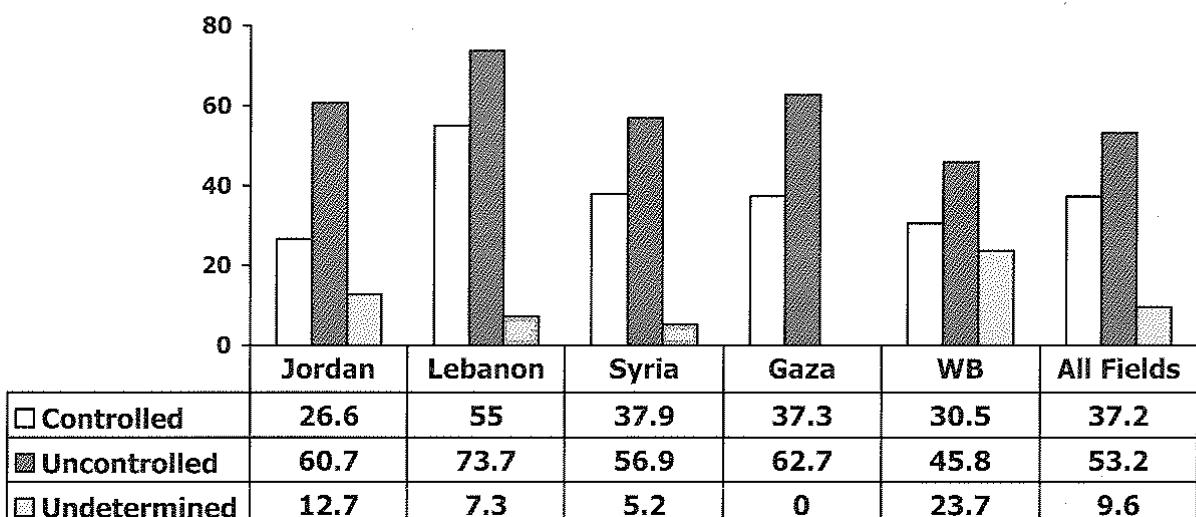
1.5 Outcomes of care:

A pilot study was conducted in one large health centre in each Field using standardized electronic files (line-listing of patients under supervision). The pilot trial provided an opportunity to study the clinic records of 10,032 patients who represent 8.2 per cent of total noncommunicable disease patients under supervision in the five Fields. The study comprised information on risk factors, outcomes of care and the association between risk factors and outcomes.

The findings of the study were as follows:

- a) Control status, the status of 37.2 per cent of patients was controlled whereas, the status of 53.2 per cent was uncontrolled and the status was undetermined for 9.6 per cent of patients because of non attendance, see figure 2 below:

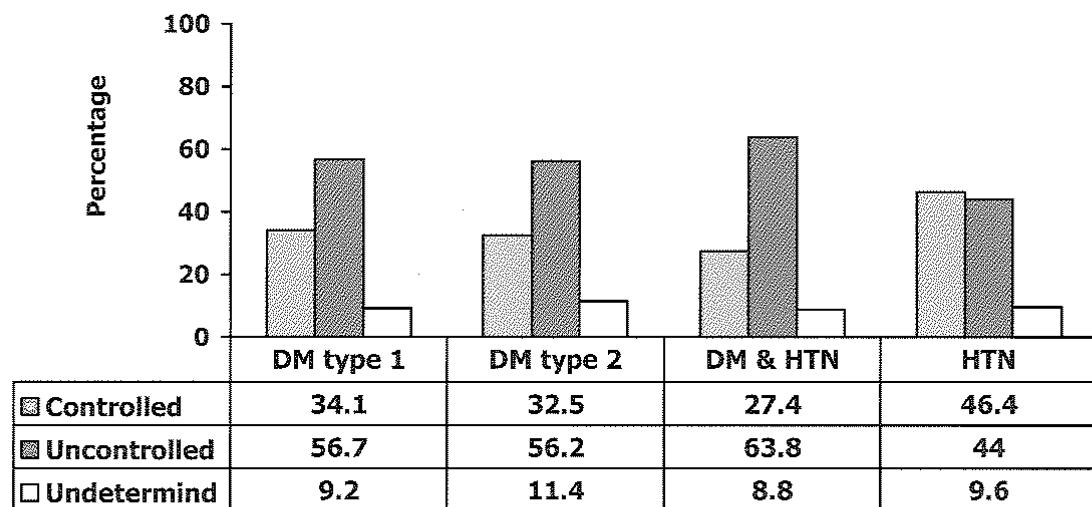
Figure 2, Control status of NCD patients by Field



The control status varied significantly from one Field to another and from one type of morbidity to another with the highest control rate of 55.1 per cent achieved in Lebanon Field and the lowest of 26.6 per cent in Jordan. Better control rates were observed among patients suffering from hypertension whereas the lowest control rates were among patients suffering from both diseases (see figure 3).

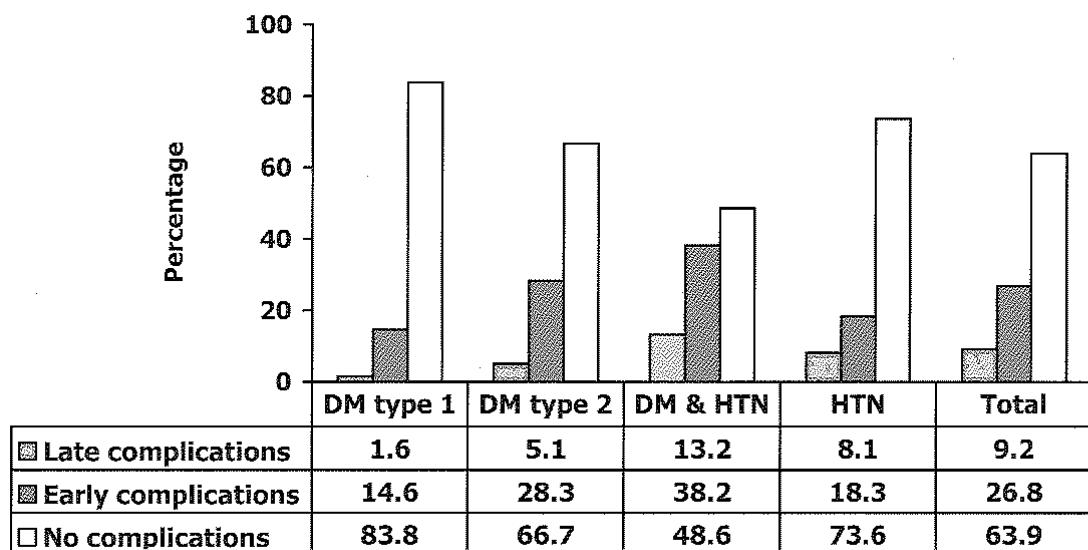
It is worthmentioning that achieving acceptable control is dependent on several factors including selection of appropriate management plans and patients' compliance to advice on diet, physical activity and use of medicines.

Figure 3, Control status of patients by type of morbidity



- b) Complications, the frequency of complications was 26.8 per cent for early complications and 9.2 per cent for late complications, see figure 4 below:

Figure 4, Frequency of complications by type of morbidity



As expected, the highest complications rate, both early and late, was among patients suffering from diabetes and hypertension combined, whereas the lowest was among patients suffering from diabetes mellitus type I followed by patients suffering from hypertension.

The breakdown of organ-specific late complications by Field is shown in table 6.

It can be noticed from this table, that the highest late complications rate of 14.8 per cent was reported from Syria, followed by 8.5 per cent the West Bank and the lowest of 6.8 per cent was from Gaza.

Table 6, The breakdown of organ-specific late complications by Field

Field	Blindness	End-stage renal failure	Myocardial infarction	Cerebro vascular accident	Amputation	All late complications
	%	%	%	%	%	%
Jordan	0.7	0.3	3.7	3.3	0.3	8.0
Lebanon	0.3	0.2	1.1	2.9	0.9	7.9
Syria	0.3	0.6	7.9	5.4	0.7	14.8
Gaza	0.7	0.3	1.5	1.6	1.5	6.8
West Bank	0.7	0.4	3.5	3.8	0.4	8.5
All Fields	0.5	0.3	3.6	3.4	0.6	9.2

As can be seen from table 7, the prevalence of late complications by type of morbidity revealed that the highest complication rate of 13.2 per cent was among patients with both diseases, followed by patients with hypertension only (8.1 per cent).

The most common organ-specific late complication rate of 3.6 per cent was myocardial infarction followed by cerebro-vascular accidents (3.4 per cent) and the lowest rate was end-stage renal failure.

Table 7, The breakdown of organ-specific late complications by morbidity type

Morbidity type	Blindness	End-stage renal failure	Myocardial infarction	Cerebro vascular accident	Amputation	All organ-specific late complications
Diabetes mellitus Type I	0.5	0.0	0.0	0.0	0.7	1.6
Diabetes mellitus Type II	0.9	0.1	2.0	1.4	1.0	5.1
Total diabetes	0.9	0.1	1.8	1.3	0.7	4.7
Hypertension	0.1	0.3	3.3	2.8	0.0	8.1
Diabetes mellitus & hypertension	0.9	0.5	5.0	5.4	0.9	13.2
Total	0.5	0.3	3.6	3.4	0.6	9.2

- c) Disability and mortality, the number of reported deaths was 2,401 (2 per cent) of the total number of noncommunicable disease patients. However, there were 6,672 non-attendants, the outcomes of whom were not adequately investigated. Data on deaths among all noncommunicable disease patients is shown in table 8.

Table 8, Disease-specific mortality proportions among reported deaths, NCD patients

Field	Diabetes mellitus			HTN %	Diabetes & HTM %	All NCDs %
	Type I %	Type II %	Total DM %			
Jordan	0.0	17.4	17.4	23.9	58.7	28.8
Lebanon	0.0	3.7	3.7	22.2	74.1	21.0
Syria	0.0	17.5	17.5	47.5	35.0	19.9
Gaza	0.0	0.0	0.0	66.7	33.3	16.0
West Bank	0.0	8.1	8.1	37.8	54.1	14.3
All Fields	0.0	11.5	11.5	36.4	52.1	100

The results obtained from analysis of data collected through the Health Information System clearly indicate that there is still a long way to enhance system performance and improve disease surveillance to determine outcomes of care in terms of disability and mortality by upgrading the skills and capabilities of medical personnel on early detection and management of noncommunicable disease, as well as by improving health education and counselling activities.

The burden of noncommunicable diseases is on the increase and it will continue to draw on the scarce Agency resources. It is therefore essential to ensure that these diseases are properly managed ahead the need to meet the high cost of treating their complications and disabling effects.

- d) Association between risk factors, control status and outcomes, analysis of data collected from the NCD module of the Health Management Information System revealed that the prevalence of modifiable risk factors among patients was high. Approximately 95.4 per cent had one or more risk factor including obesity, hypercholesterolemia, smoking, physical inactivity, uncontrolled blood pressure or uncontrolled blood glycaemia.

Table 9 shows the prevalence of the different modifiable risk factors among patients under supervision.

Table 9, Prevalence of risk factors among NCD patients

Risk factor	Risk criteria	Rate
Obesity	Body mass index > 30	60.7
Hypercholesterolemia	Cholesterol value of ≥ 200 mg/dl	39.5
Uncontrolled blood pressure	BP $\geq 140/90$ in the last 2 values	53.6
Uncontrolled glycaemia	PPBG ≥ 180 /dl in two of last 3 values	70.8
Physical inactivity	< 30 minutes/day, 3 times per week	48.3
Smoking	Any type of tobacco use	18.1

However, in spite of the high prevalence of modifiable risk factors, analysis of data did not reveal statistically significant correlation neither between risk factors and control status on the one hand and risk status and complications on the other.

This weak or negative association between modifiable risk factors, control status and outcomes of care is contrary to expectations and is most probably due to the quality of data collected through the pilot project because of under-reporting and under-recording of outcomes. This area will receive special attention during future in-service training of medical personnel.

In the absence of community-based programmes addressing risk factors that contribute to the incidence of noncommunicable diseases, it is readily acknowledged that the prevalence of these diseases will continue to increase and the cost of their treatment will escalate. Increased life expectancy, major shift in life styles and introduction of new expensive medicines will place additional burdens on the scarce resources available to the health programme.

During 2004 major part of the expenditure on essential medicines used in the health programme was on procurement of medicines for treatment of cardiovascular diseases and diabetes.

While the per capita expenditure on all essential medicines used in the health programme was USD 2.9, the cost of medical supplies used for treatment of diabetes mellitus was USD 38 per patient (almost double the per capita expenditure on the full range of health services provided by the Agency). This clearly indicates the need for heavy investment in staff training and patient education as well as the need for reinforcing rational prescribing practices and promoting compliance with standard management protocols as means to improve outcomes of care, reduce disability and premature death and avoid the high cost of treating the complications of these diseases at the secondary and tertiary levels.

The Agency's leading experience in integrating noncommunicable disease care within its primary health activities needs therefore, to be closely monitored and periodically evaluated in order to ensure that it is affordable, sustainable, responsive and cost-effective.

2. Other noncommunicable diseases

There is a wide range of noncommunicable diseases including chest diseases, hereditary anaemias and cancers, the prevalence of which is on the increase among the refugee population. However, owing to the limited resources allocated to the programme, strategies could not be developed to ascertain the burden of these diseases in terms of morbidity, disability and mortality nor to introduce appropriate interventions to adequately address them.

Assistance is provided to patients as they come to the attention of the health care system, which comprises issue of medical supplies and hospitalization on need-basis.

The Agency's medium term plan (2005-2009) includes provision for establishment of new programmes for early detection and management of physical and mental disabilities and cancers of the breast and the cervix. However, implementation of these strategies is much dependent on donors support.



Storm Water Drainage Line (Middle Area)



Storm Water Drainage Line (Middle Area)

VII. ENVIRONMENTAL HEALTH

Water and sanitation is one of the primary drivers of public health. I often refer to it as "Health 101", which means that once we can secure access to clean water and to adequate sanitation facilities for people, irrespective of the difference in their living conditions, a huge battle against all kinds of diseases will be won.

*Dr. LEE Jong-Wook
Director-General, WHO*

OBJECTIVE

To reduce morbidity and risks of outbreaks associated with poor environmental conditions and practices by maintaining acceptable environmental health standards in refugee camps and contributing to sustainable development in the sub-sectors of water, sewerage and solid waste management and integrating camp systems within municipal/regional systems.

PROGRAMME ACTIVITIES

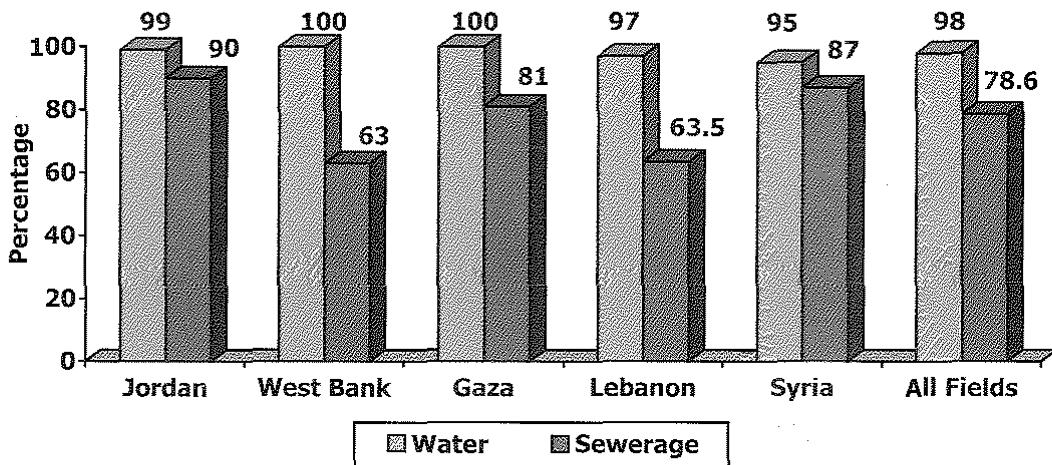
1. UNRWA's regular environmental health services continued to be focused on maintaining acceptable standards of water and sanitation in refugee camps in the five Fields of its area of operations.
These services were provided to approximately 1.3 million Palestine refugees residing in 58 official camps in Jordan, Lebanon, Syrian Arab Republic, Gaza Strip and the West Bank. The services were provided either directly by UNRWA, or in close collaboration with local municipalities or through contractual arrangements. In Jordan and the Syrian Arab Republic, the Host Authorities had historically played a major role in camps development and integrated camp infrastructure of water, sewerage and drainage within municipal systems, except in few situations where camps are located in areas where no such systems exist. Unlike Jordan and Syria, the environmental conditions in Lebanon, Gaza Strip and the West Bank remained generally poor and the Agency had to assume a major role in camp development.
2. UNRWA's approach to camp development was developed in the late eighties where several development projects were implemented in Gaza Strip and the West Bank in the context of the Expanded Programme of Assistance to the occupied Palestinian territory. This approach was further enhanced through the establishment of the Special Environmental Health Programme in Gaza, in 1993, which played a key role in carrying out camp-by-camp need assessments, preparation of detailed feasibility studies, identification of projects and preparation of detailed technical designs for construction of sewerage and drainage systems and rehabilitation of water networks in refugee camps and nearby municipal areas. The programme has also assisted in review of feasibility studies and technical designs for development projects in the refugee camps in Lebanon, Syrian Arab Republic and the West Bank.

PROGRESS IN 2004

1. Camp Population with access to water and sewerage facilities

Figure 1, below provides data on the percentage of camp shelters with indoor connection to water and sewerage systems, as at end of 2004:

Figure 1, Percentage of camp shelters with indoor connections to water and sewerage systems



At present, 14 camps, Agency-wide do not have proper sewerage systems. Feasibility studies and detailed designs are readily available for implementing development projects in these camps subject to availability of funds.

It is also worthmentioning that in spite of the optimal rate of indoor connections to water networks, pumping of water into these networks is intermittent and the quantity of water is inadequate. In addition, the quality of water in Gaza Strip does not meet international standards for drinking purposes because of high salinity levels.

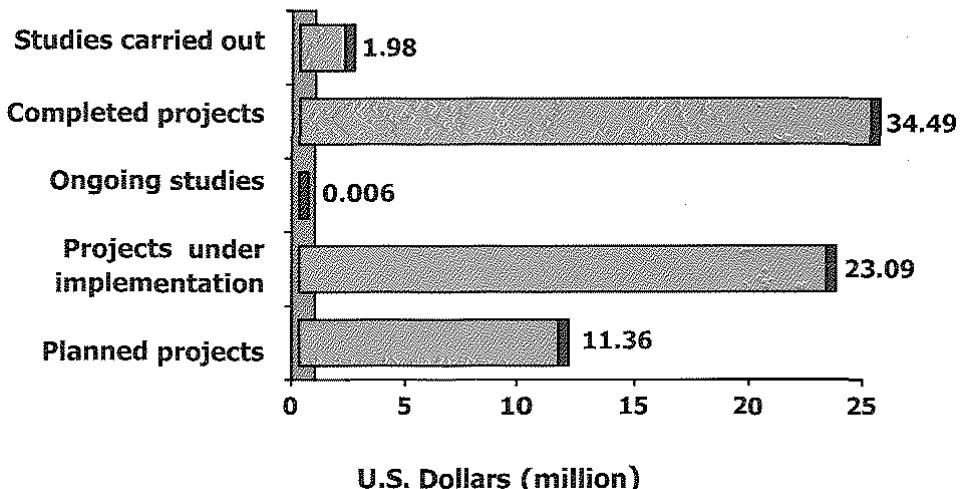
2. Development projects in Gaza Strip

Following projects were completed in Gaza Strip under the Special Environmental Health Programme:

- Construction of gravity main inceptor in Deir El-Balah camp, stage II.
- Construction of sewerage and drainage systems in Deir El-Balah, Phase II, stages A, B and C.
- Construction of a new water well in Jabalia camp.
- Construction of infrastructure for the re-housing project in Rafah, phase III.
- Construction of infrastructure and electricity system for re-housing project in Khan Younis, phases I, II and III.
- Pavement of roads and pathways in Jabalia camp, phase VI.

- Conducting a mass insect and rodent control campaign.
- Total investment in development projects since the establishment of the Special Environmental Health Programme in 1993, is outlined in figure 2 below:

Figure 2, Cost of projects and studies, Special Environmental Health Programme, Gaza



3. Development projects in Lebanon

Implementation of The European Commission (EC) funded projects for construction of water and sewerage networks in 5-refugee camps was well in progress during the year. The progress made until year end is shown in table 1 below:

Table 1, Progress in project implementation

Camp	Accumulated financial progress in %	
	Actual progress %	Planned progress %
Rashidieh	98	100
Burj Shemali	51.2	55
Mia Mia	100	100
Beddawi	42	48
Wavel	100	100

In addition, works were still in progress for drilling of a deep water well and construction of a sewerage and drainage system in Naher El-Bared camp. In addition, public awareness and mass cleaning campaigns were undertaken in Nahr El-Bared, Wavel and Ein El-Hilweh camps in coordination with local NGOs, municipalities and the Palestinian Red Crescent Society.

4. Development projects in the Syrian Arab Republic

The partnership and financing agreement between the European Union (EU) and the Syrian Government has been signed after a series of delays. According to this agreement the EU will contribute € 8.0 millions. This development will enable the Agency to go ahead with implementation of the projects for

construction of water and sewerage systems in Khan Eshieh camp and construction of sewerage system in Khan Dannoun camp, which constitutes an integral part of the agreement for development of rural areas. The objectives of the project comprise:

- Improve public health and environmental conditions.
- Provision of sustainable and safe water supply system.
- Provision of wastewater collection system.
- Utilization of treated wastewater for irrigation of crops.
- Reduction of the risk of contamination of ground water resources.
- Capacity building for local community groups and institutions.

The inception report and the feasibility study were completed in 2004, preparation of the detailed technical design and tender documents is expected to be completed during 2005 and construction works started in 2006 and completed in 2007.

In addition, funding of the project for re-housing of Nairab camp inhabitants will enable the Agency to implement the project for construction of environmental infrastructure in Ein El-Tal.

5. Solid waste management

The Agency made good progress in mechanization of the process of refuse collection and disposal in refugee camps in Gaza Strip, Lebanon, Syria and the West Bank, but still has to go a long way towards achieving similar results in Jordan and upgrading available systems in all Fields. In addition, 10 out of the 58 camps are served by local municipalities and arrangements are in place for use of municipal dumping sites.

The ultimate objective of these projects, which represent an integral part of the Agency's medium term plan (2005-2009), is to achieve cost-efficiency gains by reducing the labour-intensive costs and improve general cleanliness in camps.

6. Rehabilitation of conflict-damaged infrastructure in the oPt

The Agency had rehabilitated major damages to water and sewerage systems as part of the project for reconstruction in Jenin camp, West Bank which was affected by a large scale Israeli military operation in spring 2002.

Immediate repairs were also made for damages to water, sewerage and roads in Jabalia camp, sustained during repeated Israeli military incursions into northern areas of Gaza Strip. However, the Agency could not keep pace with the rate of damage caused during these incursions, often accompanied by house demolishing, uprooting of trees and destruction of infrastructure.

Environmental health services

Field	Jordan	Lebanon	Syria	Gaza	West Bank	All Fields
<u>Demographic data</u>						
(i) Registered refugees as at end of 2004	1 776 669	399 152	421 737	682 657	952 295	4 232 510
(ii) Camp population	283 262	210 155	112 008	468 405	179 851	1 253 681
(iii) No. of camps	10	12	9	8	19	58
(iv) Percentage of camp population to total registered refugees	16	53	27	49	26	30
<u>Water supply</u>						
(i) No. of camps connected to municipal water systems	10	6	9	8	18	51
(ii) Percentage of shelters connected to water networks	99	96.7	95	100	100	98.3
<u>Sewerage and drainage</u>						
(i) No. of camps partially or fully connected to sewerage networks	9	9	9	6	11	44
(ii) Percentage of shelters connected to sewerage networks	89.9	63.5	86.6	81	62.7	78.6
<u>Solid waste management</u>						
(i) No. of camps partially or fully served by UNRWA mechanized systems	1	12	7	8	13	41
(ii) No. of camps served by Municipalities	3	0	2	0	5	10
(iii) No. of camps served through contractual arrangements	6	0	0	0	1	7

Notes: (a) In all these services, it is not uncommon that camp populations are served by more than one source/system.
(b) All camp shelters Agency-wide are served by private latrines connected to local cesspits or proper sewerage schemes.



Jabalia Camp Phase IV - During Work



Jabalia Camp Phase IV - After Work

FACT SHEET, 2004

	Jordan	Lebanon	Syria	W.Bank	Gaza	Agency-wide
A- DEMOGRAPHIC INDICATORS						
- Registered refugee population in thousands	1777	399	422	683	952	4,233
- Percentage of camp population to total registered refugees	16	53	27	26	49	30
- Percentage of refugees to total country/district population	32.8	12.3	2.6	30.2	73.1	15.0
- Growth rate of registered refugees (%) ⁽¹⁾	2.1	1.2	1.9	2.6	3.2	2.3
- Total fertility rate ⁽²⁾	3.6	2.6	2.5	4.1	4.4	3.5
- Percentage of children below 18 years of age	36.9	31.1	36.6	39.7	48.3	39.4
- Percentage of women of reproductive age (15-49 Years)	25.4	26.7	26.0	23.8	22.2	24.6
- Percentage of population 40 years and above	25.9	32.3	27.5	26.9	20.7	25.7
- Aging index	34.2	48.2	33.1	31.6	18.0	30.1
- Average family size	5.4	5.1	5	5.5	6	5.5
B- UNRWA's HEALTH INFRASTRUCTURE						
<u>Primary health care (PHC) facilities :</u>						
a- Inside official camps	13	13	14	17	11	68
b- Outside camps	10	12	9	19	7	57
Total :	23	25	23	36	18	125
c- Ratio of primary health care facilities per 100,000 population	1.3	6.3	5.5	5.3	1.9	3.0
<u>Services integrated within PHC facilities :</u>						
a- Laboratories	23	15	21	25	15	99
b- Dental clinics						
· Stationed units	23	17	14	21	13	88
· Mobile units	3	0	1	1	3	8
C- Family planning	23	25	23	36	18	125
d- Special care for non-communicable diseases	22	25	23	34	15	119
e- Specialists	9	10	4	7	15	45
f- Radiology facilities	1	4	0	6	5	16
g- Physiotherapy clinics	1	0	0	6	6	13
h- Maternity units	0	0	0	0	6	6
i- Hospitals ⁽³⁾	0	0	0	1	0	1

1- Rates are calculated based on population figures as per UNRWA "Registration Statistics."

2- UNRWA study, 2000

3- Only one hospital run by UNRWA in Qalqilia, otherwise hospital care is provided through contractual arrangements or reimbursement of costs.

C- BUDGETARY AND HUMAN RESOURCE INDICATORS

- Health personnel per 10,000 registered refugees		0.4	0.9	0.9	0.6	0.8	0.6
- Doctors		0.1	0.4	0.3	0.3	0.2	0.2
- Dental surgeons		1.3	3.0	2.9	3.1	2.7	2.2
- Annual per capita budget allocations on health US \$		7.3	34.3	14.2	19	18.0	14.7
- Total allocations on health as percentage from approved regular budget		15.3	20.7	21.2	25.1	18.9	17.7
- Average expenditure on pharmaceuticals per out-patient medical consultation US\$		1.3	1.0	1.2	1.5	1.5	1.3

D- HEALTH STATUS INDICATORS

- Infant mortality rate per 1000 live births ⁽¹⁾		22.5	19.2	28.1	15.3	25.2	22
- Infant mortality rate per 1000 live births by gender ⁽¹⁾							
- Boys		23.6	18	33.1	15.7	26.6	
- Girls		20.8	20.3	22.5	14.8	22.8	
- Neonatal mortality rate per 1000 live births ⁽¹⁾		13.5	15	22.9	9.3	17.1	15.3
- Early child mortality rate (below 3 years) per 1000 live births ⁽¹⁾		25.1	20.2	30.5	17.6	28.3	24.4
- Percentage of women married by the age of 18 years ⁽¹⁾		25.4	31.6	22.7	31.2	36.3	30.2
- Mean birth interval (months) ⁽¹⁾		36.2	43.0	42.3	35.1	33.0	37.1
- Percentage of women with birth intervals < 24 months ⁽¹⁾		31.9	25	25.8	32.7	34.7	30.9
- Prevalence of modern contraceptives among women of reproductive age utilizing UNRWA MCH services ⁽²⁾		48.6	64.7	65.4	41.9	36.5	49.9
- Mean marital age (women) ⁽²⁾		20.3	19.7	20.5	19.5	18.9	19.7
- Percentage of infants breastfed for at least one month ⁽³⁾		75.9	87.2	78.3	87.1	65.0	78.9
- Prevalence of exclusive breast feeding up to 4 months ⁽³⁾		24.0	30.2	40.3	34.5	33.3	32.7
- Prevalence of anaemia among children < 3 years of age ⁽⁴⁾		28.3	33.4	17.2	34.3	54.7	33.8
- Prevalence of anaemia among pregnant women ⁽⁴⁾		22.4	25.5	16.2	29.5	35.7	26.2
- Prevalence of anaemia among nursing mothers ⁽⁴⁾		22.2	26.6	21.8	23.1	45.7	28.6
- Percentage of pregnancies at high or relative risk		34.6	28.9	34.0	38.3	36.9	35.6
- Prevalence of diabetes among population served, 40 years and above (%)		4.4	5.3	6.6	6.3	7.8	5.5
- Prevalence of hypertension among population served, 40 years and above (%)		6.65	10.4	10.8	7.27	10.75	8.35
- No. of cases of communicable diseases reported							
- Pulmonary TB smear positive		4	12	23	2	1	42
- Measles		20	2	0	0	0	22
- Rubella		87	0	0	0	0	87
- Mumps		764	17	39	2434	33	3287
- HIV/AIDS		1	1	1	0	0	3

1- UNRWA study, 2003

2- UNRWA study, 2000

3- UNRWA study, 2001

4- UNRWA study 1999 except Gaza Field which was conducted by CDC, Atlanta

E- INDICATORS OF COVERAGE WITH PRIMARY HEALTH CARE

- Percentage of pregnant women who received antenatal care	50.3	53.3	88.6	63.4	98.1	68.7
- Percentage of pregnant women who paid at least four * ante-natal visits to UNRWA MCH Clinics	86.7	95.5	88.7	75.6	92.6	88.2
- Average No. of antenatal visits	6.3	6.7	6	6.7	7.1	6.7
- Proportion of pregnant women registered during * the first trimester	52.2	72	57.7	39.3	52.1	52.2
- Percentage of pregnant women protected against tetanus	99.6	99.7	99.7	99.5	97.6	98.8
- Percentage of pregnant women delivered by trained personnel *	99.3	99.9	97.4	99.2	99.9	99.3
- Percentage of deliveries in health institutions	98.7	97.5	91.1	98.5	99.4	97.9
- Percentage of pregnant women who received postnatal care	89.3	97.4	96.8	80.6	92.9	90.6
- Percentage of surviving infants who received regular care and monitoring	57.8	48.0	89.5	60.7	89.6	68.7
- Percentage of infants registered within one month after birth	79.7	96.5	91.4	64.2	99.3	85.7
- Percentage of infants 12 months old fully immunized	98.7	100.0	99.7	96.4	100.0	99.4
- Percentage of children 18 months old received all booster doses of EPI vaccines	97.6	99.4	99.3	94.5	99.6	98.1
- Percentage of camp shelters with access to safe water	99	96.8	95	100	100	98.4
- Percentage of camp shelters with access to sewerage facilities	89.9	63.48	86.6	62.7	81	78.6
- Number of camps served by UNRWA mechanized refuse collection and disposal equipment	1	12	7	13	8	41

F- PERFORMANCE INDICATORS

- Average daily medical consultations per doctor	102	96	91	114	140	112
- Average daily consultations per dental surgeon	24	26	19	19	34	24
- Actual laboratory productivity rate compared to the target of 50 workload units /hour	58.5	49.9	49.4	56.6	65.7	55.9
- Actual productivity of dental services compared to the target of 50 workload units per hours	49.1	44.1	56.9	42.1	69.1	51.3
- Average stay (days) among hospitalized patients	2.2	2.4	1.5	2.8	3.5	2.4
- Average daily bed occupancy (%)						
· Qalqilia hospital	0	0	0	44.7	0	44.7
· Maternity units	0	0	0	0	18.0	18.0

* Data obtained through the management health information system , 2003

ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infections
BCG	Bacillus Calmette-Guerin
CDC	Centres for Disease Control & Prevention
CRC	Convention on the Rights of the Child
DFID	Department for International Development
DOTS	Directly Observed Treatment Short-Course Strategy
DPT	Diphtheria, Pertussis and Tetanus
EC	European Community
ECHO	European Community Humanitarian Office
EMRO	Eastern Mediterranean Regional Office
EPI	Expanded Programme on Immunization
ESCPA	United Nations Economic and Social Commission for Eastern Asia
EU	European Union
GAPAR	General Authority for Palestine Arab Refugees
Hib	Haemophylus influenzae stereotype b
HIV	Human Immuno-deficiency Virus
IMCI	Integrated Management of Childhood Illnesses
IDDs	Iodine Deficiency Disorders
IUDs	Intra-uterine Devices
IUED	Geneva's Graduate Institute of Development Studies
FP	Family Planning
MCH	Maternal & Child Health
MDG	Millennium Development Goals
MMR	Measles, Mumps and Rubella
NCDs	Noncommunicable Diseases
NIDs	National Immunization Days
NGOs	Non-Governmental Organizations
NTPs	National TB Programmes
OPV	Oral Polio Vaccine
oPt	Occupied Palestinian Territory
PA	Palestinian Authority
PRCS	Palestinian Red Crescent Society
SAR	Syrian Arab Republic
SEHP	Special Environmental Health Programme
UNAIDS	United Nations Programme on AIDS
UNICEF	United Nations Children's Fund
UNDP	United Nations Development Programme
UNFPA	United Nations Fund for Population Activities
UNRWA	United Nations Relief & Works Agency for Palestine Refugees in the Near East
UNSCO	United Nations Special Coordinator in the Occupied Territories
USAID	United States Agency for International Development
WHO	World Health Organization
WFP	World Food Programme
TB	Tuberculosis

Senior staff in the Health Department
(As at 31 December 2004)

1. Headquarters Staff

<u>Post Title</u>	<u>Incumbent</u>	<u>Telephone</u>	<u>E-mail address</u>
WHO Special Representative & Director of Health	Dr. F. Mousa	5808300	f.mousa@unrwa.org
Head, Health Information System	Vacant		

Division of Health Protection & Promotion

Deputy Director of Health & Chief, Health Protection & Promotion	Dr. H. Madi	5808302	h.madi@unrwa.org
Reproductive Health Officer	Dr. Ali Khader	5808316	a.khader@unrwa.org

Division of Disease Prevention & Control

Chief, Disease Prevention & Control	Dr. Humaid A/Mousa	5808315	h.abu-mousa@unrwa.org
-------------------------------------	--------------------	---------	------------------------------------------------------------------

Division of Medical Care Services

Chief, Medical Care Services	(Vacant)		
Senior Pharmacist	Ms. Eman Al-Zmily	5808306	e.al-zmily@unrwa.org
Senior Laboratory Services Officer	Mr. A. Al-Natour	5808305	a.alnatour@unrwa.org

2. Chiefs Field Health Programme

Jordan	Dr. Z. Zu'bi	5609100 ext. 171	z.al-zu'bi@unrwa.org
West Bank	Dr. H. Siam	5890400 ext. 501/502	h.siam@unrwa.org
Gaza	Dr. A. El Alem	6777269 ext. 269	a.alem@unrwa.org
Lebanon	Dr. J. Yusef	840491 ext. 215/213	j.yusef@unrwa.org
Syrian Arab Republic	Dr. R. Daghestani	6133035 ext.216/217	r.daghistani@unrwa.org

UNRWA Headquarters Amman
P.O. Box : 140157 Amman
11814 Jordan
Tel : 00962-6-5808300
Fax: 00962-6-5808318
E-Mail: f.mousa@unrwa.org
Web-Site: www.un.org/unrwa/