unrwa
الاونروا

# health department

## annual report 2012

www.unrwa.org

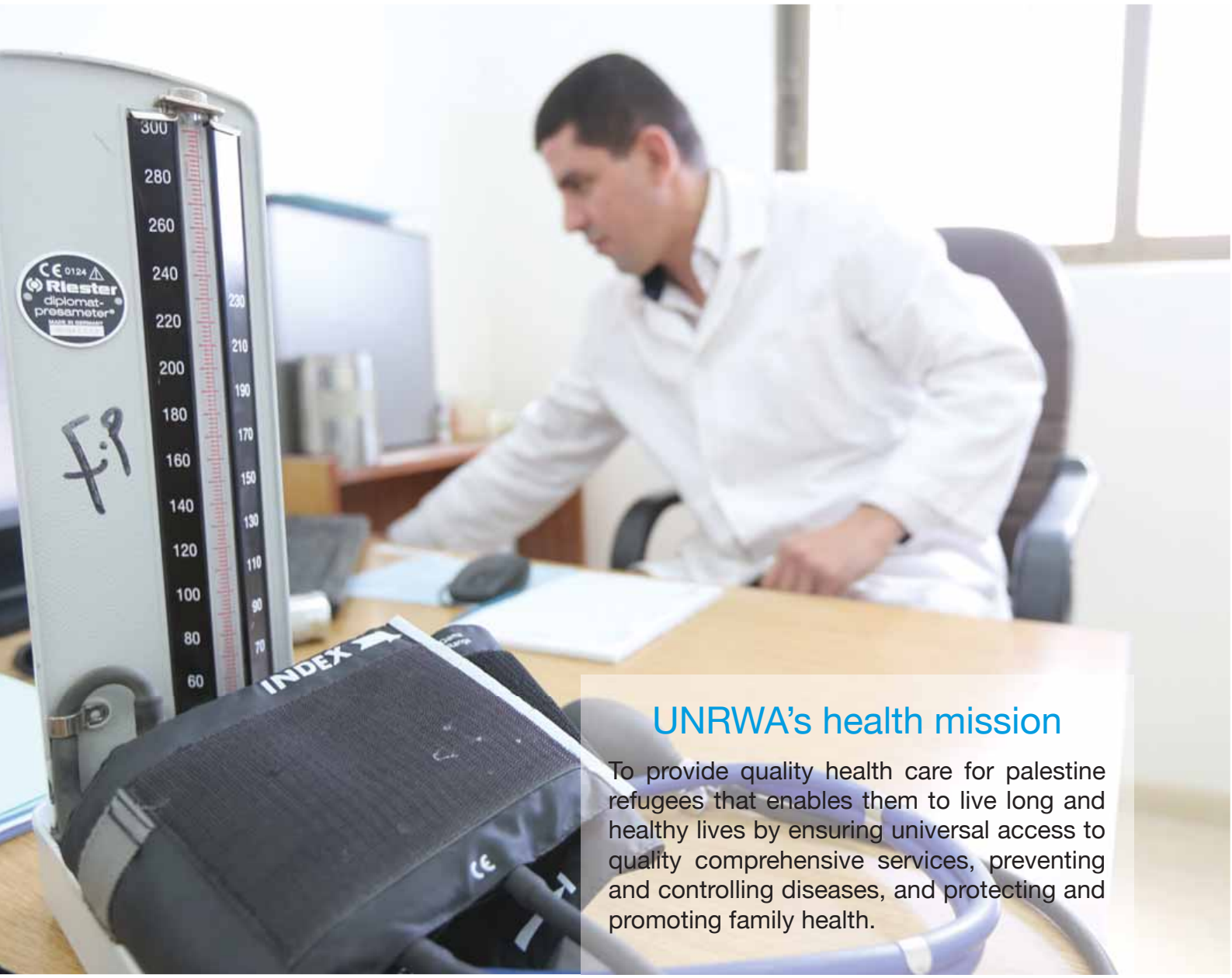
unrwa
الاونروا

# health department


# annual report 2012

www.unrwa.org

published may 2013




## UNRWA's health mission

To provide quality health care for palestine refugees that enables them to live long and healthy lives by ensuring universal access to quality comprehensive services, preventing and controlling diseases, and protecting and promoting family health.

# Table of contents

# Message of the unrwa commissioner general and of the WHO regional director

When reading the Health Department's 2012 annual report, it will become apparent that managing the 21st century disease burden is challenging, to say the least, especially in a region suffering from protracted conflicts, including the long unresolved Palestinian-Israeli conflict, as well as severe economic difficulties, and high rates of poverty and unemployment.

Despite this complex backdrop, UNRWA is moving forward with implementation of a reform designed to address the contemporary basic health needs of Palestine refugees, which will strengthen effectiveness of health services in Gaza, the West Bank, Jordan, Lebanon and Syria. In Syria, UNRWA's health staff continues to demonstrate extraordinary dedication in providing health services to the Palestine refugees under extremely difficult conditions of conflict. In all Fields, the Agency's health programme continues to benefit from the support of its strategic partner, the World Health Organization (WHO).

In a pattern evident throughout the developing world, the Middle East is also undergoing demographic and epidemiological transitions, whereby the burden of disease is changing from communicable to life-style related non-communicable diseases (NCDs). The change is attributed to a range of factors such as rapid urbanization, reduced physical activity, change in diet, and increased life-expectancy. Compounding these is the increase in key lifestyle risk factors such as smoking and obesity. UNRWA estimates that 70% of Palestine refugee deaths are caused by NCDs, particularly diabetes and hypertension.

UNRWA's ongoing health reform focusing on the Family Health Team approach is improving efficiency and effectiveness of its health services, and providing patients with optimal care essential to treating NCDs. Data in this report will show that continuity of care, patients' compliance, and health outputs have already improved. The Family Health Team reform – supported by WHO – provides primary health care for Palestine refugees and encourages community members to participate in creating healthy environments at home and in public life. While UNRWA's health programme has played a key part in improving health of Palestine refugees, much more needs to be done to address health challenges and to mobilize the necessary resources that enable it to better fulfil its mandate on behalf of the refugees.

Filippo Grandi

UNRWA Commissioner General

Dr. Ala Alwan

Regional Director, WHO/EMRO

# Foreword of the director of health

I present the Health Department's 2012 Annual Report with mixed feelings. Although, our ongoing health reforms gained evidence to support improvements in program efficiency and effectiveness throughout Gaza, Jordan, Lebanon and West bank, I have been deeply concerned about the conflicts in Syria and Gaza. The health status of Palestine refugees in Syria deteriorated throughout the year as access to health centres grew precarious due to the prevailing insecurity. Yet despite the crisis, I have been humbled by the dedication shown by Syria Field Health staff, determined to maintain access to the health services, medicines and treatment for the Palestine refugees in Syria. I would also like to acknowledge the Gaza Field Health Staff who, last November, showed tremendous commitment to keep its centers open during the war with Israel. My gratitude goes to all staff in the fields and in HQs who continue to work to improve the health status and quality of life of over 5 million Palestine refugees we serve.

This report documents the results of the health staff's hard work. There is no doubt; we still have considerable ways to go to realize our ultimate Human Development Goal, "A Long and Healthy Life." Nonetheless, we are moving in the right direction and incremental gains are evident. The report underscores that the Family Health Team (FHT) reform focused on family/household as a unit rather than disease is working. We adopted the Family Health Team approach to modernize the delivery of our primary health care services and improve our response to the increasing burden of non-communicable diseases. FHT started as a pilot in two health centres in late 2011, expanded in 2012 to 34 health centres. The enthusiasm expressed by the Palestine refugees and our implementing health centre staff is inspiring. Therefore, our vision is to expand the family health team approach to all 139 health centres of UNRWA by 2015.

All Fields also continue to take innovations in critical areas to suit field realities. Innovations are often participatory, initiated by our frontline health centre staff in collaboration/consultation with the community. As a result the report dedicates a section to highlight the work done by our frontline staff including in Syria. With health centers closed or with limited opening hours, the Syria Field Office introduced outreach-based health points to compensate for access deficits.

One objective of the health reform is to introduce the health informatics platform and electronic medical records. Accordingly E-Health has been expanding steadily. Quite a few health centres are now fully equipped with e-health and are paperless in their functioning. E-health allows us to collect and analyse the data extensively and generate real time evidence to guide decision making and service delivery interventions. This is particularly important for the care of non-communicable diseases, and thus we introduced an innovative cohort-analysis for patients with diabetes and hypertension.

We still need to work harder for the health of Palestine refugees and prepare better to meet any contingencies such as avoidable ill-health and health deterioration in Syria. Major other challenges remain namely inequitable access to health, increase demand and costs for specialized care, particularly for non-communicable diseases, which is an increasing financial burden for the refugees. The increased number of refugees under counseling underscores the growing importance for psycho-social and mental health services.

Nevertheless, I remain optimistic and strongly believe that these challenges and crisis also afford unique opportunities. We have increased number of national and international partners, including donors as indicated in the relevant parts of the report. Most importantly, we have great staff in health. I always have full respect for them. With their commitment, dedication and skills, we will continue to improve health of the Palestine Refugees.

Dr. A. Seita

WHO Special Representative
Director of the UNRWA
Health Programme

# Executive summary

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) is the main comprehensive Primary Health Care provider for Palestine refugees in the Near East and has been the largest humanitarian operation in the region for over 60 years. UNRWA's mandate on health is to protect and promote the health of Palestine refugees registered in the Agency's five Fields of operation (Jordan, Lebanon, Syria, Gaza and the West Bank). It aims for them to achieve the highest attainable level of health as indicated in the first Human Development Goal, "A Long and Healthy Life", of the UNRWA Medium Term Strategy 2010-2015. Under this goal, UNRWA has three strategic objectives: to ensure universal access to quality, comprehensive primary health care, to protect and promote family health, and to prevent and control diseases.

UNRWA works toward achieving these objectives through a range of services that address the needs of refugees across the lifecycle phases of an individual. A healthy life is a continuum of phases from infancy to old age. Each one of these phases has specific needs for the maintenance of good health. UNRWA therefore adopts a Life Cycle Approach to health care, providing packages of prevention and care that are best suited to each phase of an individual's life. During the last decade UNRWA Health Department was confronted with a situation of changing health care needs, increasing demand for services and rising health care costs, while at the same time facing a stagnating resource base. New approaches to health services provision had to be found to meet the needs of Palestine refugees in the 21st century. This report summarizes the main achievements of UNRWA's health programme in 2012 and is structured in three sections: Section 1 reports on the innovation strategies being implemented to provide quality health services to Palestine refugees in response to the changing environment and the challenges of a changing health care context; Section 2 provides information on the performance of health service delivery programmes and activities in 2012; Section 3 contains self-explanatory data tables and trends on major indicators for each service delivery area.

## Section 1: Responding to a changing environment

UNRWA has implemented an extensive health care reform and is adopting new approaches to health services provision to meet the needs of Palestine refugees in the 21st century. In 2012, further progress was achieved in the two major health service reform initiatives: the Family Health Team approach and E-health. In addition, major health programme's Field innovations to support the health reform and to improve the quality and efficiency of UNRWA's health services are presented:

In Gaza, improvements included the reconstruction of North Gaza (Saftawi) and Khan-Younis health centres, the expansion of hospital services contracting new hospitals, the expansion of the family health team approach to 11 H/Cs, the introduction of E-health to 7 health centres and the improvement of the School Health Services.

In Jordan, innovation included implementing the first phase of Health Centre Budget Initiative designed was implemented to strengthen the management capacity at service delivery level.

In Lebanon, the CARE Programme: (Catastrophic Ailment Relief Programme) was strengthened to respond to the growing needs of Palestine Refugee patients suffering from catastrophic health conditions such as cancer and chronic blood diseases.

In West Bank, the family and child protection programme was strengthened with new partners, the Shams Centre for NCD prevention and management was established in Dheisheh Camp, grey water recycling project was built in Deir Ammar to provide irrigation water for Deir Ammar and Ein Sultan schools, and jointly with the Education Department a sexual and reproductive health and rights to adolescents model was introduced.

## Section 2: Maintaining quality health services across the life-cycle

The performance of UNRWA health services in 2012 is presented in this report according to the 2010-2025 Medium Term Strategy and to the health service priorities identified for each biennium by the Field Implementation Plans (FIP). This section is divided in strategic objective areas: ensure universal access to quality, comprehensive primary health care; protect and promote family health and prevent and control disease. In addition, a section is dedicated to cross-cutting activities.

Services under the first objective include outpatient care, inpatient care, community mental health, oral health and physical rehabilitation. Services under the second objective include reproductive health, child health and initiatives to address gender - based violence and services under the third objective include non communicable diseases (NCDs), communicable diseases and environmental health.

Highlights for 2012 include the persistence of excessively high workloads and the emergence of NCDs and mental health as public health priorities among Palestine refugees.

UNRWA is strengthening its approach to primary prevention through health education and by improving the quality of foods served in school canteens. The Agency is also intensifying its screening programmes and assistance through the patient - centred new Family Health Team approach. The implementation of E-Health and the introduction of a cohort monitoring system are also improving the quality of care in UNRWA health centres.

Cross-cutting service areas support all three strategic objectives and include: nutrition, disability care, laboratory, radiology, medical supplies, health information systems, integrated community based activities, emergency preparedness and response, human resources and gender mainstreaming.

## Section 3: Data

The data section is structured in five parts: Agency wide trends for selected indicators, Field Implementation Plans 2012/13 - indicator trends, 2011 data tables and selected survey indicators. In this section all updated data for UNRWA performance and management indicators are provided.

# Section 1: responding to a changing environment

## The challenges of a changing health care context

The UNRWA health programme has been delivering comprehensive primary health care (PHC) services to Palestine refugees for over six decades now. Despite conflict, violence, insecurity and limited access these years have seen considerable health gains in areas akin to transitional economies namely remarkable improvements in maternal and infant mortality, pregnancy related care, infectious and communicable diseases etc. However, the disease profile of Palestine refugees is shifting with ever increasing proportion of refugees suffering from non-communicable diseases (NCDs) namely diabetes and hypertension. This shift is not confined to Palestine refugees as the increasing prevalence of NCDs is a global phenomenon. What further makes this global epidemic of NCDs peculiar is its attribution to life style and health behaviours in contrast to infectious and communicable diseases afflicting children, pregnant mothers etc which had a pathogenic organism as the causative agent. The life style and health behaviours related association and the chronicity of NCDs make their prevention, management and control a complex, lifelong process.

Accordingly this changing disease profile is changing the very context in which the health programs have to operate, and is posing a wide array of new and complex challenges not amenable to past milieu of interventions. UNRWA's beneficiary population also continues to grow. During 2012, the population utilizing (or "served by") UNRWA health facilities numbered an estimated 3.1 million in the four Fields of operation excluding Syria field which was 404,637 in 2011, while the total registered refugee population reached 5.3 million. Along with the absolute increase in population size, the demographic mix of the refugee population is also evolving with an aging population. Aging populations have an increasing proportion of older people at higher risk of NCDs, an ever increasing intensity of health care utilization, and a growing demand for cost-intensive secondary, tertiary and long-term care. Approximately 9.6 million medical consultations during 2012; doctors serving as many as 100 patients per day and these high numbers increasingly challenging clinicians in provision of quality health care.

NCDs are now also steadily emerging as the leading cause of death globally, in our region, and the same is the case in our Palestine refugees.

Need for high intensity health care utilization and longevity of care in our NCD patients warrants a comprehensive package of health services delivered by an efficient and well-functioning health systems. Timely and easy access to patient records is critical for ensuring comprehensiveness, maintaining efficiency, and reducing errors, all made possible by electronic medical records as existing manual and paper records are inherently inefficient records. In addition, the need for high cost and time intensive secondary and tertiary services and costly medications to treat an increasing number of NCD patients is exerting pressure on available financial and human resource envelopes. Current UNRWA information systems are inadequate to meet these complex information needs. In order to enable evidence-based decision-making in the future, substantial investment is needed in health information systems.

It can be well appreciated that afore-mentioned changes in disease profile, other drivers, and remedial measures are all costly, a fact validated by high demand and rising costs of delivering health care continue to rise in all of UNRWA's Fields of operation. UNRWA has experienced substantial increases in the costs of medicines and hospitalization fees in recent years. At the same time, the global financial crisis and Syrian conflict have impeded commensurate increase in availability of donor funding and operational space to provide needed services. Thus the increasing health needs have far outpaced much needed increase in funding. In 2012, the UNRWA Health Department thus got jeopardized by the funding deficit in scaling up and modernizing its services to meet the changing and an increasing demand for services, a fundamental mismatch that can potentially seriously jeopardize our ability to sustain newly introduced, innovative and novel approaches, namely FHT and E-health, to meet the health challenges of 21st century.

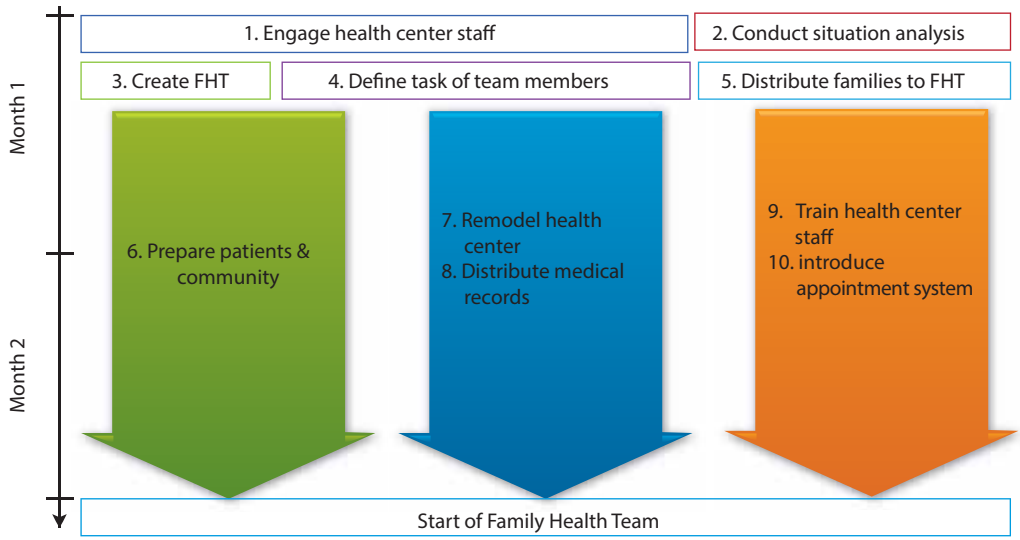
# Introducing the family health team approach

Confronted by the challenges of the changing environment, the UNRWA Health Department began implementation a major health service reform initiative in 2011. UNRWA's traditional Primary Health Care (PHC) delivery model, based on a vertical approach, is no longer optimal to manage current health care needs. In keeping with trends in the Middle East and globally, UNRWA introduced a new, modern PHC service delivery model – the Family Health Team (FHT) approach.

Health reforms that began in 2011, under FHT modality, use a family and person-centred approach to provide holistic primary care at UNRWA health primary centres. Families are registered with and assigned to health teams consisting of a doctor, and possible inclusion of other staff such as midwife and clerk. This team is responsible for all the health care needs of the families registered to them over the life cycle. The strong patient-provider relationships coupled with longevity of care will ensure effective, efficient and timely delivery of care, an aspect especially critical in the management of NCDs. The notions of "my doctor" and "my patient", previously unknown in UNRWA facilities capture the essence of the new FHT approach.

After an extensive consultation and preparation process, FHT pilots commenced in two health centres in the Gaza Strip and Lebanon during late 2011.

UNRWA adopted a "learning by doing" approach and, based on the experience gained through the pilots, a 10-step Family Health Team introduction package was developed (Figure 1).

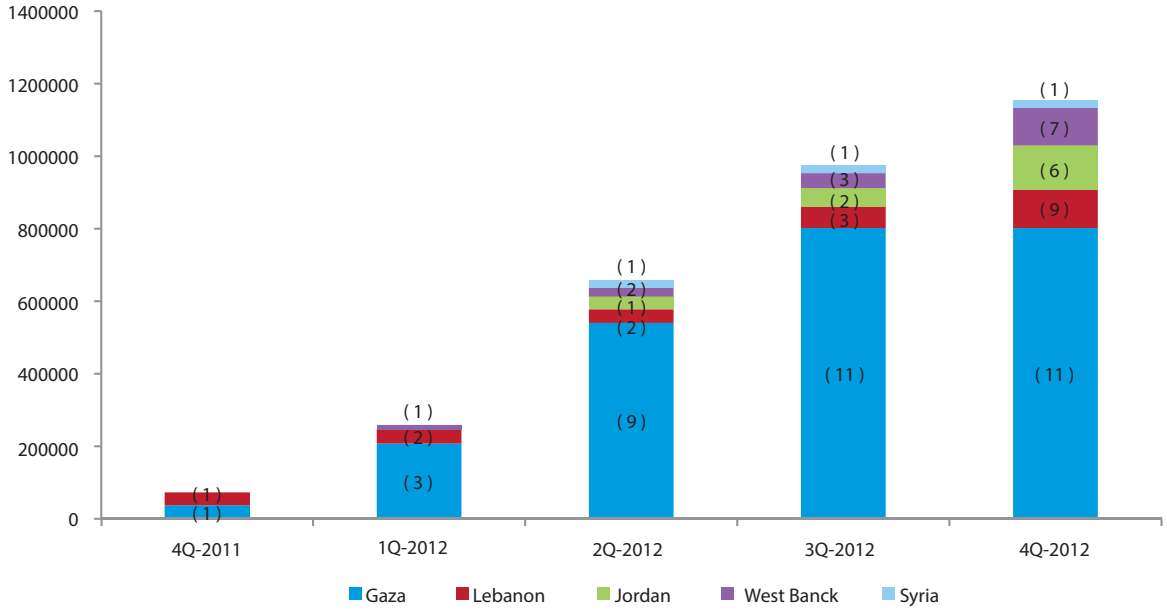




NOTE: The 10 steps are interlinked. Timing and sequencing of the steps may vary according to the local situations and needs

Figure 1 – The ten steps to start FHT

During 2012, UNRWA continued to expand the FHT approach by optimal use of the available resources. By end of December 2012, the FHT has been implemented in 36 health centres, including thirteen in Gaza, seven in the West Bank, nine in Lebanon, and six in Jordan and one in Syria, serving more than one million (30% of the served population)Palestine refugees.

The expansion of the FHT approach will continue in all fields except for Syria. UNRWA plans to roll out the family health team approach to all 139 health centres in its five fields of operation by 2015. By end of 2013, Lebanon and Gaza would expand FHT to all health centres (28 and 21, respectively), West Bank to 15 and Jordan to 12 health centres.




Note: No. in brackets = No. of health centers with FHT approach

Figure 2- Expansion of the FHT and refugee population served through the FHT, 2012

Preliminary assessments found a very positive response to the approach from both staff and patients. Equitable workload distribution, a consequence of the new teamwork structure, was one of the key positive factors perceived by all staff. Staff also stated improved professional satisfaction that resulted from having responsibility for the comprehensive health care of patients registered with them, as well as the opportunity to build relationships with patients over time. Patients appreciated having a "personal" doctor for their family and perceived the health centre to be more organized and less congested since introduction of the FHT approach.

The implementation of the FHT has shown signs of quality improvement and potential efficiency gains (e.g. reduction and equalization of workload and reduction of hospital referrals). For example, the daily medical consultation of doctors has been reduced from around 120 to around 80 in Lebanon allowing doctors to have longer consultation time with patients.

Waiting time to see the physicians was significantly shorter. Antibiotics prescription rates have decreased from around 30% to around 20-25% and a more rational use was reported for other drugs such as pain-killers and anti-inflammatory drugs.

If such changes was to be extrapolated to other fields these could potentially bring cost savings in the future. However, it is still too early to quantify such cost saving. Moreover, the FHT approach aims primarily at quality improvement, namely increasing the outcomes of health services by making the best use of the available resources.

# Clinical audit on diabetes care

UNRWA has been providing diabetes and hypertension care at its health centers since 1992, the diabetes care includes screening of high risk groups, diagnosis, and treatment with lifestyle education and medical treatment including insulin therapy. For the purpose of evaluation of diabetes care and with technical and financial support from World Diabetes Foundation (WDF) a clinical audit was conducted in UNRWA health centers in Jordan, West Bank, Gaza and Lebanon during 2012.

A total 1600 patients from the largest 32 clinics (50 from each clinic, 8 from each Field, Jordan, West Bank, Gaza and Lebanon) with diabetes were included in the audit. Patients were interviewed and examined according WDF-UNRWA data collection sheet including questions on demographics, past medical history, current findings, laboratory tests, clinical management and diabetes complications.

Out of the 1600 patients, 1019 (63.7%) were females and the rest male; 1488 (93%) were 40 years old and above, 68 (4.3%) with type 1 Diabetes Mellitus (DM), 430 (27.2%) with type 2 and 1102 (68.5%) with diabetes and hypertension. 313 (19.6%) were smokers, 34% among men and 11.3% among women, 1024 (64%) were obese with Body Mass Index (BMI≥30 kg/m2). A total of 614 (39.8%) had a serum cholesterol concentration greater than 5.17 mmol/L. According to the American Diabetes Association 3, the satisfactory diabetic control for HbA1c is at <7%, the overall control rate was 28.3% among all, 32% among males, and 24% among females. Only 757 (47.3%) patients had fundoscopy within the last 12 months. Of those 408 (54%) were examined by UNRWA ophthalmologists, while the rest were seen by outside specialists, only 361(22.6%) received 4 or more sessions per year (as recommended by UNRWA guidelines) with concentration on physical activity and foot care.

In conclusion, the control rate of diabetes was found low, possible reasons could be high obesity rate, low level of health education provided to patients. UNRWA is cognizant of low control rates and the ongoing health reforms, using Family Health Team (FHT) approach, aim at improving efficiencies and effectiveness, and health outcomes by enhancing longevity of care and focusing upon family/house hold rather than just the patient. There is a need to scale up diabetes care other than prevention of increasing risk factors such as obesity and physical inactivity.

Health education to patients needs to be given more attention; it should cover different aspects of diabetes care during regular visits to clinics focusing on practical, possible, with available resources interventions like healthy cooking sessions and physical exercise.

## Cohort analysis

In 2009, UNRWA started an electronic health record system (E-Health). In Nuzha Health centre, Jordan Field, where the E-Health system has been operational for more than 3 years, the Health Department developed a cohort reporting system for Palestine refugees with hypertension and diabetes. The aim of this cohort was to illustrate the methodology by reporting on quarterly and cumulative case finding, cumulative and 12-month cohort outcome analysis and assess how these data could usefully inform and improve the quality of hypertension and diabetes management services.

Patient data were obtained from the Clinic E-Health system. Data variables for the cohorts included: age, sex, diagnosis of disease, associated diabetes or hypertension, new or previous diagnosis of the morbidity, diagnosis made inside or outside UNRWA health centres, whether the patient has been transferred in from another UNRWA clinic, current treatment and outcome status.

Collecting and reporting on these cohort data on a quarterly and annual basis, will enable the Health Department to look at whether performance and disease control in later cohorts are improving. E-Health is essential for enabling this type of cohort analysis to work as using paper-based registers and cards to do manual calculation of cohorts and outcomes is too time consuming and distracts health staff away from patient care.

The experience also showed the advantage of embracing E-Health technology in routine primary health care services.

Papers were published in Tropical Medicine & International Health (TMIH) in 2012 and featured by the Lancet Journal.

## Developing unrwa's e-health

UNRWA's health service has for decades relied on a labour intensive system of hand-written patient records, prescriptions and registers. The Health Department recognized that an electronic system could strengthen both the quality and efficiency of health services. In response, UNRWA's E-health was developed: an electronic medical record system for primary health care, with all patient records in electronic format, accessible from multiple service delivery points within the clinic, and able to generate aggregate reports for management use. E-health complements and facilitates the introduction of the FHT approach. A family file, containing all relevant information of all the family members, is a key feature of the FHT concept. Through E-health, information on all aspects of the patient's care, including both curative and preventive services, is easily available at any station a patient may need to visit. E-health consists of linked modules for non-communicable diseases, maternal health, child health and general outpatients. Relevant modules are contained in a patient's individual electronic record, within the comprehensive family file.

By the end of 2012, at least one module of E-health was operational in 13 UNRWA clinics in Jordan, 8 clinics in Gaza, 1 clinic in West Bank and 28 clinics in Lebanon.

The system is fully operational at 14 HCs agency wide, which added more value to the clinics to be paperless and cost efficient clinics. E-health has streamlined service delivery and data management in UNRWA clinics. After introducing a module, all clinical information is managed electronically. Routine service data are available through automated reporting functions, reducing the time spent on reporting tasks. E-health has also enhanced data analysis capacity. For example, using E-health, UNRWA was able to introduce an innovative system of cohort analysis for routinely monitoring the care of non-communicable diseases patients. Before the introduction of E-health, such analyses were feasible only for a limited sample of patients and even then required time-consuming hardcopy record reviews. Introduction of an electronic medical record system into a clinical practice is a complex task. However, UNRWA's experience has shown that development and implementation of such a system is feasible even in resource constrained primary care settings. UNRWA learned that

A range of factors contributed to success including:

- A strong management decision to embark on E-health;
- Strong technical leadership within the Health Department;
- Availability of competent information technology experts to develop E-health;
- Coordinated work between the Health and Information Systems Departments;
- Strong leadership in clinics;
- Presence of a trained and competent E-health advocate among clinic staff;
- Adequate funding and time to establish infrastructure;
- Availability of supporting staff for initial entry of data into the E-health system;
- Continuous technical support by information technology staff during the implementation phase.

Building on the lessons learned so far, UNRWA aims to implement E-health in all of its 139 clinics. The various E-health modules have been integrated into a single comprehensive electronic medical record system, one E-health, which will serve as a vehicle for expanding the Family Health Team approach. This one-E-health, with its integrated modules is being piloted at Aqabet/ Jaber health centre in West Bank Field and Amman New Camp health centre in Jordan Field.

# UNRWA in times of conflict

Though a refugee agency by mandate and existence, for the most part UNRWA has been running its health programs in non-active conflict settings. Conflicts in Syria and Gaza stretched thin every relief agencies resources and assets and we were no different. Especially in Syria conflict with massive displacements and widespread conflict, health services have been significantly hampered. The effects of this health access and utilization deficit may be disproportionately higher as the population is exasperated and is close exhausting all its coping mechanisms. Like native Syrians, Palestine refugees in Syria (PRS) have also crossed borders into Lebanon (over 15,000) and Jordan (over 2,500) putting pressure on UNRWA health facilities, especially more so in Lebanon.

This relatively sudden increase in demand for health services is adversely impacting efficiency, burdening human resources, and exacerbating consumption of life-saving medicines and other supplies. Despite these added pressures health sections of LFO and SFO, with support from UNRWA HQs are working extremely hard to sustain this service provision for PRS facing once again displacement, along with maintaining health services coverage for pre Syrian crisis Palestine refugee populations. However the added patient load has its significant cost and resource implications. Staff has done exceedingly well to cope with this additional demand without a commensurate increase in UNRWA resources. Health Department in HQA, in collaboration with Field Offices contributed to resource mobilization appeal of the UN. Field offices have started hiring additional clinical staff to ensure sustained health access, additional demand is adequately met, and that emergency lifesaving interventions inside Syria continue. The situation has impacted UNRWA staff themselves as they hail from the community and conflict has adversely affected their families too. The insecurity, active conflict and violence, dwindling infrastructure and support systems (water, electricity, etc.), all are adding equally to the stress and worries of PRS and UNRWA staff.

Stocks of some life-saving medicines, especially to treat NCDs are depleting with replenishments slowed down because of insecurity and disruption of supply chains.

The Health Department with support from other concerned departments is working to estimate increase in demand and procure and pre-position stocks in accordance with needs.

Insecurity and violence has also shrunk humanitarian space to continue function at desired levels. At the same time operational costs are spiraling upward with rising inflation as resources become increasingly scarce and support structures and services (safe drinking water, electricity, etc.) dwindle. UNRWA over all is adjusting to the impact of the conflict to ensure best possible services access and availability for marginalized population of multiply displaced Palestine refugees.

Conflicts have also underscored the need for better preparedness and emergency response planning in future to cope with such contingencies, a lesson and recommendation the Health Department will ensure gets materialized in letter and spirit.

# Field innovations

During 2012 UNRWA's Field health departments introduced a number of innovations that strengthen and complement E-Health and the Family Health Team approach. Through these innovations, Fields are working in creative ways to improve the quality and efficiency of UNRWA's health services.

## Gaza Strip: Achievement in 2012

*Inauguration of Northen Gaza Saftawi Health centre (H/Cs):* In May, northen Gaza Saftawi H/Cs was inaugurated and attended by the Greece Delegation, Director of UNRWA Operation (DUO) and his deputy, Chief Field Health Program and other health staff.

The H/Cs will serve about 80,000 refugees providing the following services: out patients' services, maternal health, communicable and non-communicable disease services in addition to oral health services, laboratory, physiotherapy and x-ray services. The total consultations is about 220,000 since May to the end of December 2012. It is worth to mention that Saftawi H/Cs started Family Health Team approach directly upon its inauguration.

*Inauguration of Khan-Younis H/Cs:* In April, inauguration of Khan-Younis H/Cs took place attended by the Bahrain Delegation composed of Office of H.H Shaikh Nasser Bin Hamad AlKhalifa – Chairman of the Board of Trustee, Royal Charity Organization.

*Expansion of hospital services:* At UNRWA, we are always looking to provide essential health services to our refugees consistent with basic principle and concepts of the World Health Organization. UNRWA aims to upgrade the services provided to refugees including hospital services. Recently, UNRWA created the chance for new hospitals on the ground of competition, to provide the best services with reasonable prices while taking into consideration the quality of care, improving the accessibility and the equity to the hospitalization services for all Gaza strip population.

Since 17 July 2012, UNRWA contracted with 4 hospitals (Awda, Public Aid, Kuwait and AAH "the previous contracted one"). The services provided are as follows: general surgery, urological operations and orthopedic surgeries, normal delivery and urgent cesarean section and endoscopic services. From July to December 2012, the number of patients who received services in the contracted hospitals was 7063 with an average of 1,177 patients/month comparing to 411 patients/month in the previous years.

*Family Health Team approach:* It is an innovative, collaborative way of providing primary health care to refugees. The team approach brings together family physicians, nurse and midwife in order to coordinate the best patient care possible for the whole family. FHT approach focuses on the personal relationship between patient and provider, creating a greater continuity of care, building rapport with a medical team (doctor, nurse and midwife) and leading to healthier clients and their families. During 2012, the number of H/Cs implementing family health team approach has been increased to 11 H/Cs. B/Hanoon, Beach, Sabra, Nuseirat and West Nuseirat, Saftawi, Khanyounis, Japanese, Shabora, GT and Shoka H/Cs and it is going very well in those H/Cs.

*Advantages of FHTA:*
- Efficient distribution of workload among staff
- Decreased the number of consultations/ medical Officer/ Day as the number of visits has been decreased due to good
- quality of care.
- Increased the contact time with health providers and decrease the waiting time of patients
- Better communications with patients and early detection of patients problems
- Increased the referral rate to psychosocial counselor at each H/C.

*E-Health:* E-health introduced new tool to organize the operations at the health clinics, by giving every patient an electronic health record.

All patient's data is computerized i.e. MCH, NCD or general clinic patients records with embedded patient's work-flow at the health clinics. The patients attending at the H/Cs, will be referred electronically form one station to another with no need of the hard copy files e-health is well implemented in 7 H/Cs and initiated at the eighth health centre. The plan is to extend it to all H/Cs subject to availability of funds.

Achievements in school health program after merging school health activities with Special Children & Special Need (SCSN) initiative which lead to improve school health program as the following:
- Early detection of morbidities among new entrants ( new entrants examined by both Special Children & Special Need (SCSN) teams and school health teams in summer vacation)
- Hearing screening outsourcing for early detection of hearing impairment among new students and SCSN students
- Speech therapy program for SCSN initiative' student in addition to screening for the new entrance for early detection and management of speech problems
- Follow up of active cases of SCSN initiative conducted by school health teams in the schools
- All management among SCSN initiative reimbursed by 100%
- Eyeglasses and hearing aids and orthopae dic shoes provided for the needy students among SCSN students and school students

## Jordan: health centre budget initiative

The Health Centre Budget Initiative (HCBI) is a strategy designed in Jordan Field and implemented in 2012 to monitor routinely Health Centres' (HC) budget and performance, ensure that resources are allocated more effectively and equitably, and decentralize resources and decision-making to Health Centre level and

finally empower facility managers by giving them some responsibility on their own budgets while the goals of efficiency and equity are sought through targeted resource allocation at Field Office level.

The HCBI is implemented in three phases. The first phase, covering the whole year 2012, and consisted of tracking of inputs (expenditure, staffing), outputs (contacts, consultations) and efficiency indicators on a monthly and quarterly basis and monitoring the expenditure by selected budget lines by health centre, It also includes management training for current and prospective facility managers. The second phase spreads over 2013 and focuses on assigning a virtual budget to every HC, against which expenditure can be compared.

Finally, the third phase will start in 2014 with the allocation of real budgets to some of the HC, and the ulterior expansion of this practice until all HC have their own real budgets and become cost centers and their expenditures are recorded and reported as part of the new Enterprise Resources Planning (ERP).

In 2011, the Jordan Field Office (JFO) commissioned a performance analysis of its network of health facilities, focusing on the concept of efficiency. The main conclusions of the study were that large imbalances existed between health facilities, in terms of resource availability, utilization and efficiency. The analysis report recommended that indicators showing relevant differences among health centres should trigger actions to investigate the reasons behind the findings and, eventually, take corrective decisions. Another recommendation was to pilot the allocation of virtual budgets, described as allocation of resources to individual facilities, against which actual expenditure can be compared, but that are under the control of the Field Office Health Department.

At the beginning of 2012, the decision was made to try the “HCBI approach” carried by a health team at Health Department office. While all health-related information (activities, quality and utilization indicators) can be obtained internally at the Health Department, financial data are scattered across different sources. Data on Personnel Expenditure is to be provided by the Human Resources Department using the HQ-managed Payroll Table.

The second budget line in importance is drugs and medical supplies. The bulk of this information is obtained from the Pharmacy Information Management System (PIMS) database. This information has to be complemented with adjusted data on vaccines (obtained from the Procurement and Logistics Department (PLD)).

The remaining expenditure is grouped in utilities, that is, electricity, water, and telephone. Utility payments are made and records are kept at Area Office (AO) level. A monthly form was prepared for AO to fill in with the relevant information. Rent for specific facilities is paid and recorded by the Finance Department at JFO. Expenditure on hospitalization was excluded in this exercise as hospital claims are not settled by HCs at this stage. The Health Department took the necessary efforts to produce quality and timely monthly expenditure reports for the remaining of 2012. Enormous burden is shouldered by the HCBI team /HD that implies setting up of a parallel system to collect, treat and report expenditure by health centre. The quarterly reports were produced and used to assess efficiency indicators and to inform Chief Area Officers, Area Health Officers and Health Center managers about the results of the initiative. The Health Department set its target on the six-monthly/annual report (January-June/January-December) as the one where most indicators could be finally assessed properly. Overall, eighty staff members (Senior Medical Officers, Medical Officers-in-Charge and Senior Staff Nurses) were trained on general management concepts, Financial Management, Human Resources Management and Drug Management as well as on Maintenance of buildings and equipment in order to cope with HCBI exercise.

According to HCBI annual report for 2012, the estimated overall expenditure on health care at the 24 HCs was US$ 15.06 million, yielding a mean of $12·85 per beneficiary actively using the service. 67.02% of facility-attributed costs were for staff salaries, 30.22% for drugs and supplies, and 2.76% for rent and utilities.
For every 12,000 refugees served by UNRWA’s health-care centres, there was one medical officer. Efficiency, measured as daily consultations per day per medical officer, total expenditure per contact, and drug expenditure per curative consultation, was 78 consultations (ranging from 33 to 108) per day per medical officer, total expenditure per contact $ 5·54 (4.34–9.27), and drug expenditure per consultation $ 2.18 (1.43–3.12). Indicators of availability showed large differences between facilities and on average 1 medical officer served 12,000 refugees, ranging from 2·4 in Aqaba to 0·47 in Amman New Camp. Productivity (consultations per medical officer per day) was lowest at Aqaba health-care centre with 33 consultations per medical officer. This number was almost three times higher in Msheirfieh health-care centres (108 consultations).
The HCBI team –under guidance of the CFHP— was able to proceed to the next step: the preparation of the virtual budget proposal by health centre for 2013.

The main objectives of the virtual budget allocation proposal were to make sure that no disruptions happen in the routine services, and to introduce corrective measures for the main efficiency problems identified in previous HCBI exercises. Year 2013 activities will be divided into three groups: reporting and analysing, intervening, and preparing for the future. Production of the monthly expenditure reports will consists of tables by health centre and containing allocation, expenditure and balance by budget line, corresponding to the relevant month and cumulative since the beginning of the year, and designed to help facility managers monitor their expenditure. The quarterly reports will include the calculation of utilization, efficiency and quality indicators (workload, service utilization, or drug expenditure per consultation) and comparison between health centres is shared with Area and Facility managers.

The HCBI team –under guidance of the CFHP— was able to proceed to the next step: the preparation of the virtual budget proposal by health centre for 2013. The main objectives of the virtual budget allocation proposal were to make sure that no disruptions happen in the routine services, and to introduce corrective measures for the main efficiency problems identified in previous HCBI exercises. Year 2013 activities will be divided into three groups: reporting and analysing, intervening, and preparing for the future. Production of the monthly expenditure reports will consists of tables by health centre and containing allocation, expenditure and balance by budget line, corresponding to the relevant month and cumulative since the beginning of the year, and designed to help facility managers monitor their expenditure.

The quarterly reports will include the calculation of utilization, efficiency and quality indicators (workload, service utilization, or drug expenditure per consultation) and comparison between health centres is shared with area and facility managers.

A limited number of health centers, based on their performance and the openness of their managers, will be selected to proceed to the next step, which is the attribution of real budgets lately in 2013.

Finally, the third year of HCBI implementation, year 2014 will be dedicated for the roll out of real budgets to as many health centres as possible and selected health centres will be dealt with as cost centres and their expenditures will be recorded and reported as part of the new ERP system to offset the enormous burden of the current parallel HCBI system and free HD for monitoring, evaluation and supporting health facilities.

## Lebanon: Care Programme

*The CARE Programme:* (Catastrophic Ailment Relief Programme) was introduced in April 2011 in the Lebanon Field in response to the growing needs of Palestine Refugee patients suffering from catastrophic health conditions such as cancer, chronic blood diseases, severe neurological diseases and those in need of advanced surgeries such as cardiovascular, brain or joint replacement surgeries. These patients do not benefit at all from the coverage of the Lebanese Ministry of Public Health, which is granted to Lebanese citizens. Moreover, the coverage of UNRWA regular health programme for these conditions is either limited or null.

This programme, which is a partnership between UNRWA and the private sector, aims to improve patients' accessibility to the sophisticated and expensive medical care they need and to provide them with additional financial assistance on top of the UNRWA's regular coverage.

The CARE programme succeeded to launch several packages during the last months, which include:

- Hospitalization Package: that provides additional financial support for patients whose hospitalization bills exceed $8000 per admission.
- Cancer Package: that provides additional support for cancer patients in the cost of medications and radiotherapy.
- Multiple Sclerosis Package: that provides a significant coverage (80%) in the cost of medications for patients with Multiple Sclerosis.
- Thalassemia Package: that provides a compre hensive treatment (consultations, tests and medications) for patients 11 years and below suffering from Thalassemia.
- Sickle Cell Anaemia Package: that provides 80% support in the cost of medications for patients suffering from Sickle Cell Anaemia.

Until the end of December 2012, CARE programme was able to support 436 patients suffering from Catastrophic Health Conditions, during what was undoubtedly the most difficult time in their lives. Moreover, the CARE programme launches periodically special appeals to raise funds for Palestine refugees in need of highly expensive life-saving procedures such as bone marrow transplant, kidney or other organ transplant and sophisticated cardiovascular surgeries. So far, the CARE special appeals were able to influence positively the lives of eight (8) Palestine refugees and give them a fighting chance. Efforts are exerted to ensure sustainability of the existing packages as well as launch new packages such as chronic renal failure, chronic hepatitis B & C and post-transplantation packages.

**SUCCESS STORIES**

- Mohamad T., an 18-year-old boy from Nahr El Bared camp and suffering from liver cirrhosis, was in critical need of an urgent liver transplant to survive. Through the generous support of private donors, organizations, and the CARE programme, Mohamad was able to undergo the liver transplant and he was given a new chance in life.
- Hadi N., a 2 years old boy from Bourj Brajneh camp, was supported with a surgery to correct a congenital heart defect called Ventricular Septal Defect (VSD). His surgery was successful and Hadi is in good shape.

*Thalassemia & Sickle cell anemia programme:*
A Thalassemia and Sickle Cell Anaemia programme was launched at UNRWA Lebanon Field Office during 2012 in the aim of preventing new cases among Palestine Refugees and offering patients support for the continuous and costly treatments these diseases entail. Thalassemia and Sickle-cell Anaemia are two types of inherited recessive blood diseases, which are prevalent in the Mediterranean region and among the Palestine refugees registered with UNRWA. Patients with these diseases can suffer a great deal of complications if they do not receive the adequate treatment, and they need to take very costly medication for life.
This highly needed programme became a reality thanks to a generous donation from the German Government, which will last till the end of 2014. The programme includes different activities namely:

Raising awareness campaigns: to raised the awareness of the public regarding these two diseases and the ways for prevent through community-based activities and integrate these activities within the primary health care services.

Screening: to enable early diagnosis of these two diseases, hence ensure easy treatment.

Treatment: to provide of patients with these diseases with the required treatment. A comprehensive treatment (including medical consultations, laboratory tests and medications) is offered to children 11 years old and below suffering from Thalassemia through a cooperation agreement established with Chronic Care Center, a center of excellence in the management of this disease. In addition, Sickle cell anaemia patients are supported with 80% of the total bill of specific expensive medications.

An Open Day took place in December 2012 in Burj El Shemali camp, one of the camps highly prevalent with Sickle Cell Anaemia and Thalassemia. Different activities were conducted during that day aiming at delivering key messages for the prevention and treatment of these two diseases through: educative playing activities, oral presentations regarding Thalassemia & Sickle Cell Anemia, a short Play, sharing experiences as well as conducting screening for around 100 community members.

This screening activity enabled to diagnose few patients with Sickle Cell Anaemia as well as identify individuals with Thassemia and Sickle Cell Anaemia traits.

It is worth noting that the blood test results allowed identification of individuals with above-average glucose concentration in the blood over a prolonged period of time. Although the open day did not aim to screen for diabetes, it proved to be a valuable opportunity for UNRWA staff to reach out to individuals with unusually high HbA1c levels. These individuals are either at high risk of developing diabetes or are diabetes patients unaware of their diagnoses. These individuals were referred to UNRWA endocrinologist for medication or counseling on preventative lifestyle changes.

## West Bank: Family and child protection

*Family and Child Protection:* UNRWA's Family and Child Protection Programme was established by the WBFO Health Department in 2009 in response to a growing awareness of cases of violence, abuse, and neglect among Palestinian refugee families. As a part of the UNRWA West Bank Community Mental Health Program, the Family and Child Protection Programme brings UNRWA's main service delivery departments Health, Education, and RSSP, together with the refugee communities to prevent and respond to cases of abuse, neglect, and violence in homes, schools, and communities. The programme is implemented in 15 refugee camps, one city, and one village in the West Bank.

In 2012, the number of domestic abuse and violence cases managed by the Family and Child Protection Programme reached 414. This number, while highly underrepresented, represents a 300% increase in the number of detections since 2011.

Nearly half of cases detected was psychological abuse (46%), followed by physical abuse (25%), verbal abuse (18,%). 79% of all cases detected were female, nearly 72% of which are between the ages of 24 and 65 years. 28% of all cases were children and youth under the age of 19 years old.

The Family and Child Protection Programme adopts a public health approach to address the causes and risk factors of abuse, neglect and violence in refugee homes, schools, and communities. The Programme has integrated Family and Child Protection into WBFO's primary health care system—including introducing protocols for response, an internal and external referral system, and an information system. All health staff (medical and non-medical) were trained on screening, detection, and case management, and take an active role in awareness raising and education within and outside the health clinic. The Programme is also integrating family and child protection into UNRWA's education and RSS departments, to ensure that families receive services that protect the livelihood and social integration survivors. By ensuring a multi-sectoral approach to family and child protection, the Programme brings all stakeholders internal and external to UNRWA together to prevent and respond to violence and abuse within society.

The introduction of the Family Health Team model in UNRWA's primary health care services is allowing for greater protection of children and families. Like any public health problem, the prevalence and long-term effects of domestic abuse cannot be dealt with at the case-level only.

Therefore, the family unit is the main focus of attention for the Programme. Families benefit from greater access to supportive services such as parent, mother, and child education and support groups (which can sometimes prevent domestic abuse and violence), and family preservation services such as psychosocial individual and family counseling.

WBFO health and mental health staff also work hand-in-hand with their communities through camp Family and Child Protection Committees to combat the taboos of domestic abuse and violence and transform social, cultural, and religious understanding, norms, and acceptance of the phenomenon. The Programme reached nearly 10,000 community members through awareness raising sessions and psychosocial support to youth, mothers, elderly, neglected families, and men.

Shams Centre for NCD Prevention and Management opened in Dheisheh Refugee Camp in February 2012

as part of the WBFOís longer-term strategy against NCDs. Shams is the first referral centre for NCDs, complementing the work of UNRWA's primary health care clinics. It provides intermediary care for patients who would otherwise directly access tertiary services and is the result of an effective partnership between health service providers and the community. The Center is staffed with a diabetologist, ophthalmologist, nutritionist, and para-medical staff. Over the past year, 687 NCD patients received care, 735 received nutritional counseling, 1354 patients received diabetic foot care, and 1891 patients received eye care by the ophthalmologist. Next year, the center will begin diabetic retina screening using a highly specialized fundus camera.

Promoting environmental health and combatting communicable diseases through grey water recycling water shortages in refugee camps are increasingly problematic as demand for raw water sources increases. WBFO's Environmental Health Programme is finding creative and cost-effective ways to ensure access of pollution-free water to refugee camps through grey water recycling for irrigation. Building on a pilot project conducted in Nablus in 2010, the Environmental Health Programme built a grey water treatment and recycling system in the Jerusalem area, which allows for drinking water used at schools to be filtered and recycled to irrigate school gardens. A grey water treatment plant was built in Deir Ammar, and was used to provide irrigation water for Deir Ammar and Ein Sultan schools. The treatment plant and system low-cost, easy to operate, and protects the public from risk of water-borne diseases while reducing water and environmental pollution.

Promoting Healthy Living through Sexual and Reproductive Rights and Health Education. A life-cycle approach to positive sexual and reproductive health and rights is required to prevent child and maternal illnesses and mortalities, sexually transmitted diseases, and gender-based violence. WBFO HD has been at the forefront of ensuring the Palestine refugee youth are equipped with the knowledge to protect and defend their sexual and reproductive health and rights. WBFO Health Department works jointly with the Education Department to introduce sexual and reproductive health and rights to adolescents. The Health Department developed three relevant modules: (1) sexual reproductive and health rights, (2) early marriage and (3) sexual abuse and sexually transmitted diseases, which will be incorporated into the UNRWA school curriculum by 2014.

# Section 2: maintaining quality health services across the life cycle

## Introduction

UNRWA's mandate on health is to protect and promote the health of Palestine refugees registered in the Agency's five Fields of operation (Jordan, Lebanon, Syria, Gaza and the West Bank). One of UNRWA's four overarching human development goals is to enable refugees to live "a long and healthy life". Under this goal UNRWA has three strategic objectives for the Agency's Medium Term Strategy (MTS) 2010-2015: ensure universal access to quality, comprehensive primary health care; protect and promote family health; and prevent and control diseases.

UNRWA works toward achieving these objectives through a range of services that address the needs of refugees across the lifecycle phases of an individual. A healthy life is a continuum of phases from infancy to old age. Each one of these phases has specific needs for the maintenance of good health. UNRWA therefore adopts a Life Cycle Approach to health care, providing packages of prevention and curative care that are best suited to each phase of an individual's life.

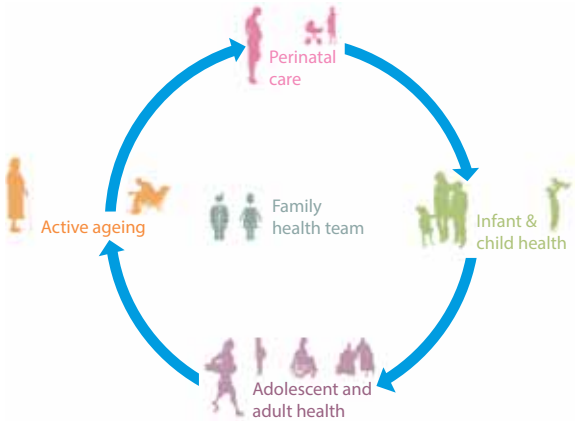



Figure 3- The Life Cycle Approach to healthcare

Preventive and curative health services sustain and promote the health of refugees from preconception, through pregnancy, childhood, adolescence and adulthood, to active ageing. These services include family planning, pre-conception care, antenatal care of pregnant women, post-natal follow-up, infant care (growth monitoring, medical check-ups and immunizations), school health, oral health, outpatient consultations, diagnostic services (laboratory services) and management of chronic non-communicable diseases.

Control of communicable diseases is achieved in part through high vaccination coverage and in part by the early detection and control of outbreaks using a health centre-based epidemiological surveillance system.

UNRWA's environmental health programme controls the quality of drinking water, provides sanitation and carries out vector and rodent control in refugee camps, thus reducing the risk of epidemics. The three strategic health objectives of the 2010-2015 MTS provide the framework within which the Life Cycle Approach to health is implemented. Trend data for these indicators are presented in Section 3. In the following chapters, UNRWA's health services across the life cycle are described within the framework of the three strategic objectives and the supporting crosscutting services. For each biennium of the MTS, Field Implementation Plans (FIP) define the health service priorities and monitor the implementation of activities and progress toward targets within each Field and Agency-wide. The FIP log frame containing the set of key performance indicators for the 2012-2013 biennium is presented in Annex 1. Comprehensive data, relevant to the various programme areas described under the following strategic objectives may be found in Section 3 of this report.

# Strategic objective 1: Ensure universal access to quality, comprehensive primary health care

Services under this objective include outpatient care, inpatient care, community mental health, oral health and physical rehabilitation.

## Outpatient care

### Utilization

UNRWA currently provides comprehensive Primary Health Care through a network of 139 health centres of which 70 are located inside refugee camps. In addition, UNRWA operates five mobile clinics in the West Bank to facilitate access to health services in those areas affected by closures, checkpoints and the Barrier.

Utilization of outpatient services Agency-wide decreased by 9.5 % in 2012 compared with 2011, with a total of approximately 9.65 million medical consultations. Of these consultations, 211,832 were specialist consultations. This decrease in utilization was found in all fields except Gaza.

In Syria, this decrease is mainly attributed to the closure of a large number of health centres and difficulty of access to the other health centres as a result of the on-going conflict. The available data represents the first five months of 2012.

In Jordan, Lebanon and West Bank, this decrease could be attributed to implementing the appointment system, e-health system and FHT approach in some health centres.

In the UNRWA system, outpatient medical consultations are classified as either first or repeat visits. First visits are defined as the first visit of an individual to the health centre in a calendar year. All other visits are considered repeat visits. During 2012, the ratio of repeat to first visits was decreased from 3.6 in 2011 to 3.4 in 2012. This ratio varies among Fields and also among health centres within the same Field. The highest ratio (4.6) was found in Lebanon, while the lowest (0.9) in Syria.


Table 1- No. of medical consultations, 2011-2012

| | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| 2011 | 2,306,878 | 1,114,873 | 1,003,779 | 4,383,785 | 1,860,256 | **10,669,571** |
| 2012 | 1,943,057 | 979,993 | 414,993 | 4,515,248 | 1,798,961 | **9,652,066** |

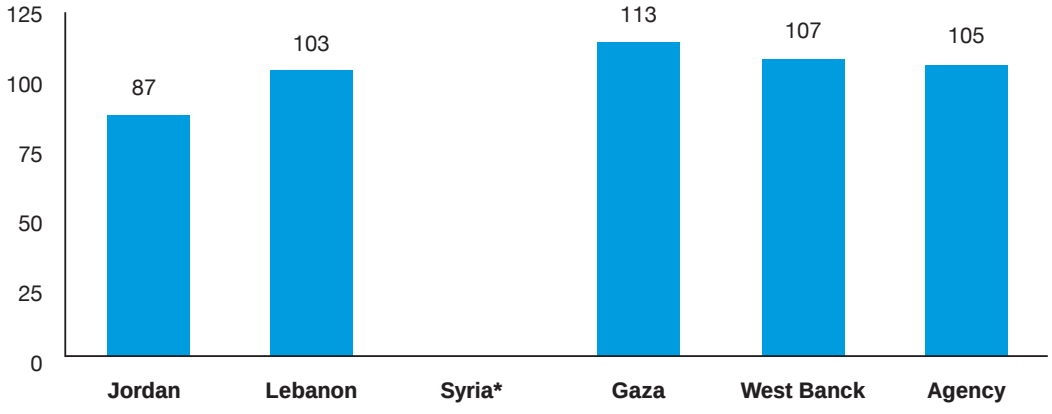



Figure 4 - Average daily medical consultations per doctor, 2012
* Data not available

### Workload

The average number of medical consultations per doctor per day at UNRWA health centres slightly increased from 104 in 2011 to 105 in 2012. In spite of decrease of total medical consultations the workload per doctor increased due to decrease in number of medical officer recruited on the emergency basis under the "JCP / LDC". This workload remains far from UNRWA's intermediate target of 80 patients consultations per doctor per day. However, the introduction of the Family Health Team approach may help to reduce the workload, through the shifting of tasks from medical officers to nurses and through the introduction of an appointment system to manage demand. In addition, the individualized care provided through the FHT approach may help to reduce irrational health care seeking behaviour.

## Inpatient care

UNRWA assists refugees to obtain hospital care by contracting beds or by partially reimbursing costs incurred for inpatient care at public, non-governmental and private health care facilities. In addition, the Agency directly provides hospital care in one hospital at Qalqilia in the West Bank.

### Outsourced Hospital Services

During 2012, a total of 80,426 refugees benefited from assistance for hospital services, representing an increase of 5.2 % compared with 2011. The average length of stay was 2.0 days across UNRWA's five areas of operation - almost identical to 2011.

Of all the patients hospitalized, 46.4% were between 15 and 44 years old, while 32.2% of were children below the age of 15. Almost 64.7% of the patients were women. There is significant variation among Fields concerning the number and type of hospital cases reimbursed by UNRWA, with a predominance of surgical cases in the Gaza Strip and Syria, and internal medicine cases in Lebanon and the West Bank.

In Jordan, deliveries represent the majority of the cases reimbursed. The variation is not related to any significant morbidity variations but is rather a consequence of differences in the resource allocation and reimbursement policies implemented in the various Fields. The table below shows the expenditure on hospital services.

### Qalqilia Hospital

In addition to subsidizing outsourced hospital services, UNRWA manages a 63-bed secondary care facility in Qalqilia, West Bank. Qalqilia Hospital is the only hospital operated by the Agency and accommodates 14 surgical, 12 medical, 20 paediatric, 15 obstetric/gynaecologic and two intensive care beds, in addition to a five-bed emergency ward. The hospital serves both UNRWA refugees and non-refugees from the surrounding municipalities. A total of 6,118 patients were admitted to the hospital compared to 6,070 in 2011. The average daily bed occupancy in Qalqilia Hospital was 57.4% in 2012, compared with 59% the previous year. The average length of stay in 2012 was 2.2 days. The overall expenditure on Qalqilia hospital services amount to USD 2,853,633 all of which were secured through general funds GF.

Table 2 - Patients receiving assistance for hospitalization, 2011 and 2012

| | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| 2011 | 16,069 | 26,030 | 6,926 | 4,810 | 22,618 | **79,453** |
| 2012 | 14,481 | 29,767 | 4,580 | 8,719 | 22,879 | **80,426** |

Table 3- Expenditure on hospital services, 2012

| Cost | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| GF | 1,791,319 | 8,746,996 | 1,138,517 | 2,130,000 | 2,822,158 | **16,628,990** |
| Projects | 0 | 273,330 | 260,305 | 0 | 800,000 | **1,333,635** |
| Total | 1,791,319 | 9,020,326 | 1,398,822 | 2,130,000 | 3,622,158 | **17,962,625** |

# Community mental health

Palestine refugees have for decades suffered the trauma of displacement as well as repeated episodes of conflict and violence. In response to the situation of on-going and often severe psychological stress, particularly in the Gaza Strip and the West Bank, UNRWA launched a Community Mental Health Programme. The Programme offers counselling and support, and ensures the long-term strategic incorporation of psychosocial wellbeing of refugees into the Agency's healthcare package.

Through a network of counsellors, established in UNRWA health centres, schools and in community based organizations, the programme seeks to help groups at risk to develop effective coping mechanisms and prevent further psychological deterioration. Throughout 2012, the Community Mental Health Programme offered frontline counselling and group interventions through school, community and health centre based activities for children, parents, individuals, families and groups.

Complementing this community based programme, the UNRWA Health Department is working toward increased integration of mental health into primary health care, through the new Family Heath Team approach. With a strong focus on continuity of care, the approach uses a multidisciplinary teamwork model to address the holistic health care needs of individuals, families and communities.

## The Gaza Strip community mental health programme

During 2012, 194 school counsellors, 13 community counsellors and 21 health centres counsellors offered a wide range of services targeting children, youth, parents, elderly and disabled people as well as local committees, local organizations, professionals and students.

## The West Bank community mental health programme

In the West Bank, the programme provided individual counselling, group counselling, family counselling, home visits, referrals, group intervention sessions, supportive group sessions, summer and winter camps and open days, reaching a total of 128,641 individuals.

Table 4 - Community mental health programme activities - Gaza, 2012

| | Individual counselling | Group counselling | Group guidance (awareness) | Home visits | Others |
|---|---|---|---|---|---|
| Sessions | 49,005 | 12,416 | 1,395 | 3,622 | **79,453** |
| Beneficiaries | 31,147 | 32,907 | 27,201 | 6,211 | **80,426** |

Table 5 - Community Mental Health Programme activities – West Bank, 2012

| | Individual counselling | Group counselling | Family counselling | Home visits | referral | Summer /winter camps | Supportive groups | Group interventions |
|---|---|---|---|---|---|---|---|---|
| Sessions | 20,703 | 1,809 | 4,264 | 147 | | 1,409 | 708 | **3,801** |
| Beneficiaries | 19,203 | 17,091 | 1,106 | 121 | 1067 | 24,431 | 4,021 | **61,601** |

# Oral health

Oral health services during 2012 were provided through 108 fixed and 9 mobile dental clinics. The total number of curative oral health consultations reaching a total 620,497 in 2012 decreased by 6.5% compared to 729,145 in 2011. Due to limited access to health services caused by the prevailing security constraints, data from Syria was not reported. The decrease observed in other fields could be explained by the change in UNRWA strategy to focus on oral health prevention interventions and reduction of 2 mobile dental units in Lebanon. Moreover, the West Bank is facing difficulties in sustaining oral health services provided through emergency programme. Oral health screening activities were conducted Agency-wide for 200,645 individuals including pre-school children, school children, women at the first preconception care visit and pregnant women.

This decrease in utilization is mainly attributed to the absence of data from Syria Field and to the change in screening policy in Gaza Field where only 1st grade students are targeted with comprehensive care including oral health screening, treatment and pit and fissure sealant application.

A total of 35,225 assessments were conducted among pre-school children. Regular dental screening for new school entrants, as well as 7th and 9th grade students, along with oral hygiene education continued in all Fields except Gaza where they targeted only first grader with comprehensive dental care. The policy of providing root canal treatment was reviewed and treatment priorities were revised to allow more resources for community preventive dentistry.

Assessment of workload, productivity and efficiency of oral health services is conducted annually in each of the five Fields. The assessment, based on a standardized protocol, is carried out as part of the periodic evaluation of system performance. It is also used to identify staffing requirements and the need for re-organization of services. The acceptable average productivity per dental surgeon per hour (45-55 WLUs/hour) was achieved in Jordan and Lebanon, but was exceeded in Gaza and West Bank Fields, Gaza continued to report the highest workload (87.8 WLUs/hour). No data was reported from Syria.

Table 6- No. of curative and preventive interventions, 2012

| | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| No. of curative interventions | 204,938 | 80,103 | Na | 301,062 | 86,904 | **673,007** |
| No. of preventive interventions | 93,802 | 37,717 | NA | 107,528 | 32,682 | **271,729** |

During 2012, UNRWA continued to reinforce the preventive component of oral health. Oral health education was introduced as part of routine mother and child health care, with dental screening for women at the first preconception care visit and for all pregnant women, Agency-wide, coverage of 99.8% was achieved for this group in 2012. Comprehensive oral health assessment includes was conducted for all children at the age of two years, as well as application of sealant.

# Physical rehabilitation

Physiotherapy services were provided to 14,427 patients through 18 physiotherapy units (eleven units in Gaza, six in the West Bank and one in Jordan). The 4,710 patients who were treated at physiotherapy units in the West Bank received 48,180 sessions and 4,140 home visits provided through 21 staff members (11 regular employees and 10 recruited under emergency programme) and the 11,345 new patients treated at physiotherapy units in Gaza Field received 157,262 sessions provided through 34 staff members.

These units provided a wide range of physiotherapy and rehabilitation services including manual treatment, heat therapy, electro therapy, and gymnastic therapy with an outreach programme using advanced equipment which exceeded 50 in number and facilitated providing therapeutic exercise, manipulation massage, functional training, hydrotherapy, electrotherapy and self-training The outcome of the treatment sessions provided at UNRWA

physiotherapy units and through home visits in Gaza Field was the discharge of 80% of treated patients without any disability (full recovery), 17% with mild disability and only 3% remained disabled due to the nature of injury or disorder. The outcome of the treatment sessions provided in the West Bank Field was the discharge of 84.9% of treated patients without any disability (full recovery), 14.2% with mild disability and only 0.9% remained disabled due to the nature of injury or disorder. The patients with permanent disability together with their family members were educated how to handle the physical aspect of the disability in the daily lives which will for sure lead to more independence and self-reliance and consequently will release the professional staff to devote more time for other patients.

### Physiotherapy outreach activities

Physiotherapy outreach activities included: conducting home visits; strengthening the cooperation between physiotherapists and school supervisors; creating partnerships between UNRWA physiotherapy units and non-governmental organizations; launching a preventive physiotherapy programme for feet examination; screening school children at 1st elementary class for postural deformities; distributing of assistive technical aid devices (30 wheel chairs, 50 pairs of crutches and 35 walkers) to persons with disability on lawn basis; and holding 11 Joint Medical Days with Prince Basma Centre for Rehabilitation of children in cooperation with the local committee for persons with disability.

Awareness sessions were conducted to raise awareness on physiotherapy services and physical rehabilitation related to types of disabilities, preventive measures of avoidable disabilities and on how to care for disabled people. Topics of awareness sessions included:

- New technique in physiotherapy for burn victims
- Prevention and management prolapsed disc
- facial palsy prevention, prognosis and physiotherapy management
- Criteria of healthy school bag
- Prevention form deficiency calcium on pregnant and physiotherapy role in management of this deformity
- Amputation risk factors, prevention and physio therapy management
- How to deal with the child with DDH and advice mothers on the correct methods of dressing the child and position of sleep

The overall expenditure on physiotherapy services during 2012 amounted to USD 1,744,691, out of which USD 311,909 were patient subsidies.

# Strategic objective 2: protect and promote family health

Strategic Objective 2 includes reproductive health, child health and initiatives to address gender - based violence

## Reproductive health services

UNRWA's reproductive health services include family planning, preconception care, antenatal care, delivery care and postnatal care.

### Family planning

Family planning services, including counselling and provision of modern contraceptives, are available at all times to women accessing UNRWA health centres. Services are also provided as an integral part of maternal and child services through preconception care, antenatal, post-natal care and growth monitoring of children under-five years of age. Family planning services will be further strengthened with the increased males' participation through the Family Health Team Approach.

During 2012, similar to previous years, the demand for modern contraceptive methods continued to increase. A total of 23,050 new family planning users were enrolled in the Family Planning Programme. The Agency-wide total number of continuing users excluding Syria reached 137,213 representing an increase of 4.7% compared with 2011. The increase was consistent in all Fields. During the last decade the number of women accessing modern contraceptives through UNRWA services has increased about two folds. Consequently Couple Years of Protection, an indicator used to estimate the number of clients (or couples) protected from pregnancy in one year by UNRWA dispensed contraceptives, increased in all Fields. The distribution of family planning users according to contraceptive method remained stable: the intra-uterine device continued to be the most popular method with 50.2% followed by oral contraceptive with 25.1%, condoms with 21.3%, injectable with 2.7% and spermicidal suppositories less than 1%.

Table 7 - Utilization of UNRWA family planning services, 2012

| | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| New users | 7,519 | 1,706 | NA | 11,058 | 2,767 | **23,050** |
| Total continuing users at year end | 39,612 | 14,057 | NA | 59,001 | 24,543 | **137,213** |
| Discontinuation rate (%) | 6.2 | 5.6 | NA | 5.2 | 3.8 | **5.1** |

## Preconception care

UNRWA's Preconception Care Programme, introduced in 2010, consists of six main components: health promotion, counselling, screening, periodic risk assessments, intervention and follow-up, and regular folic acid supplementation. Couples receive counselling concerning the risks of "too many, too often, too early and too late pregnancy" and on how to prepare for a healthy pregnancy. Women are assessed for risk factors, screened for hypertension, diabetes, anaemia, oral health diseases, provided with medical care where relevant, and are given folic acid supplementation to prevent congenital malformation in particular neural tube defects. Where necessary, couples may be advised to avoid or delay pregnancy using a reliable contraceptive method. During 2012, a total of 13,427 compared to 13,448 women in 2011 had been enrolled in UNRWA's Preconception Care Programme in the five Fields of operations. The decline in the number of women registered to the preconception care programme could be explained by the turn down trend observed for the demand of antenatal care and also to the decrease reported from Syria from 638 women in 2011 to 302 in 2012 for security reasons.

## Antenatal care

UNRWA encourages pregnant women to receive their first antenatal assessment as early as possible and to have at least four antenatal care visits throughout their pregnancy to promote early detection and management of risk factors and complications. Pregnant women receive a comprehensive initial physical examination and regular follow-up care, including screening for pregnancy related hypertension, diabetes mellitus, anaemia, oral health problems and other risk factors. Women are classified according to their risk status for individualized management. Iron and folic acid supplementation is provided to all pregnant women.

In 2010, UNRWA introduced the Maternal and Child (MCH) Handbook that serves as a health education tool and a home based record for the mother during pregnancy and for the child until the age of five years. During 2012, all pregnant women registered in UNRWA antenatal care were provided with the MCH handbook. UNRWA uses selected indicators of coverage and quality to monitor the performance of antenatal care services: antenatal care coverage, percentage of registration for antenatal care in the 1st trimester, number of antenatal care visits, tetanus immunization coverage, risk status assessment and diabetes mellitus and hypertension in pregnancy (Section 3).

### *Antenatal care coverage*

In contrast to the trend in previous years, since 2008 the demand for UNRWA antenatal services has decreased constantly. This was observed in all Fields. In 2012, the number of pregnant women registered for antenatal care decreased by 9% Agency wide and if we exclude Syria this could reach 6%. The intensification of hostilities during 20012 in Syria hardly affected the access of pregnant women to antenatal care whereas significant drop was observed in the number of registered pregnant women from 8,611(60.2% coverage) in 2011 to 4,684 (31.6% coverage). The reasons for the decrease require further investigation but could be at least in part explained by an increased utilization of other service providers and/or by access constraints due to movement restrictions in the West Bank or insecurity in Syria. UNRWA has traditionally calculated antenatal care coverage based on the expected number of pregnancies in the registered refugee population.

Table 8 - UNRWA antenatal care coverage, 2012

| | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| Served population | 1,175,021 | 260,408 | NA | 1,224,383 | 474,920 | **3,134,732** |
| Expected no. of pregnancies[1] | 32,900 | 5208 | NA | 45180 | 14247 | **97,584** |
| Newly registered pregnancies | 25,857 | 5,418 | NA | 41,174 | 13,678 | **86,127** |
| ANC Coverage (%) | 78.6 | 104.0 | NA | 91.1 | 995.6 | **88.3** |

### *Registration for antenatal care in the 1st trimester*

Early registration facilitates timely detection and management of risk factors and complications, thus improving the likelihood of a positive outcome for mother and baby.

1. Calculated by multiplying the total number of registered refugees (from the UNRWA registration system) by the crude birth rates published by host authorities (2.8% in Jordan, 2.0% in Lebanon, 2.8% in Syria, 3.7% in the Gaza Strip and 3.0% in the West Bank).

Despite the decline in early registration in Syria from 76.6% in 2010 before the outbreak of violence to 74.7 in 2011 and to 68.4% in 2012, the Agency-wide, early registration in the first trimester of pregnancy increased by 2.3% reaching 78.2% of women registered in the first trimester, 19.4% in the second, and 2.4% in the third trimester. This increase in early registration could be attributed to the expansion of preconception care and the introduction of the Family Health Team approach.

### *Number of antenatal care visits*

WHO recommends that all pregnant women attend at least four antenatal care visits. The average number of antenatal care visits per client has decreased (6.8 in 2012 compared with 7.1 in 2009), probably as a result of changes to UNRWA's technical guidelines. In an effort to rationalise care, the frequency of antenatal follow-up appointments for normal pregnancies was reduced from every four weeks to every six weeks.

Table 9 - Number of antenatal care visits, 2012

| Indicator | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| % of pregnant women with four antenatal visits or more | 82.2 | 86.2 | 76.6 | 93.5 | 81.5 | **86.5** |
| Average number of antenatal visits per pregnant women | 5.4 | 6.4 | 5.3 | 8.2 | 6.2 | **6.8** |

Maternal Health indicators were affected with the security situation in Syria, 2012 data shows that despite the improvement achieved in Gaza and West Bank there is slight decline in the Agency wide percentage of pregnant women who paid ≥ 4 antenatal visits from 87% in 2011 to 86.5% in 2012.

### *Tetanus Immunization Coverage*

Results of the annual rapid assessment survey of antenatal records for 2012 showed that 99.7% of pregnant women were adequately immunized against tetanus. No cases of tetanus have reported during the last two decades among mothers or new-borns attending UNRWA antenatal care services.

### *Risk Status Assessment*

The new WHO model of antenatal care separates pregnant women into two groups: those likely to need only routine antenatal care (about 75% of pregnant women), and those with specific health conditions or risk factors that necessitate special care (25% of pregnant women)[2] .

UNRWA currently uses a risk scoring classification based on three risk categories (high, alert, low). Agency-wide during 2012, 13.5% of women were classified as high risk, while 25.6% were considered alert risk cases. High and alert risk pregnancies receive more intensive follow-up than low risk cases and are referred to specialists as needed.

### *Diabetes mellitus and hypertension in pregnancy*

Pregnant women are screened regularly for diabetes and hypertension all through pregnancy. Agency-wide during 2012, the prevalence of diabetes mellitus during pregnancy (pre-existing and gestational) was 4.6 % compared to 3.8%, in 2011 and to 1.9% reported in 2006. The increase may reflect improved screening practices. Globally the reported rates of gestational diabetes range from 2 to 10 percent of pregnancies depending on the population studied and the diagnostic tests and criteria employed[3]. Hypertensive disorders affect 5-15% of pregnancies worldwide.

The prevalence of hypertension during pregnancy (including pre-existing and pregnancy-induced hypertension) was 9.9% in 2012 similar to previous year, with wide variations among Fields.

## Delivery care

### *Place of delivery*

Delivery in a health facility, where complications can be managed, substantially lowers the risk of complications and death for both mother and baby. UNRWA subsidizes hospital delivery for pregnant women classified as high-risk. During 2012, 97.7% of all reported deliveries Agency-wide took place in hospitals compared with 78.0% in 2002, 90.6% in 2005, and 97.2% in 2011.

Deliveries in private clinics accounted for 2% of the total, while home deliveries represented 0.3%. The highest rate of home deliveries continues to be reported from Syria with 3,7%, but with a declining trend. Most home deliveries were attended either by a qualified midwife or by a physician. Agency-wide, 99.9% of women that delivered in 2012 were assisted by trained personnel.

2. The Partnership for Maternal, New-born & Child Health. 2011. A Global Review of the Key Interventions Related to Reproductive, Maternal, New-born and Child Health.
3. Centres for Disease Control and Prevention. National Diabetes Fact Sheet: national estimates and general information on diabetes and pre-diabetes in the United States, 2011. Atlanta, GA: U.S. Department of Health and Human Services Centres for Disease Control and Prevention, 2011.

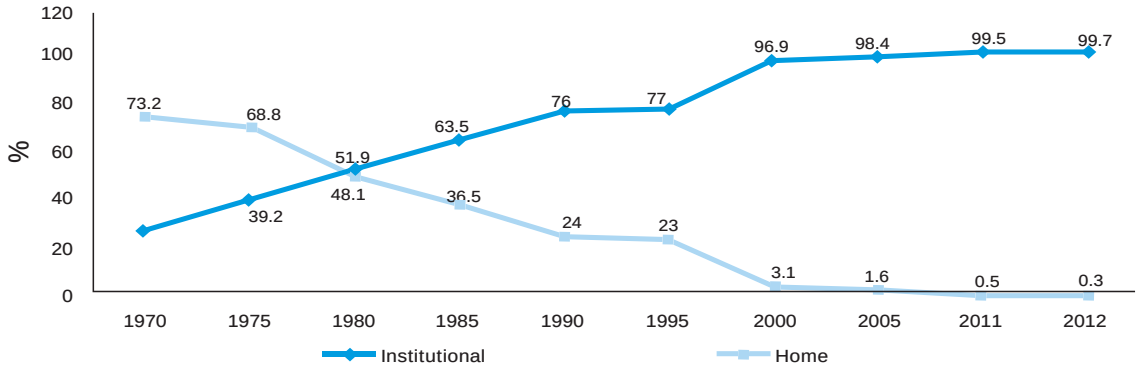



Figure 5 - Trends (%) of home versus institutional deliveries, 1970-2012

### *Caesarean sections*

The proportion of deliveries by caesarean section among Palestine refugees served by UNRWA is increasing: 20.8% in 2012, compared to 20.5% in 2011, 19% in 2010 and 17.8% in 2009. The increase and the substantial variation among Fields may reflect a combination of client preference and prevailing medical practice. There is wide variation among regions and countries globally, while worldwide caesarean section rates are estimated at 33%[4]. In Jordan, a caesarean section rate of 20% was documented in the last Demographic and Health Survey (2007).

This could be attributed to difficulties with follow-up due to restrictions imposed on the movement of clients and staff. In Syria, due to the prevailing situation health staff couldn't track and ascertain the outcome of pregnancy of registered women in the antenatal care due to the mobility of people to seek safe heaven inside and outside the country.

### *Monitoring maternal deaths*

During 2012, a total of 15 maternal deaths were reported from the five UNRWA Fields. This is equivalent to an overall maternal death ratio of 17 per 100,000 live births among women registered with UNRWA antenatal services.

Table 10 - Caesarean section rate among UNRWA reported deliveries, 2010-2012

| Field | Total deliveries 2012 | Caesarean section rate | | |
|---|---|---|---|---|
| | | % 2010 | % 2011 | % 2012 |
| Jordan | 24,552 | 19.1 | 21.1 | 20.7 |
| Lebanon | 4,821 | 28.8 | 31.0 | 33.8 |
| Syria | 4,824 | 38.3 | 39.9 | 42.0 |
| Gaza Strip | 39,658 | 12.7 | 13.8 | 14.6 |
| West Bank | 12,031 | 19.8 | 21.4 | 22% |
| **Agency** | **85,886** | **19.0** | **20.5** | **20.8%** |

### *Monitoring the outcome of pregnancy*

In 2002, UNRWA established a registration system (based on the expected date of delivery) to track the outcome of each pregnant woman in each health facility. During 2012, the total number of pregnant women who expected to deliver was 88,412. Of these, the outcome of only 203 pregnancies (0.2%) remains unknown. The percentage of unknown outcomes dropped from 2.8% in 2002 to 0.2% in 2007, and has since remained constant. The highest proportion of unknown outcomes in 2012 was reported from the West Bank (1.5%).

UNRWA staff conducts a thorough assessment following each reported maternal death using a standardized verbal autopsy questionnaire. Five women died during pregnancy, one during labour and nine deaths occurred in the post-natal period. All deaths occurred in hospital. The main reported cause of death was haemorrhage in five cases (33%), pulmonary embolism in four cases (26%), septicaemia in two cases (13%) and one case (7%) from each of eclampsia, valvular heart disease, intestinal perforation and H1N1.

4. Villar J, Valladares E, et al. Caesarean delivery rates and pregnancy outcomes: the 2005 WHO global survey on maternal and perinatal health in Latin America. The Lancet 2006;367:1819-1825.

Worldwide, 287,000 women die during pregnancy and childbirth every year. The majority of these deaths can be prevented. Globally the common medical causes for maternal death include bleeding, high blood pressure, prolonged and obstructed labour, infections and unsafe abortions. The maternal mortality among Palestine refugees served by UNRWA is similar to the rate in upper middle income countries and far low from the estimate for the Arab states at 140 and west Asia region at 71 per 100,000 livebirth.[5]

### *Post-natal Care*

UNRWA encourages all women to attend post-natal care as soon as possible after the delivery. Post-natal care services include a thorough medical examination of the mother and the new-born, either at UNRWA health centres or at home, counselling on Family Planning, breast feeding and new born care. Of the 82,338 pregnant women who delivered during 2012 a total of 76,050 women received post-natal care within six weeks of delivery, representing 92.4% coverage among expected deliveries.

## Child health services

UNRWA provides care for children across the phases of the lifecycle, with specific interventions to meet the health needs of new-borns, infants under-one year of age, children under-five years of age and school-age children.

Both preventive and curative care is provided, with a special emphasis on prevention. Services include new-born assessment, well-baby care, periodic physical examinations, immunization, growth monitoring and nutritional surveillance, micronutrient supplementation, preventive oral health, school health services and care of sick children, including referral for specialist care.

### Care of children under five years of age

#### *Registration and follow up*

Each UNRWA health centre maintains a system of registration for children under five years of age. This system enables the follow-up of children that have missed important appointments, for example, for immunization, growth monitoring and screening. In the past, UNRWA registered only children up to the age of three years. The system is currently under transition to include children under five years of age. During 2012, a total of 260,730,574 children below 60 months were registered at UNRWA primary health care facilities. The observed decline in the following figure could be justified mainly for the exclusion of Syria data and for the observed decline in the number of children attending child health care services.

5. Trends in maternal mortality: 1990 to 2010 WHO, UNICEF, UNFPA and The World Bank estimates.

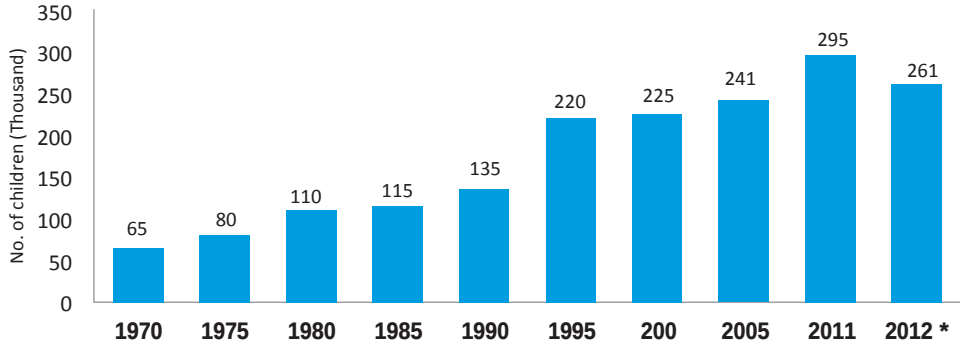



Figure 6 - Children 0-3 years registered at UNRWA health centres, 1970-2012
*Syria Field is not available

### *Child care coverage*

Similar to the antenatal care, the demand for UNRWA child care services has decreased constantly since 2008. This was observed in all Fields. In 2012, the number of new born registered for child health care decreased by 5.1% Agency wide covering 58.6% of the expected number of children. This could be explained by an increased utilization of other service providers and/or by access constraints due to movement restrictions in the West Bank or insecurity in Syria and Gaza. Child health care coverage is calculated based on the crude birth rates in host countries.

### *Immunization*

UNRWA health services provide immunization against ten diseases: tetanus, diphtheria, pertussis, tuberculosis, measles, rubella, mumps, polio, haemophilus influenza type B (Hib), hepatitis and pneumococcal vaccine in West Bank, gaza and for one year in Jordan. Immunization coverage is assessed annually through a review of a sample of records. The percentage of children aged 12 months and 18 months that have received all required immunizations was more than 99% for both age groups during 2012. Coverage has been close to 100% for more than a decade.

### *Growth monitoring and nutritional surveillance*

Growth and nutritional status of under-fives is monitored at regular intervals through UNRWA health services. Breast-feeding is promoted and mothers are counselled on infant and child nutrition, including the appropriate use of complementary feeding and micronutrient supplements. A new electronic growth monitoring system, based on the revised WHO growth monitoring standards, was introduced in pilot health centres during 2011. The system documents the four main growth and nutrition related problems among under-fives: underweight, wasting, stunting and obesity.

UNRWA's documentation system is at present under transition to the new system, with different Fields at different stages of implementation. Data for 2012 reflect only the total number of children that were under-weight for the age group 0-3 years. For this group, the prevalence of under-weight was 4% Agency wide at the end of 2012. There was no disparity between girls and boys. While under-weight does not represent a major health problem among refugee children, there is growing concern about obesity and micronutrient deficiencies. The new growth monitoring system will help to quantify the extent of the obesity problem.

### *School health*

During the school year 2011-2012, a total of 485,500 pupils were enrolled in UNRWA schools. Collaboration between the UNRWA Health and Education Departments continued through meetings of school health committees, training of health tutors and provision of screening materials and first aid supplies. During 2012 the School Health Forum was conducted during the period 24th-26th September at Amman Training Centre. The main objective of the meeting was to finalize the School Health Strategy.

The UNRWA School Health Programme includes medical and oral health prevention interventions and screening, assistance to children with special health needs, immunization, Vitamin A supplementation, and a de-worming programme. Particular attention is given to diseases and disabilities that can negatively impact learning capacity, such as hearing and vision impairment. As a result of the School Health Programme activities during 2012, a total of 7,240 students were referred to UNRWA health facilities for further care and an additional 2,663 were referred for specialist assessment. Furthermore, 9,268 students were assisted towards the cost of eyeglasses and 132 received assistance in obtaining hearing aids.

### *New school entrants medical examination*

During the school year 2011/2012, UNRWA schools registered 56,842 new entrants (28,847 girls and 27,995 boys). New entrants received a complete medical examination, immunization and follow-up or referral as required. The most frequently detected health problems were dental caries (31.3%) and vision defects (7.8%). Health problems related to personal hygiene remain present at low levels: pediculosis was found in 1.7% and scabies in 0.2% of new entrants.

### *Medical screening*

Medical screening activities, targeting 4th and 7th grade students in all Fields, involve assessment for vision and hearing impairment, thyroid enlargement and oral health problems. Among 4th grade students, 54,206 were screened, achieving 97% coverage. The most common morbidities detected were vision defects (12.6%) and hearing impairment (1.6%). Among students in the 7th grade, 49,735 were screened, with 98.4% coverage. The main morbidities were again vision defects (13.4%) and hearing impairment (1.1%).

### *Oral health screening*

Oral health screening is conducted for 1st, 7th and 9th grade students in all Fields and for the 4th grade students in the West Bank. A total of 71,349 students were screened in different grades. Screening is coupled with other dental caries prevention activities such as pit and fissure sealant for 1st erupted molar in the 1st and 2nd grade, fluoride mouth rinsing, tooth brushing campaigns, periodic testing of fluoride levels in drinking water. In the 9th grade, 38,234 students were screened, with 83.8% coverage. In Gaza, 28,834 students in the 1st grade were comprehensively managed with screening, pit and fissure sealant application and treatment of oral morbidities, achieving 98.4% coverage. Improvement in oral health screening for school children is the result of the reorientation of the Oral Health Programme towards a preventive approach and investment in staff training on this concept.

### *Children with special health needs*

During the school year 2011-2012, a total of 2,068 school children were identified with special health needs. Of these, 689 students were affected by juvenile diabetes mellitus, 336 had heart disease, 319 showed behavioural problems, 313 had asthma and 154 were living with epilepsy. These children receive special medical attention from teaching staff and the school health team and their school records are maintained separately to facilitate follow-up.

### *Immunization*

UNRWA Immunization programme for school children is streamlined with host country requirements. During the school year 2011-2012:

- New entrants in all Fields received a booster dose of tetanus-diphtheria (DT/Td) immunization. The Agency-wide coverage was 99.1%;
- Coverage of oral polio vaccine (OPV) for new entrants was 100% in the Gaza Strip and 99.2% in the West Bank;
- Coverage of Td vaccination among 9th grade school children in the five Fields was 99%.

### *De-worming programme*

In accordance with WHO recommendations, UNRWA maintains a de-worming programme for children enrolled in UNRWA schools, applying a single dose of a broad-spectrum anti-helminthic medication for three successive years. An initial three-year campaign, completed during the 2004/2005 school year, targeted all school children and achieved a coverage rate of 96% across the five Fields.

Since 2006, only new entrants receive the medications for three successive years. During the 2011/2012 school year, 98% coverage was achieved among children in first, second and third elementary classes. In addition, a health awareness campaign was carried out to emphasize the importance of personal hygiene in preventing transmission.

During the school year 2011-2012 UNRWA jointly with the Global Network for Neglected Tropical Diseases at the Sabin Vaccine Institute and Dubai care implemented a comprehensive deworming project to distribute mebendazole, iron supplements and health education materials to all students in UNRWA schools in West Bank and Gaza. Despite challenges, the project achieved remarkable results: 235,329 school children were dewormed with 91% coverage, 105,963 students received iron supplementation and 60,000 health education materials were distributed. The project will cover another round of deworming during the coming school year 2013-2014.

*Vitamin A supplementation*

During the 2011/2012 school year, children from grades one to six in all UNRWA schools received two doses of Vitamin A 200,000 International Units (IU) at six-month intervals.

## Gender Based Violence (GBV)

The Health Department continued the support to all the fields as they build their referral system. Trainings for health staff on GBV detection has been supplemented by supervisory field visits and guidelines on screening potential GBV survivors.
In Gaza and West Bank the health programmes is leading the development of the referral system for GBV survivors. Gaza field office established 18 'one-stop' centers. The latter are based in UNRWA's health centers and provide medical, legal and psychosocial support to survivors in one location which they are already able to visit.

In the West Bank, UNRWA expanded project coverage into the North region, beginning sensitization and groundwork for the referral system in 7 camps and in Qalqilya City. This begins the expansion of the project's coverage from 9 locations (8 camps and 1 Dourra village) to a total of 15 camps, 1 village and 1 city. This expansion will continue through Phase 3, fully activating the referral system in these northern locations. Health Department and the Gender Office unit in the Headquarter will continue work together in the implementation of the gender mainstreaming strategy with a focus on the detection and provision of health services to the survivors of Gender Based Violence. Specifically the capacity of the health staff will continue to be built on to address domestic violence and participate actively in the referral system.

# Strategic objective 3: prevent and control disease

## Non communicable diseases

### The burden of NCD

Non communicable diseases (NCDs) continued to account for the vast majority of deaths occurring in UNRWA's host country populations. NCDs also represent an increasing health challenge among Palestine refugees, with a steady increase in the number of diabetes and or hypertension patients treated at UNRWA health centres. At the end of 2012, a total of 193,328 patients with diabetes and/or hypertension were registered for UNRWA NCD services across the four Fields excluding Syria. This represents an increase of around 8,000 patients from 2011for the four fields at 185,420 patients.

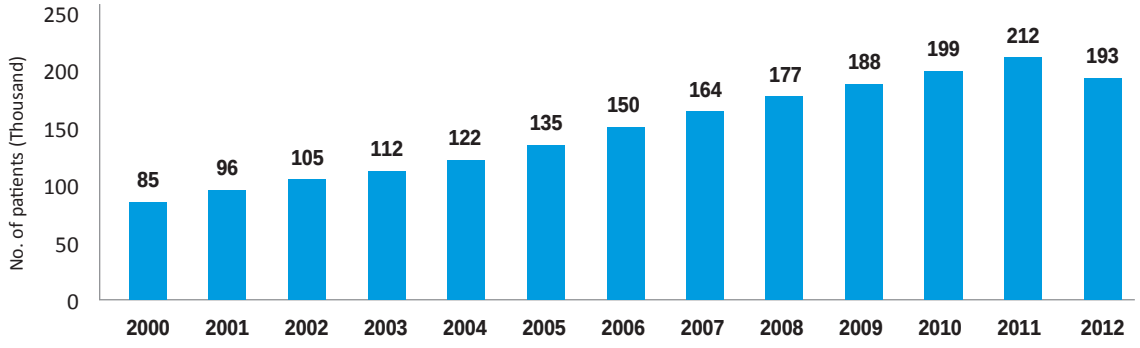



Figure 7 - Patients with diabetes and /or hypertension under care Agency-wide, 2000-2012

Patients 40 years of age and above represented 91% of all patients under care. Sixty five per-cents of patients were female, reflecting the attendance pattern of female patients to UNRWA clinics. The majority of patients are with hypertension only represents 44.5% of the total registered patients under care, followed by patients with both hypertension and diabetes at 38.2%.

The score helps health staff to manage patients according to their risk score and refer the patient for specialist treatment if necessary, those with a score 1-5 are considered at low risk and with 6-9 are at moderate while patients≥10 are at high risk. All patients registered in NCD clinics were assessed in relation to risk scoring during 2012 except for Syria.

Table 11-Patients with diabetes and/or hypertension by Field and by type of morbidity

| Morbidity type | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| Diabetes mellitus type I | 1,195 | 236 | NA | 1,050 | 621 | 3,102 |
| Diabetes mellitus type II | 10,591 | 2,380 | NA | 11,365 | 6,007 | 30,343 |
| Hypertension | 29,020 | 12,488 | NA | 30,786 | 13,662 | 85,956 |
| Diabetes mellitus & hypertension | 28,920 | 8,602 | NA | 21,699 | 14,706 | 73,927 |
| Total | 69,726 | 23,706 | NA | 64,900 | 34,996 | 193,328 |

The Agency-wide prevalence of diagnosed Diabetes Mellitus and hypertension among the served population at 40 years of age and above was 11.0% and 16.5% respectively during 2012.

The assessment found that 29.4% of hypertension patients were at high risk, followed by 24.5% of patients with both diabetes and hypertension and 14.2% of type II diabetes patients.

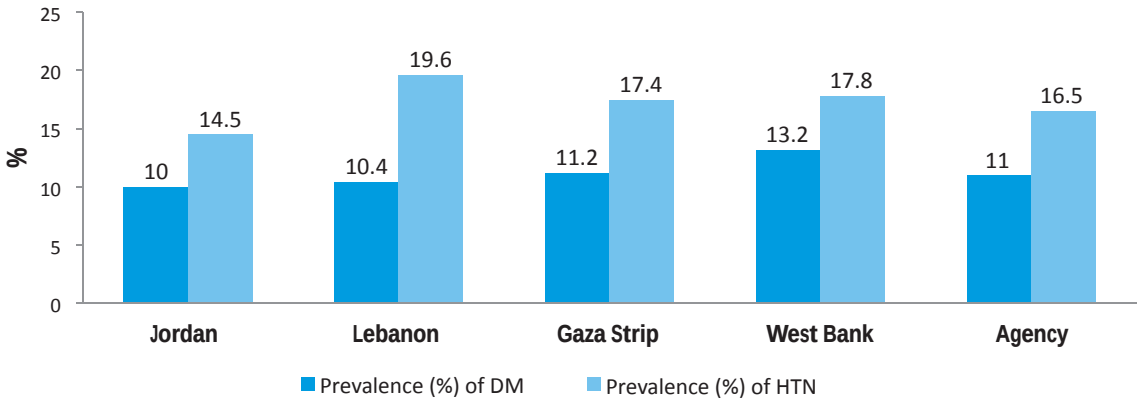



Figure 8 – Prevalence (%) of diagnosed diabetes and hypertension among served population ≥40 years of age, 2012

## Risk scoring

A risk assessment tool adopted by UNRWA from WHO risk scoring system is used to assess the risk status of NCDs patients. The system assesses the presence of risk factors modifiable such as smoking, hyperlipidaemia and physical inactivity blood pressure, blood sugar and non-modifiable as age and family history of disease.

## Treatment

Although all five Fields have the same guidelines for case management, there are significant variations among the Fields in relation to the management of patients with type II diabetes and hypertension. Similar variations are seen among UNRWA medical officers in the same Field.

For example, the percentage of non-pharmacological treatment among hypertensive patients was 9% in Lebanon Field, followed by Gaza (4%), Jordan (2%) and the West Bank (1%).The proportion of patients with type I or type II diabetes who were treated with insulin as part of their management also shows variation among Fields, from 21.9% in Lebanon to 32.7% in Gaza.

These variations were also observed from the clinical audit, conducted in 32 clinics in the four fields with involvement of 16,00 patients with diabetes. These findings will be addressed during the training courses for concerned health staff in 2013 in the fields. The training will focus on practical case studies to implement theoretical knowledge, which was at good level among medical officers, into practice. Further work to promote treatment compliance among patients and reinforce lifestyle modifications along with medical treatment and to strengthen control status monitoring are also targeted in 2013.

Control status of blood glucose levels at 45.6% among diabetic patients remains a source of concern as we only rely on 10% sample size of all patients and still the methodology of testing, UNRWA has to date relied upon fasting and post-prandial blood glucose measurements to monitor the control status of patients with diabetes mellitus. These measurements cannot however reflect the control status over time. In 2011, UNRWA introduced the HbA1c testing in one Field (West Bank). This method is able to provide information on blood glucose levels over a preceding three-month period, thus providing a more accurate view of the patients' control status. Based on funding availability, UNRWA plans to introduce HbA1c as the testing of choice for blood glucose monitoring in all Fields.

As mentioned earlier in order to evaluate the care provided to diabetes patients registered in UNRWA clinics, the Health Department, in collaboration with the World Diabetes Foundation (WDF) conducted a clinical audit during 2012, using tools prepared by WDF and adapted by UNRWA. Measurement of blood glucose using the HbA1c testing was included in the audit. The results are highlighted in front page of this annual report.

### Late complications

Late complications of NCD include: cardiovascular diseases (myocardial infarction and/or congestive heart failure), cerebrovascular disease (stroke), end-stage renal failure (ESRF), above-ankle amputation and blindness. During 2012, the records of 10% of all registered NCD patients were analysed for the presence of late complications, using the same methodology employed in previous years.

In 2012, late complications were present in 9.1% of the NCD patients Agency wide (12.4% in 2011), this drop is explained by the fact that each year the sample size of 10% could be different from that in previous year and also due under recording and reporting of late complications in some patients files. Some differences among the Fields were observed in the distribution of complications among the different disease groups, probably reflecting differences in reporting practices.

### Defaulters

Defaulters are defined as patients who did not attend the NCD clinic at all during a calendar year, either for follow-up or for collection of medicines (personally or through relatives for those with severe disability). Health staff employs all possible means to reach patients that miss follow-up appointments, including home visits, telephone calls and notification through family members. Once again without Syria rate, the Agency-wide rate was at 4.8% (10,085 patients) in 2012 while it was at 5.3% in 2011. The Field specific defaulter rate ranged from 4.0% in Lebanon to 7.2% in Jordan, the issue that needs to be followed by the field.

### Case fatality

A total of 2,985(1.9%) UNRWA NCD patients were reported to have died during 2012; deaths may however be under-reported. Patients with both morbidities (hypertension and diabetes) comprised 55.8% of the deaths, while patients with only hypertension represented 33% and those with only diabetes represented 11.2% of all the deaths.

### The way forward for NCD care

The burden of NCDs and their complications is increasing. UNRWA is strengthening its approach to primary prevention through health education and by improving the quality of foods served in school canteens. The Agency is also intensifying its screening programmes, in order to detect more cases and early manage those diagnosed, it is planned to conduct outreach campaigns in four Fields (Gaza, West Bank, Jordan and Lebanon) during 2013. Cohort monitoring system are also improving the quality of NCD care in UNRWA health centres and the experience is now implemented in 2 health centres implementing e-health in Jordan and it is expected to be implemented in all health centres using NCD E-health module and/ or family health team e-health module. Furthermore, UNRWA will continue to explore all possible options to introduce lipid-lowering agents into the UNRWA essential drugs list. Prohibitive costs have so far prevented UNRWA from introducing these lifesaving medications.

# Communicable diseases

Prevention and control of communicable diseases in 2012 continued to focus on strengthening surveillance of emerging and re-emerging diseases. It is worth mentioning that this year data does not include Syria due to mentioned earlier reason of unstable armed conflict.

## H1N1 Influenza

During the 2012 year, 64 cases with H1N1 were reported from West Bank among them 29 cases were confirmed to be positive and all admitted to hospital, three deaths reported among them (one of them was pregnant woman). All reported cases were from hospitals and discharge in good general conditions without complication. Worth mentioning that, many cases were treated at home without being reported to health centers and improved. The affected persons varied in age from 45 days to 90 years, the majority were between 20-39 years old (34%). No gender differences reported.

Close coordination was maintained with the host countries' Ministries of Health for surveillance of communicable diseases, outbreak investigation, supply of vaccines, introduction of new vaccines (e.g. pneumococcal vaccine in the West Bank), exchange of information, participation in national immunization days and the annual WHO/EMRO immunization week. UNRWA also collaborated with host authorities for laboratory surveillance of HIV/AIDS and other communicable diseases requiring advanced laboratory investigations that cannot be performed in UNRWA facilities.

## EPI vaccine-preventable diseases

In each Field, UNRWA's immunization services are linked to the host country Expanded Programme on Immunization (EPI). Agency-wide immunization coverage, for both 12 month old and 18 month old children registered with UNRWA, continued to be above WHO target and close to 100% in all Fields except for Syria where the assessment was not possible during the year. Factors contributing to UNRWA's success with immunization coverage include a consistent supply of vaccines, the enforcement of an appointment system and continuous follow-up of defaulters by health centre staff. No confirmed cases of poliomyelitis, tetanus, diphtheria, pertussis, measles or rubella were reported among the refugee population during 2011.

## Other communicable diseases

### *Viral hepatitis*

The Agency wide incidence of suspected cases of viral hepatitis (mainly hepatitis A) increased from 25.6 per 100,000 populations to 31.6, the main increase was reported from Gaza at 45 per 100,000 which may be due to low quality of water, the issue need to be addressed and reflect an on-going need to promote good hygiene practices in schools and homes.

### *Typhoid fever*

The Agency-wide incidence of suspected typhoid fever cases dropped from 2.3/100,000 population in 2011to 1.8 per 100.000 IN 2012.However, this may not reflect the true epidemiological picture due to the low referral of suspected cases for laboratory confirmation. The highest incidence was observed in Gaza (2.7/100,000). West Bank Field reported no cases for the second year. More attention should be given to confirmation and follow-up of suspected cases.

### *Tuberculosis*

A total of 75 cases of tuberculosis were reported during 2011, this number decreased by 8 cases from 2011, which also may be explained by underreporting as some cases may be treated in host countries TB centres without been seen in UNRWA clinics, Of those, 27 cases were smear-positive, four were smear-negative and 44 were extra pulmonary. Syria reported 54 cases, followed by Lebanon (11), Gaza (9) and the West Bank (1). No cases were reported from Jordan.

With the exception of Syria, detection rates in all Fields remain below the WHO target of 70% of the expected number of cases for the country. Patients diagnosed with tuberculosis are managed through national tuberculosis programmes using the directly observed treatment, short course (DOTS) strategy. During 2011, cure rates of 100% were achieved for UNRWA patients in all Fields.

*Brucellosis*

Brucellosis cases were reported from Syria 76 cases with incidence rate at 18.8/100,000 population, 6 cases from Jordan and only 2 from West Bank during 2012.

## Environmental health

UNRWA'S environmental health programme controls the quality of drinking water, provides sanitation, and carries out vector and rodent control in refugee camps. Environmental health services are managed by different UNRWA departments in different Fields; the Administration Department in Lebanon, the Procurement Department in Jordan, the Department of Infrastructure and Camp Improvement in Syria, and the Special Programmes Department in Gaza Field. In the West Bank, these services remain the responsibility of the UNRWA Health Department during 2012.

During 2012, in the West Bank, the number of employed labourers remained 183, their main work is to sweep streets and transport solid waste to collection points, from where the waste was removed to municipal dumpsites by ten UNRWA trucks. In 2012, almost 66,769 tons of domestic, medical and commercial waste has been removed and disposed in the municipal dump sites The division of Environmental Health Department (West Bank) continued to be focused on maintaining acceptable standards of water and sanitation in refugee camps as regular services, in addition to the activities of emergency appeal projects. It is important to mention that no significant change has been recorded in the number of new shelters connected to water or sewerage systems as all these infrastructure improvement projects were of the rehabilitation type and very strict in the implementation time.

Vector control campaigns conducted in the 19 camps all from May to September 2012. The campaigns included training of staff on the modern approaches in the control of disease causing vectors and the provision of tools, equipment, protective clothing, and chemicals. A work plan was prepared for every camp by dividing it into zones according to rodents spread and concentration areas. The development and execution of work in the camps was supervised by sanitation foreman with the cooperation of sanitation laborers, and followed on monthly basis.

Environmental Health Division with collaboration with, Jericho Health Department (PA), and Jericho Municipality conducted 2 campaigns to control the Leshmaniasis disease in Jericho and the Jordan Valley.

# Crosscutting services

Crosscutting service areas support all three strategic objectives and include: nutrition, disability care, laboratory, radiology, medical supplies, health information systems, integrated community based activities, emergency preparedness and response, human resources and gender mainstreaming.

## Nutrition

During 2012 the Health Department supported the Fields in further developing their nutrition programmes, with a particular focus on integrated actions to address obesity and non-communicable diseases among health centres attendees and in the community. The key activities performed are described below.

A research was conducted to Assess Health Staffs Knowledge and Counselling Skills on Nutrition to Patients with Type II Diabetes Mellitus in the largest 10 Health Centers in Jordan. Main findings of the research indicate that 77.8% of NCD staff used positive talk (supportive, enthusiastic and encouraging words). Negative talk was used in 9.7% (de-motivating, blaming and rebellious words). Emotional (12.5%) and social (15.3%) talks were observed in counselling sessions either individually or mixed with positive and negative talks.

The average number of key messages delivered was one per session, ranging from 1 to 3. The most common key messages were: limit simple sugar intake (43.1% from questionnaire vs. 44.4% observational) and to control complex carbohydrates intake (37.5%, vs. 25.0%). Other key dietary messages such as: small and frequent meals, increase fiber intake, lower salt and fat intake were seldom discussed. 75% of staff and 61.8% of patients answered correctly the questions about DM and its nutritional management. Furthermore, 66.7% of patients reported that the main risk factor for DM type 2 is stress.

The study concluded that privacy had a significant effect on message delivery (p: 0.046%). Privacy is inadequate due to limited space and poor infrastructure.

In order to address this concern, improved infrastructure is necessary. Furthermore, the NCD staffs counselling skills and nutritional management knowledge need to be improved through training and development of relevant guidelines

During 2012, the Health Department developed and distributed educational material on rickets and Ramadan meals, conducted a training workshop for doctors and nurses working on the NCD programme on proper nutritional counselling for NCD patients and started the planning and preparations of the nutritional and educational component of the 2015 Diabetes Awareness Campaign.

## Disability care

Disability is a crosscutting issue relevant to the work of all UNRWA Programmes. UNRWA adopts the definition of disability contained in the UN Convention on the Rights of Persons with Disabilities, which states "persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments, which in interaction with various attitudinal and environmental barriers hinder their full participation in society on an equal basis with others".

During 2012, disability was addressed through a variety of activities to raise staff awareness about mainstreaming disability within all UNRWA activities. Current health programme initiatives relating to disability take a comprehensive approach, addressing physical, mental and social aspects. There is a strong focus on prevention of disability, including family planning services, growth monitoring, immunization, disease prevention and control, early detection and screening services.

The health programme also implements a number of specific interventions related to disability care. UNRWA health centres record data on children under the age of five years that have permanent physical or mental impairments in order to facilitate medical follow-up such as screening new-borns for hypothyroidism and phenylketonuria.

Registered refugees identified by UNRWA health centres as suffering from permanent physical disability and/or visual and hearing impairments are eligible for financial support from the Health Department towards the cost of prosthetic devices.

During 2012, a total of 132 student were assisted towards the cost of hearing aids. Folic Acid supplementations are prescribed for the mothers in the pre-conception period, which may help to prevent certain birth defects, such as neural tube defects. Technical instructions have been issued regarding eligibility, including that first priority be given to school children and pre-school children. The financial contribution to be made by UNRWA is outlined in the technical instructions.

UNRWA physiotherapy centres (operating in the Gaza Strip and the West Bank) do not specifically target persons with disabilities. However, it is recognized that a significant proportion of the beneficiaries of this service are likely to be considered 'persons with disabilities' under the definition contained in the UNRWA Disability Policy.

The UNRWA health programme implements a community mental health programme aimed at promoting the psychological and social wellbeing of Palestine refugees, which includes a psychological support programme delivered through a network of counsellors. The programme also includes referrals for specialist care as well as awareness raising activities to promote mental health and social well-being.

## Laboratory services

In order to meet the increasing demand on basic laboratory services in Gaza Field, a new laboratory at Saftawi Health Centre in Gaza was established. This increased the number of health facilities providing comprehensive laboratory services to 124 out of 139 health facilities. The remaining 15 facilities continued to provide basic laboratory support (blood glucose, blood haemoglobin and urine tests by dipstick) through competent nursing staff using basic laboratory equipment.

*Utilization trend*

The number of tests performed decreased from 5.0 to 4.6 million. The rates of decrease were 71% in Syria, 12.1% in Lebanon, 4.8% in Jordan, and 0.2% in each of the West Bank and Gaza Strip.

The decrease in utilization in Syria Field is mainly due to accessibility problem caused by the prevailing situation where most of health centres are completely or partially closed. The decrease observed in other Fields is mainly due to rational use of laboratory services after implementation of Family Health Team Approach and the appointment system.

*Laboratory costs*

The overall cost of laboratory services provided by UNRWA (USD 6.9 million) out of which 4.8 million were secured through GF and 1.6 million through emergency funds, project funds and/or donations. The cost of laboratory services continued to be far below the rates of the host countries for equivalent services at (USD 13.6 million).

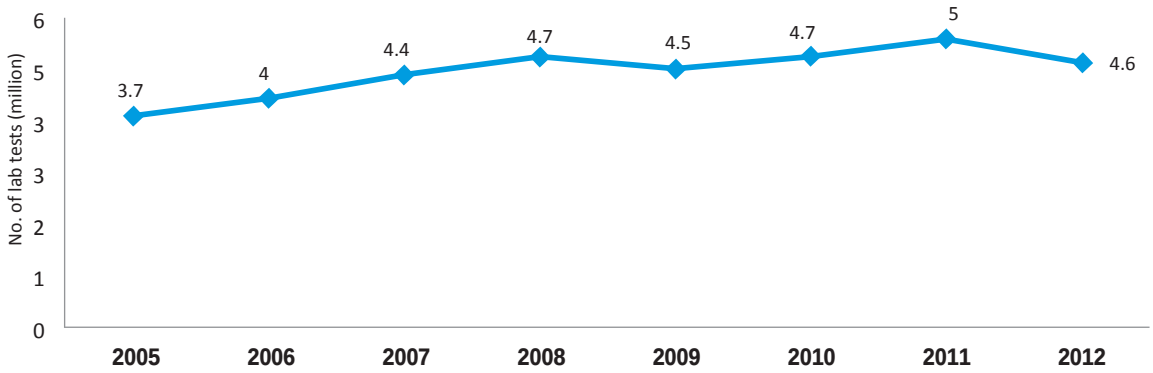



Figure 9 – Utilization trend of laboratory services, 2005-2012

*Periodic self-evaluation*

The annual comparative study of workloads and efficiency of the laboratory services was carried out based on the 2012 statistical data as part of UNRWA's periodic self-evaluation of the programmes using the WHO approach for workload measurement. The productivity target ranges from 45 to 55 WLUs/hour. The productivity was 48.2 in Jordan, 35.7 in Lebanon, 89.5. In Gaza, 48.1 in West Bank and was not reported from Syria Field due to the prevailing situation. The remarkably high workload in Gaza Field is mainly due to decrease in number of staff recruited on emergency bases under the "Job Creation Programme" from 45 to only 7 laboratory technicians.

This suggests that UNRWA's experience in integrating laboratory services into its primary health care activities remains very cost-efficient *vis-à-vis* referring patients to external services. The cost of laboratory supplies procured under UNRWA's General Fund through the cyclic review indents for the year 2012 amounted to USD 1,003,857 out of which USD 893,328 (89%) were secured through General Fund whereas only USD 110,529 (11%) through emergency funds.

The expenditure on laboratory equipment during 2012 amounted to USD 643,734 out of which USD 390,223 (61%) were secured through General Fund whereas only USD 253,511 (39%) through emergency funds, project funds and/or donations.

Table 12 - Expenditure on laboratory services

| Cost | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| GF | 1,047,451 | 705,513 | 544,858 | 1,431,887 | 1,078,749 | 4,808,458 |
| Projects | 0 | 4,272 | 8,058 | 181,141 | 1,446,648 | 1,640,119 |
| Total | 1,047,451 | 709,785 | 552,916 | 1,613,028 | 2,525,397 | 6,448,577 |

Table 13 - Comparative analysis on annual cost of laboratory services performed at UNRWA facilities and cost of same services if outsourced to host authorities (USD) - 2012

| Cost | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| Public | 3,252,670 | 1,265,251 | 393,616 | 6,109,880 | 2,560,164 | 13,581,581 |
| UNRWA | 1,128,413 | 805,457 | 619,664 | 1,697,469 | 2,655,983 | 6,906,986 |

*Quality assurance*

In order to ensure the quality of laboratory services, UNRWA laboratory supervisors continued to follow-up on the performance of laboratory personnel and on the proper provision and utilization of laboratory services through the following activities:

- Training courses and in-service training for newly recruited laboratory technicians were conducted in all Fields according to a standard training package;
- Implementation of internal quality control system at all UNRWA laboratories and for all tests;
- Implementation of External Quality Assurance System (EQAS) at all UNRWA laboratories as part of a Memorandum of Understanding which was signed between UNRWA and BIOLABO France which allowed the participation of all UNRWA laboratories (123) in a free of charge EQAS starting March 2012;
- An annual assessment of the trends in utilization and productivity of laboratory services at health centre level in each Field as part of self-internal assessment policy according to UNRWA standard assessment protocol;
- On-going check-up of the quality of laboratory supplies with relevant staff at the procurement division;
- Arrangements with the public health laboratories of the host countries with respect to referral of patients or samples for surveillance of diseases of public health importance.

# Radiology services

UNRWA operates 21 radiology units (nine units in the West Bank, six in Gaza, four in Lebanon and two in Jordan). These units provide plain x-ray services to patients attending the health centres. Other plain x-rays and specific types of diagnostic radiology services such as mammography, urography, ultrasounds, etc., are provided through different contractual agreements with hospitals and private radiology clinics to patients and to newly recruited UNRWA staff, during periodic medical examinations and as part of medical board examinations.

During 2012, radiology services conducted 99,811 x-rays to 95,403 patients out of which, 82,364 were plain x-rays to 76,532 patients through UNRWA x-ray facilities and 17,447 x-ray for 18,871 patients by contracted x-ray facilities.

# Medicine and Medical supplies

## Total expenditure

In 2012, the total value of medicine, medical supplies and equipment including laboratory supplies from all funds (General Fund, in-kind contributions and emergency appeals) was approximately USD 25.2 million, representing an increase of 4% compared with 2011 (USD 24.3 million). Of the total, the General Fund covered USD 17.6 million (69.8%), while the total value of in-kind and emergency funds spent was approximately USD7.7 million (30.2%), as shown in Table 19.

Table 14 - Expenditure on medicine and medical supplies per fund code

| | | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|---|
| Medicine | GF- | 3,614,205 | 1,237,854 | 1,041,902 | 7,269,712 | 2,506,119 | 15,669,792 |
| | Projects- | 836,900 | 1,225,747 | 923,593 | 2,236,479 | 850,183 | 6,072,902 |
| Sub-total | | 4,451,105 | 2,463,601 | 1,965,495 | 9,506,191 | 3,356,302 | 21,742,694 |
| Equipment & Medical Supplies | GF- | 309,472 | 265,543 | 105,261 | 520,147 | 715,393 | 1,915,816 |
| | Projects- | 61,556 | 71,590 | 9,925 | 1,178,719 | 269,374 | 1,591,164 |
| Sub-total | | 371,028 | 337,133 | 115,186 | 1,698,866 | 984,767 | 3,506,980 |
| | GF- | 3,923,677 | 1,503,397 | 1,147,163 | 7,789,859 | 3,221,512 | 17,585,608 |
| | Projects- | 898,456 | 1,297,337 | 933,518 | 3,415,198 | 1,119,557 | 7,664,066 |
| **Grand total** | | **4,822,133** | **2,800,734** | **2,080,681** | **11,205,057** | **4,341,069** | **25,249,674** |

The emergency appeals covered USD 500,000. In the Gaza Field, 30% of the expenditure was covered through donations. The expenditures by Field are: Gaza at USD 11.2 million (44.4%) as the highest, followed by Jordan at USD 4.8 million (19.1%),(West Bank at USD 4.3 million (17.2%), Lebanon at USD 2.8 million (11.1%) and Syria at USD 2.08 million (8.2%).

In 2012, the average expenditure Agency-wide on medical supplies per medical consultation was USD 2.5 excluding Syria Field, representing 8.7% increase over 2011 (USD 2.3).

The average expenditure on medical supplies per served refugee was USD 7.4 Agency-wide, compared with USD 7.5 in 2011. The number of served population in Syria Field is not available.

### *Expenditure on medicines*

The total expenditure on medicines in 2012 was USD 21.54 million, of which 38% was spent on medicines for the treatment of diabetes and cardio-vascular diseases (27% for diabetes, 11% for cardiovascular diseases) and 13% on antibiotics.

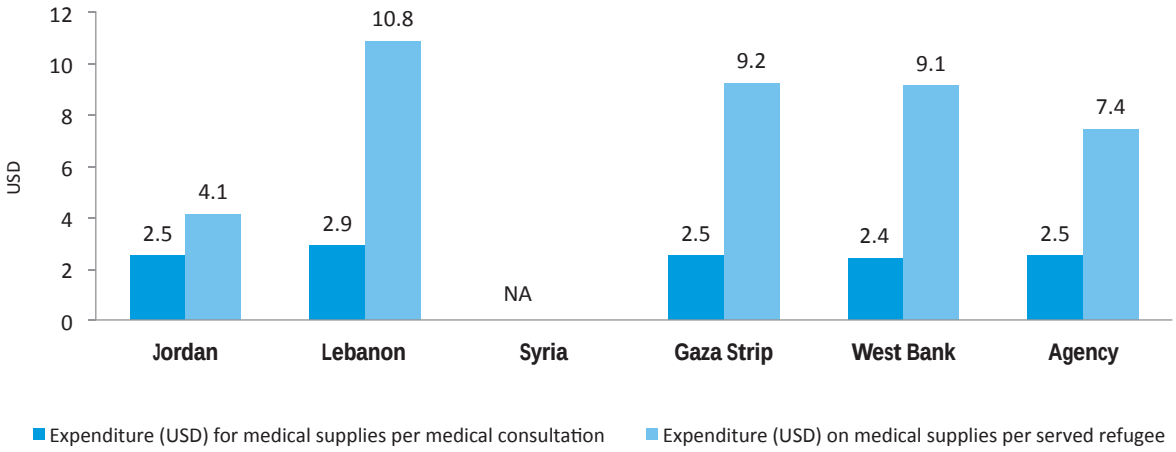



Figure 10 - Average expenditure (USD) for medicines and medical supplies, 2012

This is a result of the decrease in number of medical consultations by 9.5% agency wide.

In 2012, the average expenditure for medicines Agency-wide per medical consultation was USD 2.1 excluding Syria Field. The average expenditure on medicines per served refugee was USD 6.3 Agency-wide.

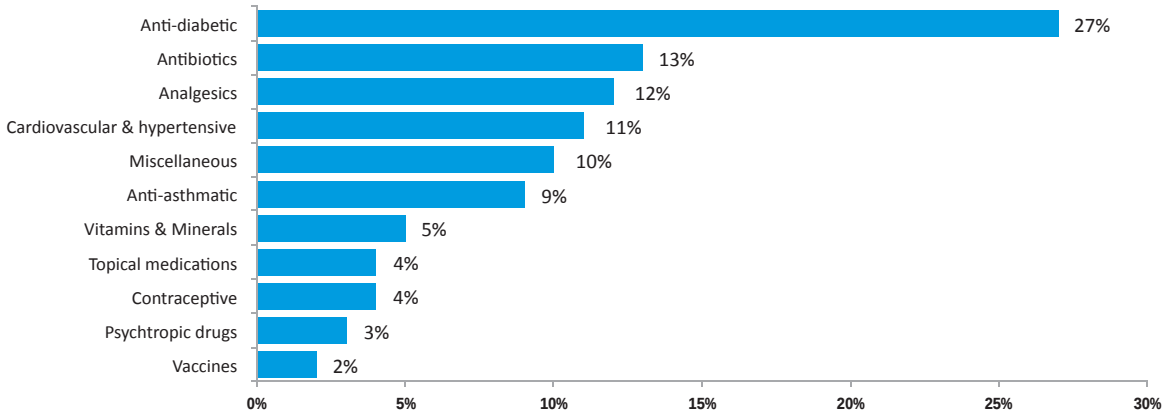



Figure 11 - Proportional expenditure on medicines per therapeutic group

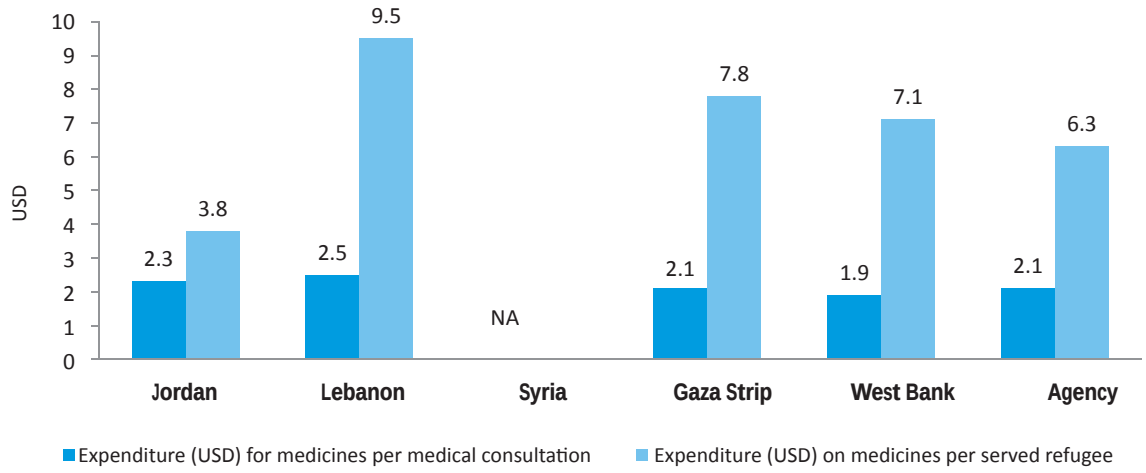



Figure 12 - Average expenditure for medicines (USD), 2012

### *Expenditure on medical equipment and related supplies*

During 2012, medical equipment and related supplies accounted for 14% (USD 3.5million) of the total expenditure for medical supplies (USD 25.2million). The expenditure on medical equipment from all funds was USD 3.5 million and includes all service contracts and maintenance. Detailed information on equipment expenditure may be found in Section 3, Tabel 28 of this report.

### Antibiotic prescription rate

UNRWA aims for an antibiotic prescription rate between 20% and 25% in line with WHO recommendations. Antibiotic prescription rates ranged from 20% in Lebanon to 33% in Syria in 2012, with variable progress among Fields over the past three years (Figure 11).

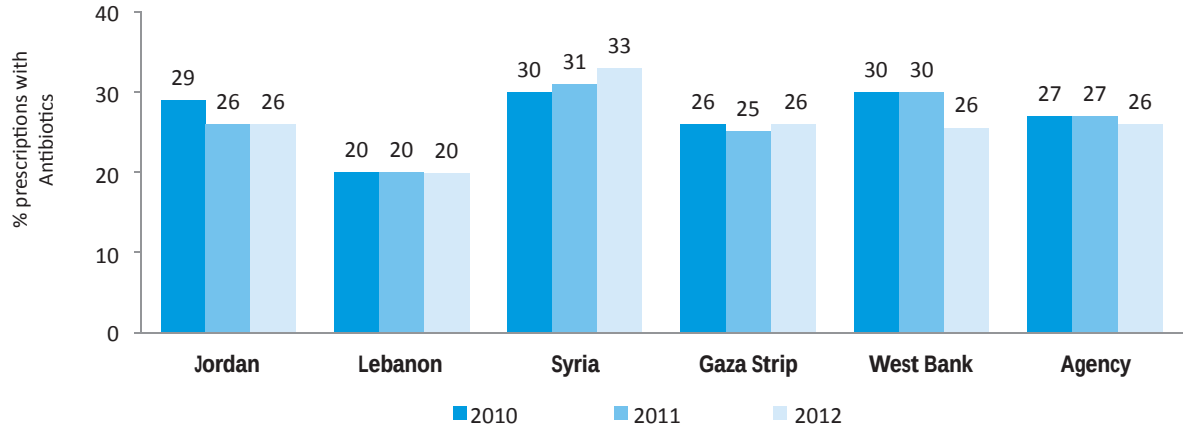



Figure 13 - Antibiotic prescription rate (%) by Field

Donations of medical supplies

In 2012, UNRWA received donations of medical supplies (medicines, medical equipment and others) equivalent to USD 7.54 million, of which Gaza Field received 45%, followed by Lebanon (17%), Jordan (15%), Syria (12%) and West Bank (11%). Out of 7.54 million, in-kind donations from medicines and consumables were valued as 6.0 million USD based on UNRWA procurement prices. The following medicines and consumables were donated during 2012:

- The Ministry of Health of the Palestinian Authority and UNFPA provided the West Bank and Gaza Fields with vaccines, iron drops and tablets as well as disposable syringes, needles and modern contraceptives;
- The Ministry of Health in Jordan provided UNRWA with vaccines and contraceptives;
- UNICEF and the NGO Health Care Society provided Lebanon Field with vaccines, medications, disposable syringes and needles;
- Syria's Ministry of Health and UNICEF provided Syria Field with vaccines, tuberculosis treatment and other miscellaneous drugs.

# Regional emergency preparedness, response readiness and relief

Intermittent violence in occupied palestinian territory coupled with unfolding humanitarian crisis in Syria clearly underscore the need for health department not only to focus routine humanitarian health issues, also on building skills and assets to prevent avoidable deaths and diseases in Palestine refugees experiencing acute humanitarian crises.

In this regard, the Syria crisis has afforded the opportunity for Health Department to plan for gradual build up to staff capacities to anticipate health risks, address priority health needs, and monitor emerging health threats. Strengthening of operational capacities, response readiness measures like strategic positioning of buffer stocks of essential, life saving medicines, fuel, generators, IT equipment, projecting population-based estimates of critical health supplies, working on elastic supply chains, humanitarian information management, contingency planning are some of the steps in that direction. Similarly, the UNRWA accords the utmost importance to the safety and well-being of its staff responding to humanitarian crisis. Continuity of operations planning (COOP), emergency evacuations, simulations, handling mental stress in crisis, picking up early warning signs of potentially deteriorating security situation etc – are all aimed at ensuring health and safety of our staff.

## The occupied palestinian territory

The humanitarian crisis continues in the occupied palestinian territories, with intermittent violence, displacement, movement restrictions and intimidation. Furthermore the combination of conflict and insecurity, political instability, severe restrictions on the movement of people and goods within the West Bank and between Gaza increasing poverty (particularly in Gaza) continue to negatively impact on the health status of Palestine refugees.

Health status continues to be compounded by on-going food insecurity and the level of food insecurity among Palestine households is still very high. According to a 2011 study published by the World Food Programme, the Food and Agriculture Organization of the United Nations and UNRWA, 60% of households in Gaza were food insecure or vulnerable to food insecurity even after having received food assistance from UNRWA and other agencies. Approximately 26% of the population had "poor and borderline" diets, such as a reduced consumption of fruits and dairy products. Large shares of the population in Gaza reported relying on adverse coping strategies in times of economic hardship: 54% by reducing food quality and 34% by reducing the number of daily meals. Psychological and behavioural disorders, as well as domestic violence, has also emerged as a health priority for UNRWA in the occupied palestinian territory.

*West Bank*

In 2012, the mobility of health teams including doctors and nurses was jeopardized by frequent closures and checkpoints. Different communities in Area C, faced difficulties in accessing health services due to road detours, road barriers, separation wall and higher costs of transportation. Obstacles to obtaining building permits hindered appropriate maintenance and expansion of the health infrastructure. Movement restrictions also prevented Palestinians from accessing six Palestinian NGO hospitals in East Jerusalem. The hospitals are the main providers of specialized care for the occupied Palestinian territory. In the face of these challenges, UNRWA continued to provide health services to isolated communities through mobile health teams providing a full range of essential curative and preventive medical services to about 13 000 patients per month living in over 59 isolated locations, a community mental health program, and provided financial support to enable access to hospital care.

*Gaza*

Blockade for the most part of the Gaza Strip continued to seriously limit UNRWA's ability to provide services befitting the health needs, to ensure timely and quality medical services in the area. Electricity cuts restrict medical treatment and construction and rehabilitation of health infrastructure is limited. There are on-going shortages of medicines in Palestinian Authority health facilities, for example, a cancer patient in the Gaza Strip can only expect to find half of the drugs required by chemotherapy protocols [6]. Patients referred for treatment abroad experience delays in obtaining permits to exit the Gaza Strip and this can at times result in death. As a result of their living conditions, Gazans experience significant mental stress. Eight days of conflict in November 2012 further compounded the plight of Gazans who overwhelmingly (> 80%), were already in need of humanitarian assistance and relief. 103 Palestinian civilians were killed and over 1000 were injured in this week. UNRWA's own rapid assessment indicated over 450 homes totally and approximately 8000 partially destroyed rendering over 15,000 people displaced. On health side 3 hospitals and 5 PHCs sustained damage. This conflict also significantly increased the need for psycho-social support for Gazan children, adolescents, and families; North Gaza and the middle area reported the highest incidence of psychosocial symptoms and other mental disorders among both adults and children. The stress of occupation, the inability of men to provide for their families and the consequent reversal of gender roles have also reportedly contributed to an increase in domestic violence. Almost a quarter of the patients assisted through UNRWA's community mental health services in the Gaza Strip during 2012. UNRWA provides primary health care to 1.2 million registered refugee in Gaza Strip through 22 health centres, while also ensuring emergency preparedness through training of staff and propositioning of essential medical supplies.

*Syrian Arab Republic*

With continuous conflict in 2012, UNRWA's health programme key focus was ensuring access to health services and mitigate life-threatening health risks. Measures taken by UNRWA included: prioritizing care for children, pregnant women and NCD patients; providing NCD patients with sufficient medicines for longer periods; opening of outreach-based health points to improve access etc. Strategic propositioning of buffer stocks of life-saving medicines was also being strived for but supplier production capacities, procedural delays, insecurity, shrinking humanitarian corridors, all made that target difficult to meet. Especially critical was lack of adequate supply of Insulin across Syria, a potentially life threatening deficit for diabetic patients. However stockpiling of fuel, safe drinking water, working generators etc was successful.

*Lebanon: Palestine Refugees from Syria*

By late 2012 over 200,000 refugees from Syria crossed the border into Lebanon to evade the conflict. Over 15,000 of these refugees are Palestine refugees from Syria (PRS). With exhausted coping capacities, multiple displacements, poor access to health services inside Syria – all have increased pressure on UNRWA health centers, staff, medicine and other supplies' stocks, and available funding in Lebanon to provide immediate PHC, arrange for life saving secondary and tertiary care, including trauma care for wounded PRS.

6. ICRC, Israel and the Occupied Territories: Another Year Without Change, February 2012

# Human resources

*Field health staffing review*

As a result of the health reform conducted during 2011-2012, fifteen post were recommended at Field level. Some of the Fields have only partially implemented these post due to the difficult financial situation. It is expected that Fields will implement the changes in phases, according to priorities and the availability of resources. Reallocation of existing resources may need to be considered.

The key objectives of the human resources part of the health reform was to align the health staff functions with the changing needs in health services and to ensure internal consistency and fairness to staff functioning with similar qualification requirements. Job descriptions were therefore, updated accordingly.

*Headquarters health staffing review*

The Health Department, HQ, Amman has established the following three project coordinator posts to meet the need to coordinate planning, implementing, monitoring and evaluating the different components of the health reform in particular the Family Health Team Approach.

1. Family Health Team Project Coordinator:

- Coordinates and facilitates the preparation, introduction and expansion of the FHT Project.
- Coordinates and conducts monitoring and evaluation activities concerning the Project based on defined monitoring indicators and produces regular progress reports.
- Develops and updates the detailed work plan of the Project.
- Manages administrative, financial and logistical-issues related to the Project in close collaboration with the relevant departments and units in UNRWA at all levels.
- Facilitates and organizes regular communication among the relevant UNRWA staff at all levels in coordination with Family Health Team Communications Officer.

2. e-Health Project Coordinator:

- Coordinates and facilitates with staff from the Health Department, Information Systems Division and other relevant departments the preparation, introduction and expansion of the e-Health Project.
- Coordinates and conducts monitoring and evaluation activities concerning the Project based ondefined monitoring indicators.
- Develops and updates the detailed work plan of the Project-which includes defined activities, budgetary requirements, timelines, expected outcomes and monitoring indicators- and the o verall strategy of the e-health in line with the Family Health Team Approach of the Agency.

3. Family Health Team Communications Officer:

- Develops a communication strategy for UNRWA's Family Health Team approach, with packages tailored to various audiences including UNRWA health staff, beneficiary communities, host country authorities and donors.
- Facilitates and coordinates with relevant UNRWA Field offices to pilot communication approaches along with the piloting of the Family Health Team approach.
- Develops communication packages–which define communication tools, including printed, audio - visual and other communication materials as relevant-targeting various audiences, including patients, communities, UNRWA staff, host coun tries, and international partners.

# Gender mainstreaming

In accordance with the UNRWA Gender Policy adopted in 2007 and the Health Gender Mainstreaming Strategy (GMS) adopted in 2008. During 2012, the Health Programme worked to support the fields in the implementation of the prioritized interventions to reduce the gender gaps in access to pre-conception care and family planning and in the health workforce as well as addressing gender based violence.

## Including men in family planning and preconception care

The Health Department printed, and distributed to all fields, technical guidance and management protocols on including men in pre-conception care and family planning. Training and workshop sessions were organized in the fields for health centres staff. However, staffs continue to report cultural obstacles as major challenges and lack of systems to record the number of men accessing the services.

## Addressing Gender Based Violence (GBV)

The Health Department contributions to addressing GBV are described under Strategic Objective 2.

## Achieving gender disaggregated data

The Health Department collects a range of gender disaggregated data, including outpatient consultations, hospital admissions, oral health consultations, radiology service utilization and patients with diabetes and hypertension under care.

## Addressing the gender gap in the workforce

To address the gender gap in the workforce, the UNRWA Health Department encourages the recruitment of female staff while remaining mindful of the need for a competitive and transparent selection process. The percentage of women recruited in all categories and in all Fields varies from 30% in Jordan to 62% in the Gaza. However the staffing structure in UNRWA Health Centres, similarly to what can be observed in the host countries reflects stereotypes in gender roles and jobs.

Nurses are primarily female and Medical Officers are mostly male. To tackle these gaps, UNRWA is working to ensure that recruitment procedures are gender-bias free. For example, actions are taken to enhance the capacity of interview panels to carry out gender sensitive interviews. Advertised positions have been revised to adopt gender-neutral language. Male nurses' appointment is encouraged and women are encouraged to fill in senior positions. The health care staff capacity will also be enhanced to include men in pre-conception care and in Family Planning counselling. Besides, the Health programme is committed to sex-disaggregate all data including health facility utilization trends by the end of 2013.

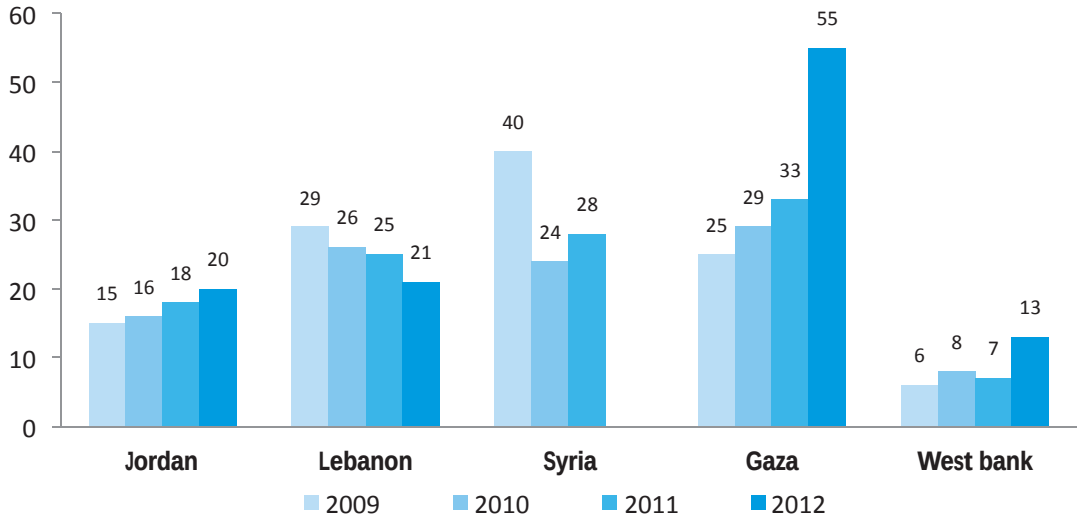



Figure 14 - Percentage of female medical officers in UNRWA health centres, 2009-2012

# Section 3: DATA

## Part 1: Agency wide trends for selected indicators

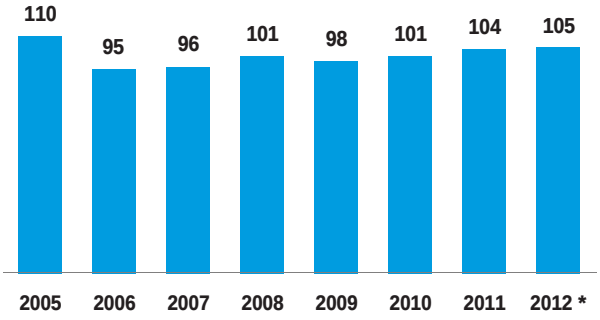



Figure 15 - Average daily medical consultations per doctor

* For 2012, data from Syria is not included

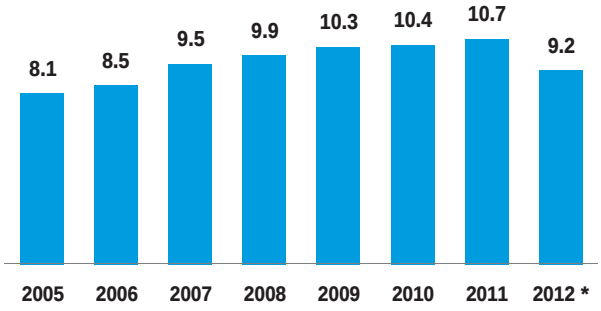



Figure 16 - No. of outpatient consultations (million)

* For 2012, data from Syria is not included

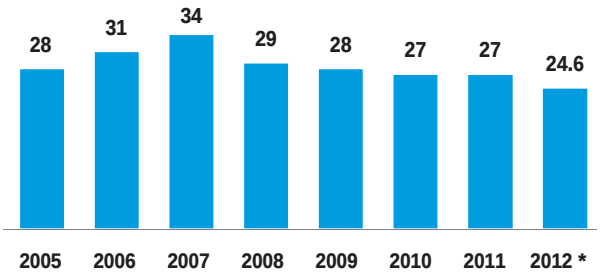



Figure 17 - Antibiotics prescription rate

* For 2012, data from Syria is not included

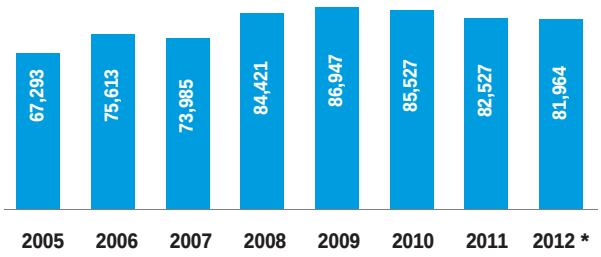



Figure 18 - No. of hospitalizations (including Qalqilia hospital)

* For 2012, data from Syria is not included

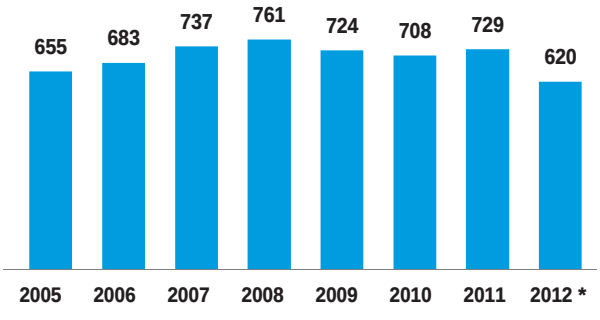



Figure 19 - No. of dental consultations (thousand)

* For 2012, data from Syria is not included

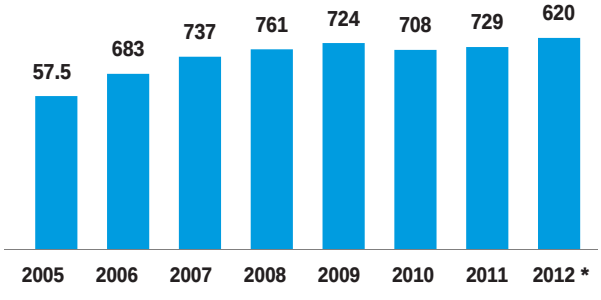



Figure 20 - % of pregnant women registered during the 1st trimester

* For 2012, data from Syria is not included

# Part 1: Agency wide trends for selected indicators

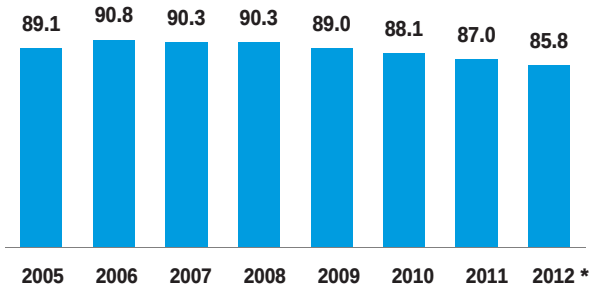



Figure 21 - % of pregnant women attending at least 4 ANC visit

* For 2012, data from Syria is not included

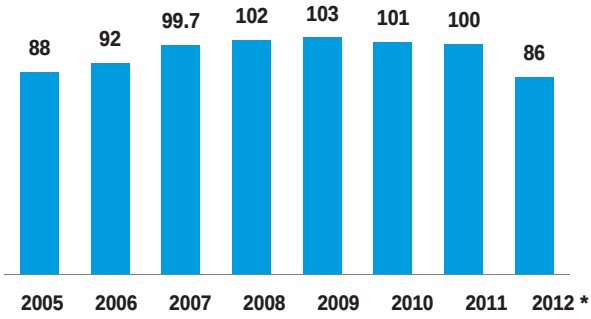



Figure 22 - No. of newly registered pregnant women (thousand)

* For 2012, data from Syria is not included

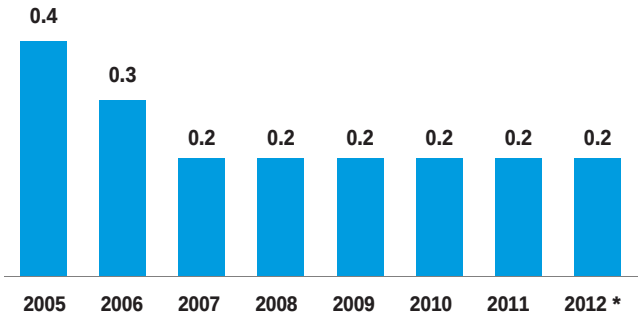



Figure 23 - % of delivers with unknown outcome

* For 2012, data from Syria is not included

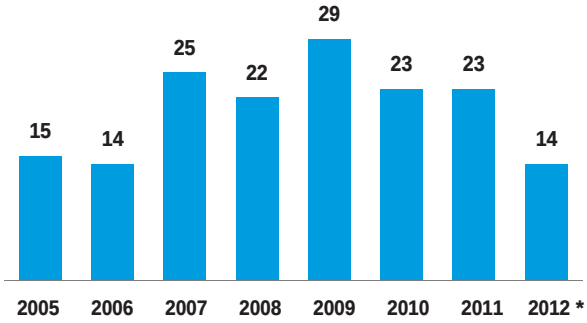



Figure 24 - No. of maternal deaths

* For 2012, data from Syria is not included

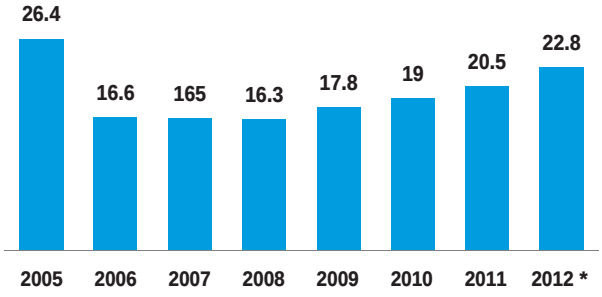



Figure 25 - % of caesarean section deliveries

* For 2012, data from Syria is not included

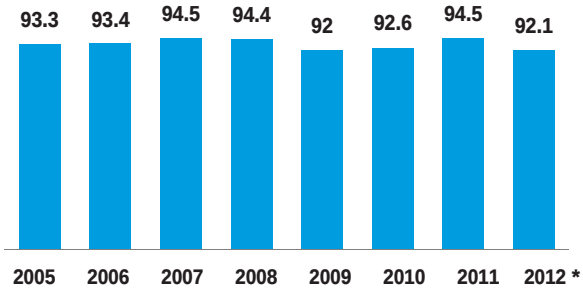



Figure 26 - % of women attending PNC within 6 weeks of delivery

* For 2012, data from Syria is not included

# Part 1: Agency wide trends for selected indicators

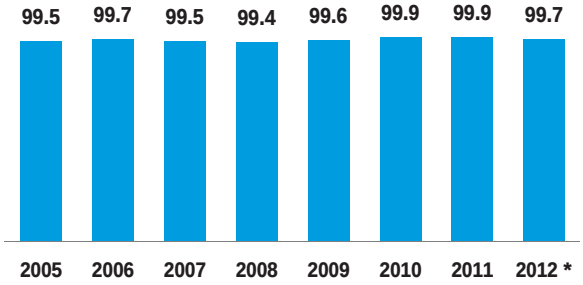



Figure 27 - % of pregnant women protected against tetanus

* For 2012, data from Syria is not included

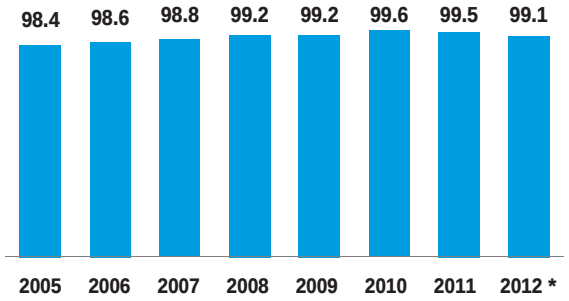



Figure 28 - % of deliveries in health institutions

* For 2012, data from Syria is not included

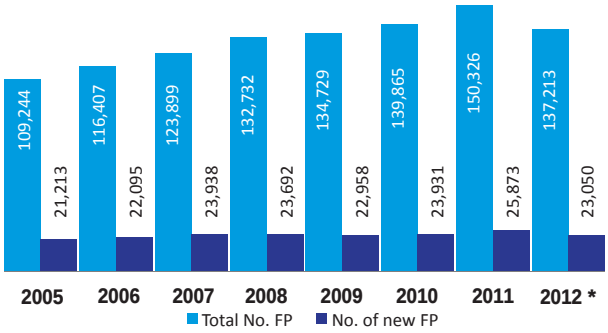



Figure 29 - New & total no. of Family Planning acceptors

* For 2012, data from Syria is not included

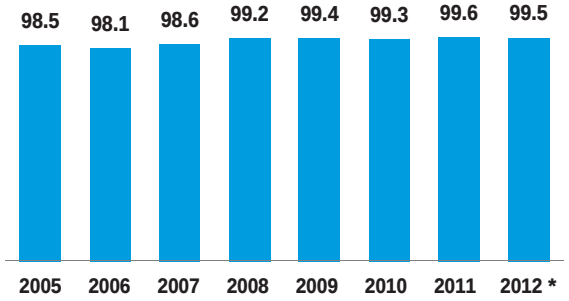



Figure 30 - % of children 18 months old received all EPI booster

* For 2012, data from Syria is not included

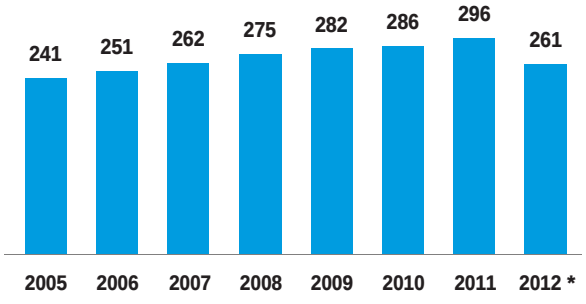



Figure 31- No. of children 0-3 years registered (thousand)

* For 2012, data from Syria is not included

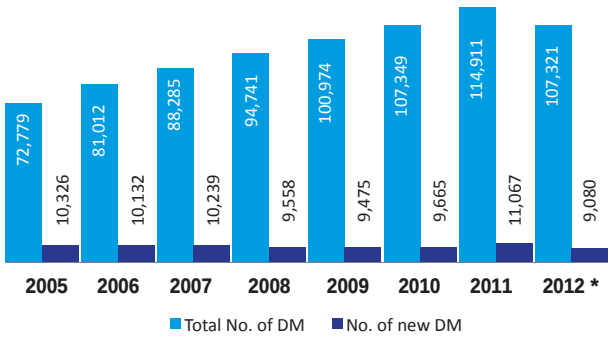



Figure 32 - New & total no. of patients with diabetes

* For 2012, data from Syria is not included

# Part 1: Agency wide trends for selected indicators

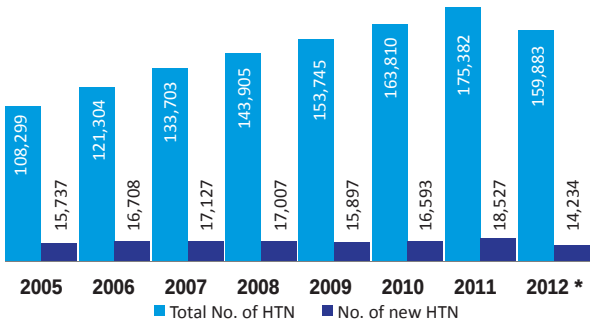



Figure 33 - New & total no. of patients with hypertension

* For 2012, data from Syria is not included

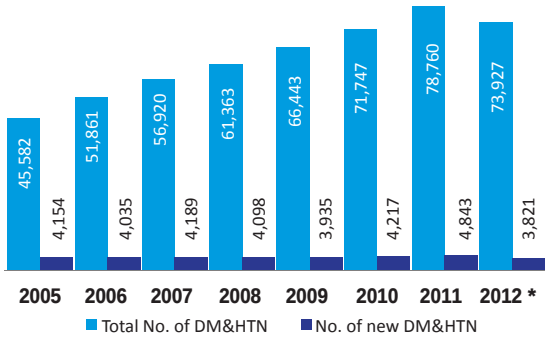



Figure 34 - New & total no. of patients with diabetes & hypertension

* For 2012, data from Syria is not included

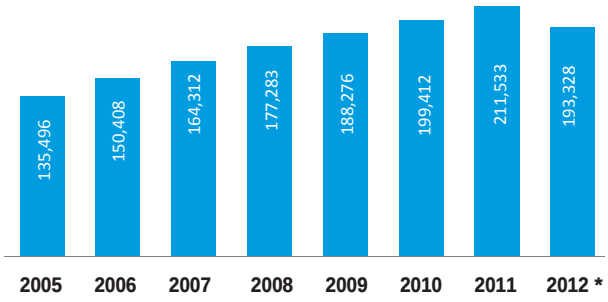



Figure 35 - Total No. of all patients with diabetes and/ or hypertension

* For 2012, data from Syria is not included

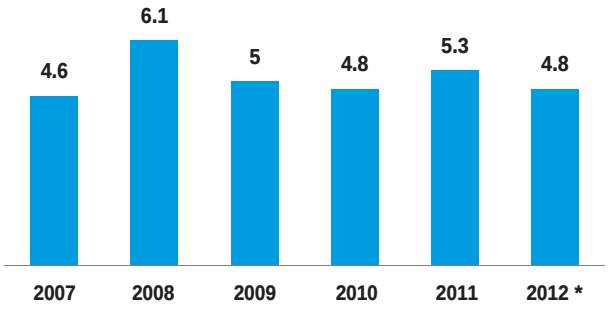



Figure 36 - % of NCD patients defaulters

* For 2012, data from Syria is not included

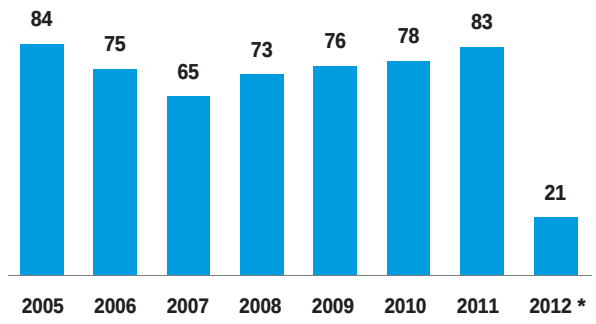



Figure 37- No. of new reported TB cases

* For 2012, data from Syria is not included

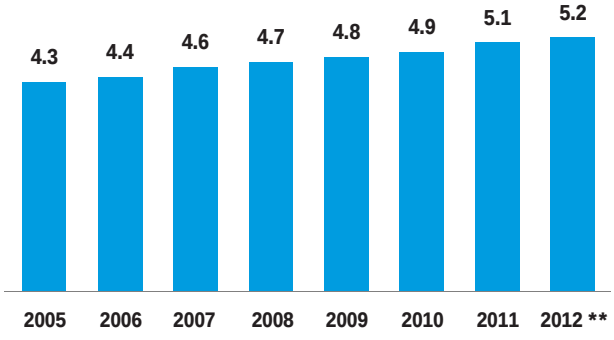



Figure 38 - No. of registered populations (millions)

* For 2012, data from Syria is not included

# Part 2- Field implementation plans 2012/2013 indicators trends

Table 15 - Field Implementation Plan 2012/2013 - Indicators Trends: Jordan Field

| SO | Indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| Strategic Objective 1 | Average daily medical consultations per doctor | 95.0 | 98.2 | 96.2 | 101.0 | 96.2 | 87 |
| | Antimicrobial prescription rate (%) | 29.6 | 24.1 | 33.1 | 29 | 26 | 26 |
| | % Preventive dental consultations of total dental consultations | 29.5 | 29.6 | 21.8 | 25.5 | 30.3 | 31.4 |
| | % 4th grade school children identified with vision defect - male | 15.7 | 11.3 | 11 | 11.2 | 13.6 | 11.9 |
| | % 4th grade school children identified with vision defect - female | 18.2 | 15.4 | 15.1 | 16.7 | 19.4 | 19.3 |
| | No. of hospitalizations(1) | 12,457 | 22,917 | 24,114 | 19,859 | 16,069 | 14,481 |
| | % Health centres implementing at least one E-health module | 0 | 0 | 0 | 4.8 | 12.5 | 54.2 |
| | % Health centres with no stock rupture of 15 tracer items (2) | | | | | | 93 |
| | % Health centres with emergency preparedness plans in place (3) | | | | | | _ |
| Strategic Objective 2 | % Pregnant women with at least 4 ANC visits | 87.6 | 87.9 | 86.4 | 85.2 | 86.2 | 82.2 |
| | % 18 month old children that received 2 doses of Vitamin A | 98.1 | 98.7 | 98.9 | 98.6 | 98.9 | 99.0 |
| | No. of women newly enrolled in preconception care program (4) | | | | | 3332 | 3267 |
| | % Women attending postnatal care within 6 weeks of delivery | 90.5 | 91.0 | 85.7 | 87.5 | 88.0 | 83.5 |
| | No. of continuing family planning acceptors | 32,799 | 35,246 | 35,129 | 37,307 | 38,640 | 39,612 |
| | %. of health centres with at least one staff member trained on detection and referral of GBV cases (2) | | | | | | 37.5 |
| | Diphtheria and tetanus coverage among targeted students | 98.8 | 100 | 100 | 99.6 | 97.8 | 98.1 |
| Strategic Objective 3 | % Target population ≥ 40 years screened for diabetes mellitus (2) | | | | | | 8.6 |
| | % Patients with diabetes under control according to defined criteria (3) | | | | | | 27 |
| | No. of new patients with diabetes mellitus | 3,504 | 3,472 | 3,575 | 3,638 | 4,137 | 3,407 |
| | Total no. of patients with diabetes mellitus | 29,844 | 31,765 | 33,907 | 36,466 | 39,299 | 40,706 |
| | No. of new patients with hypertension | 5,508 | 5,733 | 5,749 | 5,533 | 6,544 | 5,082 |
| | Total no. of patients with hypertension | 43,195 | 46,084 | 49,531 | 52,794 | 56,480 | 57,940 |
| | No. of new patients with diabetes & hypertension | 1,673 | 1,535 | 1,643 | 1,591 | 1,919 | 1,506 |
| | Total no. of patients with diabetes & hypertension | 20,592 | 21,673 | 23,509 | 25,307 | 27,470 | 28,920 |
| | No. of vaccine preventable disease outbreaks | 0 | 0 | 0 | 0 | 0 | 0 |
| | % Children 18 months old that received all booster doses of EPI vaccines | 98.1 | 98.7 | 98.9 | 98.6 | 98.9 | 99.0 |
| | No. of new TB cases detected | 7 | 8 | 2 | 5 | 5 | 0 |

(1) Includes Qalqilia Hospital & other hospital admissions subsidized by UNRWA
(2) New indicators starting 2012
(3) Criteria will change in 2012, according to (HbA1c clinical audit)
(4) PCC program established in 2011

# Part 2- Field implementation plans 2012/2013 indicators trends

Table 16 - Field Implementation Plan 2012/13 - Indicator Trends: Lebanon Field

| SO | Indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| Strategic Objective 1 | Average daily medical consultations per doctor | 89.0 | 101.6 | 107.1 | 104.0 | 117.3 | 103 |
| | Antimicrobial prescription rate (%) | 19 | 22.1 | 19.9 | 20 | 20 | 20 |
| | % Preventive dental consultations of total dental consultations | 33.5 | 22.1 | 24.8 | 27.4 | 35 | 32 |
| | % 4th grade school children identified with vision defect – male | 15 | 15.8 | 11.9 | 12 | 12.6 | 9.9 |
| | % 4th grade school children identified with vision defect female | 18 | 18.9 | 15.2 | 12.3 | 9.9 | 13.2 |
| | No. of hospitalizations(1) | 21,118 | 20,978 | 21,912 | 25,763 | 26,030 | 29,767 |
| | % Health centres implementing at least one E-health module | | | 100 | 100 | 100 | 100 |
| | % Health centres with no stock rupture of 15 tracer items (2) | | | | | | 91.9 |
| | % Health centres with emergency preparedness plans in place (3) | | | | | | 100 |
| Strategic Objective 2 | % Pregnant women with at least 4 ANC visits | 93.8 | 95.9 | 93.2 | 92.3 | 90.9 | 86.2 |
| | % 18 month old children that received 2 doses of Vitamin A | 100.0 | 99.7 | 98.6 | 99 | 100 | 99.2 |
| | No. of women newly enrolled in preconception care program (4) | | | | | 1,680 | 1,432 |
| | % Women attending postnatal care within 6 weeks of delivery | 96.5 | 97.5 | 96.6 | 95.1 | 97.0 | 97.5 |
| | No. of continuing family planning acceptors | 12,345 | 12,598 | 12,942 | 13,269 | 13,597 | 14,057 |
| | % of health centres with at least one staff member trained on detection and referral of GBV cases (2) | | | | | | 25 |
| | Diphtheria and tetanus coverage among targeted students | 100 | 100 | 100 | 100 | 100 | 100 |
| Strategic Objective 3 | % Target population ≥ 40 years screened for diabetes mellitus (2) | | | | | | 9.8 |
| | % Patients with diabetes under control according to defined criteria (3) | | | | | | 33.8 |
| | No. of new patients with diabetes mellitus | 540 | 614 | 671 | 735 | 729 | 569 |
| | Total no. of patients with diabetes mellitus | 8,665 | 8,967 | 9,529 | 10,070 | 10,965 | 11,218 |
| | No. of new patients with hypertension | 1,483 | 1,463 | 1,587 | 1,643 | 1,795 | 1,366 |
| | Total no. of patients with hypertension | 17,328 | 17,807 | 18,657 | 19,481 | 20,713 | 21,090 |
| | No. of new patients with diabetes & hypertension | 198 | 231 | 274 | 338 | 343 | 214 |
| | Total no. of patients with diabetes & hypertension | 6,440 | 6,640 | 7,106 | 7,594 | 8,437 | 8602 |
| | No. of vaccine preventable disease outbreaks | 0 | 0 | 0 | 0 | 0 | 0 |
| | % Children 18 months old that received all booster doses of EPI vaccines | 100.0 | 99.7 | 98.6 | 99 | 100 | 99.2 |
| | No. of new TB cases detected | 12 | 14 | 11 | 13 | 19 | 11 |

(1) Includes Qalqilia Hospital & other hospital admissions subsidized by UNRWA
(2) New indicators starting 2012
(3) Criteria will change in 2012, according to (HbA1c clinical audit)
(4) PCC program established in 2011

# Part 2- Field implementation plans 2012/2013 indicators trends

Table 17 - Field Implementation Plan 2012/13 - Indicator Trends: Syria Field

| SO | Indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| Strategic Objective 1 | Average daily medical consultations per doctor | 92.0 | 112.8 | 83.2 | 97.0 | 94.9 | NA |
| | Antimicrobial prescription rate (%) | 32 | 34 | 27 | 30 | 31 | 33 |
| | % Preventive dental consultations of total dental consultations | 45.8 | 48.1 | 32 | 41.3 | 40.9 | NA |
| | % 4th grade school children identified with vision defect – male | 2 | 4.5 | 4.5 | 2.7 | 2.9 | 9.2 |
| | % 4th grade school children identified with vision defect female | 1 | 4 | 4 | 2.6 | 2.5 | 11.9 |
| | No. of hospitalizations(1) | 10,890 | 11,012 | 9,963 | 8,543 | 6,926 | 4,580 |
| | % Health centres implementing at least one E-health module | 0 | 0 | 0 | 0 | 0 | 0 |
| | % Health centres with no stock rupture of 15 tracer items (2) | | | | | | NA |
| | % Health centres with emergency preparedness plans in place (3) | | | | | | NA |
| Strategic Objective 2 | % Pregnant women with at least 4 ANC visits | 86.6 | 87.6 | 86.5 | 79.5 | 78.5 | 76.6 |
| | % 18 month old children that received 2 doses of Vitamin A | 99.9 | 99.3 | 99.5 | 99.4 | 99.9 | NA |
| | No. of women newly enrolled in preconception care program (4) | | | | | 638 | 302 |
| | % Women attending postnatal care within 6 weeks of delivery | 93.6 | 93.1 | 95.4 | 95.6 | 96.0 | NA |
| | No. of continuing family planning acceptors | 18,169 | 18,267 | 18,751 | 18,778 | 19,313 | 8,436 |
| | No. of health centres with at least one staff member trained on detection and referral of GBV cases (2) | | | | | | NA |
| | Diphtheria and tetanus coverage among targeted students | 100 | 99.6 | 99.6 | 97.9 | 99.2 | 86.7 |
| Strategic Objective 3 | % Target population ≥ 40 years screened for diabetes mellitus (2) | | | | | | NA |
| | % Patients with diabetes under control according to defined criteria (3) | | | | | | NA |
| | No. of new patients with diabetes mellitus | 1,001 | 1,089 | 951 | 984 | 1,033 | NA |
| | Total no. of patients with diabetes mellitus | 10,814 | 11,428 | 11,985 | 12,618 | 13,360 | NA |
| | No. of new patients with hypertension | 1,877 | 1,946 | 1,710 | 1,977 | 2,066 | NA |
| | Total no. of patients with hypertension | 17,777 | 18,847 | 19,878 | 21,045 | 22,351 | NA |
| | No. of new patients with diabetes & hypertension | 393 | 417 | 392 | 440 | 452 | NA |
| | Total no. of patients with diabetes & hypertension | 7,065 | 7,739 | 8,203 | 8,780 | 9,598 | NA |
| | No. of vaccine preventable disease outbreaks | 0 | 0 | 0 | 0 | 0 | 0 |
| | % Children 18 months old that received all booster doses of EPI vaccines | 99.9 | 99.3 | 99.5 | 99.4 | 99.9 | NA |
| | No. of new TB cases detected | 33 | 45 | 59 | 50 | 52 | 54 |

(1) Includes Qalqilia Hospital & other hospital admissions subsidized by UNRWA
(2) New indicators starting 2012
(3) Criteria will change in 2012, according to (HbA1c clinical audit)
(4) PCC program established in 2011

# Part 2- Field implementation plans 2012/2013 indicators trends

Table 18 - Field Implementation Plan 2012/13 - Indicator Trends: Gaza Field

| SO | Indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| Strategic Objective 1 | Average daily medical consultations per doctor | 116.0 | 102.6 | 97.0 | 98.1 | 102.7 | 113 |
| | Antimicrobial prescription rate (%) | 55.4 | 29 | 25.7 | 26 | 25.2 | 26.0 |
| | % Preventive dental consultations of total dental consultations | 39.9 | 39.3 | 28.8 | 26.8 | 26.3 | 26.3 |
| | % 4th grade school children identified with vision defect – male | 10 | 9.3 | 16.3 | 12.9 | 12.1 | 12.6 |
| | % 4th grade school children identified with vision defect female | 13.5 | 11.8 | 18.1 | 18.2 | 17.8 | 16.4 |
| | No. of hospitalizations (1) | 3,944 | 4,763 | 4,590 | 4,575 | 4,810 | 8,719 |
| | % Health centres implementing at least one E-health module | 0 | 0 | 0 | 0 | 0 | 32 |
| | % Health centres with no stock rupture of 15 tracer items (2) | | | | | | 98.8 |
| | % Health centres with emergency preparedness plans in place (3) | | | | | | 100 |
| Strategic Objective 2 | % Pregnant women with at least 4 ANC visits | 96.1 | 96.0 | 93.6 | 93.7 | 92.5 | 93.5 |
| | % 18 month old children that received 2 doses of Vitamin A | 98.4 | 100.0 | 99.9 | 99.8 | 100.0 | 100 |
| | No. of women newly enrolled in preconception care program (4) | | | | | 6213 | 6773 |
| | % Women attending postnatal care within 6 weeks of delivery | 98.9 | 99.3 | 97.4 | 98.7 | 99.2 | 99.3 |
| | No. of continuing family planning acceptors | 41,874 | 45,232 | 47,479 | 49,797 | 54,698 | 59,001 |
| | %. of health centres with at least one staff member trained on detection and referral of GBV cases (2) | | | | | | 100 |
| | Diphtheria and tetanus coverage among targeted students | 97 | 99.8 | 99.9 | 99.8 | 100 | 100 |
| Strategic Objective 3 | % Target population ≥ 40 years screened for diabetes mellitus (2) | | | | | | 17.3 |
| | % Patients with diabetes under control according to defined criteria (3) | | | | | | 29.5 |
| | No. of new patients with diabetes mellitus | 3,326 | 2,689 | 2,443 | 2,962 | 3,562 | 3,307 |
| | Total no. of patients with diabetes mellitus | 23,301 | 25,647 | 27,447 | 29,313 | 31,338 | 34,114 |
| | No. of new patients with hypertension | 5,656 | 5,120 | 4,273 | 5,460 | 5,770 | 5,646 |
| | Total no. of patients with hypertension | 34,211 | 38,376 | 41,298 | 44,988 | 48,551 | 52,485 |
| | No. of new patients with diabetes & hypertension | 1,108 | 1,023 | 844 | 1,304 | 1,496 | 1,514 |
| | Total no. of patients with diabetes & hypertension | 12,837 | 14,495 | 15,804 | 17,482 | 19,458 | 21,699 |
| | No. of vaccine preventable disease outbreaks | 0 | 0 | 0 | 0 | 0 | 0 |
| | % Children 18 months old that received all booster doses of EPI vaccines | 98.4 | 100.0 | 99.9 | 99.8 | 100.0 | 99.8 |
| | No. of new TB cases detected | 10 | 5 | 2 | 9 | 7 | 9 |

(1) Includes Qalqilia Hospital & other hospital admissions subsidized by UNRWA
(2) New indicators starting 2012
(3) Criteria will change in 2012, according to (HbA1c clinical audit)
(4) PCC program established in 2011

# Part 2- Field implementation plans 2012/2013 indicators trends

Table 19 - Field Implementation Plan 2012/13 - Indicator Trends: West Bank

| SO | Indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| Strategic Objective 1 | Average daily medical consultations per doctor | 88.0 | 89.4 | 109.0 | 105.5 | 103.6 | 107 |
| | Antimicrobial prescription rate (%) | 37 | 37 | 34 | 30 | 30 | 26.0 |
| | % Preventive dental consultations of total dental consultations | 21.7 | 15.5 | 12.7 | 19.5 | 21 | 27.3 |
| | % 4th grade school children identified with vision defect – male | 8.8 | 10.1 | 9.8 | 10.7 | 7.6 | 8.7 |
| | % 4th grade school children identified with vision defect female | 10.8 | 9.2 | 11.1 | 10.7 | 10.7 | 10.8 |
| | No. of hospitalizations (1) | 25,576 | 24,751 | 26,368 | 27,213 | 28,692 | 28,997 |
| | % Health centres implementing at least one E-health module | 0 | 0 | 0 | 0 | 0 | 0 |
| | % Health centres with no stock rupture of 15 tracer items (2) | | | | | | 90.9 |
| | % Health centres with emergency preparedness plans in place (3) | | | | | | 100 |
| Strategic Objective 2 | % Pregnant women with at least 4 ANC visits | 84.4 | 83.6 | 83.3 | 83.6 | 77.2 | 81.5 |
| | % 18 month old children that received 2 doses of Vitamin A | 99.3 | 100 | 99.5 | 99.9 | 99.8 | 100 |
| | No. of women newly enrolled in preconception care program (4) | | | | | 1,585 | 1,653 |
| | % Women attending postnatal care within 6 weeks of delivery | 91.8 | 88.8 | 85.0 | 81.9 | 91.3 | 84.8 |
| | No. of continuing family planning acceptors | 18,709 | 19,519 | 20,428 | 20,814 | 24,078 | 24,543 |
| | %. of health centres with at least one staff member trained on detection and referral of GBV cases (2) | | | | | | 100 |
| | Diphtheria and tetanus coverage among targeted students | 99.2 | 99.1 | 99.5 | 97.9 | 99 | 99.2 |
| Strategic Objective 3 | % Target population ≥ 40 years screened for diabetes mellitus (2) | | | | | | 21.1 |
| | % Patients with diabetes under control according to defined criteria (3) | | | | | | 22.8 |
| | No. of new patients with diabetes mellitus | 1,868 | 2,051 | 1,835 | 1,346 | 1,606 | 1,797 |
| | Total no. of patients with diabetes mellitus | 15,267 | 16,934 | 18,106 | 18,882 | 19,949 | 21,334 |
| | No. of new patients with hypertension | 2,603 | 2,745 | 2,578 | 1,980 | 2,352 | 2,140 |
| | Total no. of patients with hypertension | 20,541 | 22,791 | 24,381 | 25,502 | 27,287 | 28,368 |
| | No. of new patients with diabetes & hypertension | 817 | 892 | 782 | 544 | 633 | 587 |
| | Total no. of patients with diabetes & hypertension | 9,697 | 10,816 | 11,821 | 12,584 | 13,797 | 14,706 |
| | No. of vaccine preventable disease outbreaks | 0 | 0 | 0 | 0 | 0 | 0 |
| | % Children 18 months old that received all booster doses of EPI vaccines | 99.3 | 100 | 99.5 | 99.9 | 99.8 | 100 |
| | No. of new TB cases detected | 3 | 1 | 2 | 1 | 0 | 1 |

(1) Includes Qalqilia Hospital & other hospital admissions subsidized by UNRWA
(2) New indicators starting 2012
(3) Criteria will change in 2012, according to (HbA1c clinical audit)
(4) PCC program established in 2011

# Part 2- Field implementation plans 2012/2013 indicators trends

Table 20 - Field Implementation Plan 2012/13 - Indicator Trends: Agency

| SO | Indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| Strategic Objective 1 | Average daily medical consultations per doctor | 96 | 101 | 98.5 | 101 | 104 | 105* |
| | Antimicrobial prescription rate (%) | 34 | 29.3 | 28 | 27 | 27 | 26 |
| | % Preventive dental consultations of total dental consultations | 34.1 | 32.4 | 24.5 | 27.3 | 29.5 | 28.8* |
| | % 4th grade school children identified with vision defect – male | 9.8 | 9.6 | 12.5 | 11.2 | 11.0 | 11.5 |
| | % 4th grade school children identified with vision defect female | 12.6 | 11.8 | 14.2 | 14.7 | 14.5 | 15.5 |
| | No. of hospitalizations (1) | 73,985 | 84,421 | 86,947 | 85,953 | 82,527 | 86,544 |
| | % Health centres implementing at least one E-health module | 0 | 0 | 21 | 21 | 22.5 | 34.5 |
| | % Health centres with no stock rupture of 15 tracer items (2) | | | | | | 93* |
| | % Health centres with emergency preparedness plans in place (3) | | | | | | 75 |
| Strategic Objective 2 | % Pregnant women with at least 4 ANC visits | 90.3 | 90.3 | 89 | 88.1 | 87.0 | 86.5 |
| | % 18 month old children that received 2 doses of Vitamin A | 98.6 | 99.4 | 99.4 | 99.3 | 99.6 | 99.5* |
| | No. of women newly enrolled in preconception care program (4) | - | - | - | - | 13,448 | 13,427 |
| | % Women attending postnatal care within 6 weeks of delivery | 94.5 | 94.4 | 92.0 | 92.6 | 94.5 | 92.1* |
| | No. of continuing family planning acceptors | 123,899 | 132,732 | 134,729 | 139,965 | 150,325 | 145,649 |
| | %. of health centres with at least one staff member trained on detection and referral of GBV cases (2) | | | | | | 65.6* |
| | Diphtheria and tetanus coverage among targeted students | 98.6 | 99.4 | 99.8 | 98.9 | 99.3 | 99.4 |
| Strategic Objective 3 | % Target population ≥ 40 years screened for diabetes mellitus (2) | | | | | | 12.7* |
| | % Patients with diabetes under control according to defined criteria (3) | | | | | | 28.3* |
| | No. of new patients with diabetes mellitus | 10,239 | 9,915 | 9,475 | 9,665 | 11,067 | 9,080* |
| | Total no. of patients with diabetes mellitus | 87,891 | 94,741 | 100,974 | 107,349 | 114,911 | 107,372* |
| | No. of new patients with hypertension | 17,127 | 17,007 | 15,897 | 16,593 | 18,527 | 14,234* |
| | Total no. of patients with hypertension | 133,052 | 143,905 | 153,745 | 163,810 | 175,382 | 159,883* |
| | No. of new patients with diabetes & hypertension | 4,189 | 4,098 | 3,935 | 4,217 | 4,843 | 3,821* |
| | Total no. of patients with diabetes & hypertension | 56,631 | 61,363 | 66,443 | 71,747 | 78,760 | 73,927* |
| | No. of vaccine preventable disease outbreaks | 0 | 0 | 0 | 0 | 0 | 0 |
| | % Children 18 months old that received all booster doses of EPI vaccines | 98.6 | 99.4 | 99.4 | 99.3 | 99.6 | 99.5* |
| | No. of new TB cases detected | 65 | 73 | 76 | 78 | 83 | 57 |

(1) Includes Qalqilia Hospital & other hospital admissions subsidized by UNRWA
(2) New indicators starting 2012
(3) Criteria will change in 2012, according to (HbA1c clinical audit)
(4) PCC programme established in 2011
(*) Syria Field data not available

# Part 3 – 2012 data tables

Table 21 – Aggregated 2012 data tables

| Field | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| **21.1 – DEMOGRAPHICS** | | | | | | |
| Population of host countries in 2012[1] | 6,508,887 | 4,140,289 | 22,530,746 | 1,710,257 | 2,622,544 | 37,512,723 |
| Registered refugees (no.) | 2,110,114 | 474,053 | 528,711 | 1,263,312 | 895,703 | 5,271,893 |
| Refugees in host countries (%) | 32.4 | 11.4 | 2.3 | 73.9 | 34.2 | 14.1 |
| Refugees accessing (served population) UNRWA health services in 2012 (%/no.) | %56 (1,175,021) | %54.9 (260,408) | NA | %96.9 (1,224,383) | %53.0 (474,920) | %59.6 (3,134,732) |
| Growth rate of registered refugees (%) | 3.1 | 1.8 | 3.6 | 3.8 | 2.4 | 3.1 |
| Children below 18 years (%) | 31.4 | 25.2 | 32.3 | 42.2 | 32.2 | 33.6 |
| Women of reproductive age: 49-15 years (%) | 28.0 | 27.3 | 25.4 | 25.1 | 24.9 | 26.5 |
| Population 40 years and above (%) | 31.3 | 38.9 | 31.6 | 22.6 | 32.0 | 30.1 |
| Population living in camps (%) | 17.6 | 50.3 | 30.1 | 42.8 | 24.2 | 29 |
| Average family size | 5.5 | 5.2 | 4.5 | 6.3 | 5.9 | 5.5 |
| Aging index (%) | 37.9 | 54.0 | 32.9 | 16.6 | 32.5 | 31.0 |
| Fertility rate | 3.5 | 3.2 | 2.5 | 4.3 | 3.9 | 3.5 |
| Male/female ratio | 1.0 | 0.95 | 1.06 | 0.96 | 0.98 | 0.97 |
| Dependency ratio | 53.3 | 45.8 | 553 | 71.4 | 53.6 | 56.8 |
| **21.2 - HEALTH INFRASTRUCTURE** | | | | | | |
| **Primary health care (PHC) facilities (no.):** | | | | | | |
| Inside official camps | 12 | 15 | 12 | 11 | 20 | 70 |
| Outside official camps | 12 | 13 | 11 | 11 | 22 | 69 |
| Total | 24 | 28 | 23 | 22 | 42 | 139 |
| Ratio of PHC facilities per 100,000 population | 1.2 | 5.9 | 4.4 | 1.7 | 4.7 | 2.6 |
| **Services within PHC facilities (no.):** | | | | | | |
| Laboratories | 24 | 17 | 21 | 21 | 41 | 124 |
| Dental clinics: | | | | | | |
| - Stationed units | 29 | 19 | 18 | 19 | 23 | 108 |
| - Mobile units | 4 | 1 | 1 | 3 | 0 | 9 |
| Radiology facilities | 2 | 4 | 0 | 7 | 9 | 22 |
| Physiotherapy clinics | 1 | 0 | 0 | 11 | 6 | 18 |
| Hospitals | 0 | 0 | 0 | 0 | 1 | 1 |
| Hospitals | 13 | 28 | 0 | 7 | 0 | 48 |

7. Sources UNRWA Registration Statistical Bulletin of 2011, and CIA World Fact-book February 2013 population estimates (https://www.cia.gov/library/publications/the-world-factbook/ last accessed on 15/2/2013

# Part 3 – 2012 data tables

| Field | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| **STRATEGIC OBJECTIVE 1** | | | | | | |
| **21.3 - OUTPATIENT CARE** | | | | | | |
| **(a) Outpatient consultations medical officer (no.)** | | | | | | |
| First visits | | | | | | |
| Male | 147,749 | 69,460 | 96,218 | 367,805 | 194,591 | 874,468 |
| Female | 248,013 | 95,566 | 122,191 | 564,674 | 263,078 | 1,288,919 |
| Repeat visits | | | | | | |
| Male | 539,075 | 304,984 | 81,363 | 1,386,654 | 537,634 | 3,705,586 |
| Female | 961,443 | 460,720 | 108,712 | 2,117,319 | 790,985 | 5,734,649 |
| **Sub-total (a)** | **1,896,280** | **930,730** | **408,484** | **4,418,452** | **1,786,288** | **9,440,234** |
| Ratio repeat to first visits | 3.9 | 4.6 | 0.9 | 3.8 | 2.9 | 3.4 |
| **(b) Outpatient consultations specialist (no.)** | | | | | | |
| Gyn.& Obst. | 36,419 | 21,386 | 6,385 | 65,870 | 8,901 | 138,961 |
| Cardiology | 4,414 | 12,020 | 124 | 16,187 | 121 | 32,866 |
| Others | 5,944 | 15,671 | 0 | 14,739 | 3,651 | 40,005 |
| **Sub-total (b)** | **46,777** | **49,077** | **6,509** | **96,796** | **12,673** | **211,832** |
| **Grand total (a) + (b)** | **1,943,057** | **979,807** | **414,993** | **4,515,248** | **1,798,961** | **9,652,066** |
| **Average daily medical consultations / doctor** | **87** | **103** | | **113** | **107** | **105** |
| **21.4 - INPATIENT CARE** | | | | | | |
| Patients hospitalized -Including Qalqilia (no.) | 14,481 | 29,767 | 4,580 | 8,719 | 28,997 | **86,544** |
| Average length of stay (days) | 2.1 | 2.4 | 1.2 | 1.3 | 1.9 | 2.0 |
| **Age distribution of admissions (%):** | | | | | | |
| 4-0 yrs | 0.6 | 17.3 | 14.3 | 0.6 | 14.7 | 11.8 |
| 14-5 yrs | 5.0 | 10.8 | 15.6 | 3.8 | 43.7 | 20.4 |
| 44-15 yrs | 86.7 | 34.9 | 42.0 | 78.4 | 29.0 | 46.4 |
| < 45 yrs | 7.7 | 37.0 | 28.1 | 17.2 | 12.6 | 21.4 |
| **Sex distribution of admissions (%):** | | | | | | |
| Male | 13.3 | 44.3 | 40.9 | 43.4 | 33.9 | 35.3 |
| Female | 86.7 | 55.7 | 59.1 | 56.6 | 66.1 | 64.7 |
| **Ward distribution of admissions (%):** | | | | | | |
| Surgery | 8.7 | 22.6 | 50.3 | 49.7 | 22.6 | 24.5 |
| Internal Medicine | 13.0 | 59.4 | 10.8 | 3.0 | 42.9 | 37.9 |
| Ear, nose & throat | 2.3 | 4.7 | 9.8 | 4.7 | 2.2 | 3.7 |
| Ophthalmology | 0.6 | 2.6 | 9.04 | 3.0 | 3.8 | 3.0 |
| Obstetrics | 75.4 | 10.7 | 20.0 | 39.6 | 28.6 | 30.9 |

# Part 3 – 2012 data tables

| Field | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| **21.5 - ORAL HEALTH SERVICES** | | | | | | |
| Dental curative consultation – Male (no.) | 60.056 | 25,686 | NA | 126,228 | 30,003 | 241,973 |
| Dental curative consultation – Female (no.) | 107,413 | 43,176 | NA | 182,220 | 45,715 | 378,524 |
| Total dental curative consultations (no.) | 167,469 | 68,862 | NA | 303,448 | 75,718 | 620,497 |
| Dental screening consultations – Male (no.) | 20,791 | 6,458 | NA | 22,811 | 5,172 | 55,232 |
| Dental screening consultations – Females (no) | 46,692 | 16,626 | NA | 67,849 | 14,246 | 145,413 |
| Total dental screening consultations (no.) | 67,483 | 23,084 | NA | 90,660 | 19,418 | 200,645 |
| % preventive of total dental consultations | 31.4 | 32.0 | NA | 26.3 | 27.3 | 28.8 |
| Productivity ( workload units /hour) | 49.6 | 42.2 | NA | 87.8 | 62.5 | 62.5 |
| Average daily dental consultations / dental surgeon | 31.4 | 27.7 | NA | 63.0 | 37.3 | 41.7 |
| **21.6 - PHYSICAL REHABILITATION** | | | | | | |
| Trauma patients | 0 | - | - | 3,691 | 481 | 4,172 |
| Non-trauma patients | 473 | - | - | 7,654 | 2,971 | 11,098 |
| Total | 473 | - | - | 11,345 | 3,452 | 15,270 |
| **STRATEGIC OBJECTIVE 2** | | | | | | |
| **21.7 - FAMILY PLANNING SERVICES** | | | | | | |
| New family planning users (no.) | 7,519 | 1,706 | 1,391 | 11,058 | 2,767 | 24,441 |
| Continuing users at end year (no.) | 39,612 | 14,057 | 8,436 | 59,001 | 24,543 | 145,649 |
| Family planning discontinuation rate (%) | 6.2 | 5.6 | 3.9 | 5.2 | 3,8 | 5.1 |
| **Family planning users according to method (%):** | | | | | | |
| IUD | 38.8 | 43.5 | NA | 55.8 | 59.0 | 50.2 |
| Pills | 32.9 | 24.1 | NA | 21.5 | 21.8 | 25.1 |
| Condoms | 24.5 | 31.5 | NA | 18.9 | 16.4 | 21.3 |
| Spermicides | 1.2 | 0.2 | NA | 0.5 | 0.6 | 0.7 |
| Injectables | 2.7 | 0.7 | NA | 3.3 | 2.3 | 2.7 |
| **21.8 - PRECONCEPTION CARE** | | | | | | |
| No. of women newly enrolled in preconception care programme | 3,267 | 1,432 | 302 | 6,773 | 1,653 | 13,427 |

# Part 3 – 2012 data tables

| Field | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| **21.9 - ANTENATAL CARE** | | | | | | |
| Registered refugees (no.) | 2,110,114 | 474,053 | 528,711 | 1,263,312 | 895,703 | 5,271,893 |
| Expected pregnancies (no.)[8] | 59,083 | 9,481 | 14,804 | 46,616 | 26,961 | 156,945 |
| Newly registered pregnancies (no.) | 25,857 | 5,418 | 4,684 | 41,174 | 13,678 | 90,811 |
| Antenatal care coverage (%) | 43.8 | 57.1 | 31.6 | 88.3 | 50.7 | 57.9 |
| **Trimester registered for antenatal care (%):** | | | | | | |
| 1st trimester | 74.1 | 84.4 | 68.4 | 83.4 | 75.3 | 78.2 |
| 2nd trimester | 22.0 | 10.9 | 27.8 | 15.8 | 22.3 | 19.4 |
| 3rd trimester | 3.9 | 4.7 | 3.8 | 0.8 | 2.4 | 2.4 |
| Pregnant women with 4 antenatal visits or more (%) | 82.2 | 86.2 | 76.6 | 93.5 | 81.5 | 86.5 |
| Average no. of antenatal visits | 5.4 | 6.4 | 5.3 | 8.2 | 6.2 | 6.8 |
| **Pregnant women by no. of antenatal visits attended (%):** | | | | | | |
| 1 | 2.9 | 2.6 | 4.1 | 0.2 | 2.2 | 1.7 |
| 3 – 2 | 14.9 | 11.2 | 19.3 | 6.3 | 16.4 | 11.7 |
| 6 – 4 | 55.2 | 43.3 | 59.5 | 46.8 | 54.3 | 51.3 |
| 9 – 7 | 23.5 | 40.5 | 16.5 | 39.8 | 24.2 | 30.7 |
| +10 | 3.6 | 2.4 | 0.6 | 6.9 | 2.9 | 4.5 |
| **21.10 - TETANUS IMMUNIZATION** | | | | | | |
| Pregnant women protected against tetanus (%) | 99.7 | | NA | 100.0 | 99.6 | 99.7 |
| **21.11 - RISK STATUS ASSESSMENT** | | | | | | |
| **Pregnant women by risk status (%):** | | | | | | |
| High | 15.1 | 9.3 | NA | 13.2 | 13.3 | 13.5 |
| Alert | 26.4 | 28.9 | NA | 24.8 | 25.0 | 25.6 |
| Low98.5 | 58.5 | 61.8 | NA | 62.0 | 61.7 | 60.9 |
| **21.12 - DIABETES MELLUTES AND HYPERTENSTION DURING PREGNANCY** | | | | | | |
| Diabetes during pregnancy (%) | 6.1 | 4.9 | NA | 3.1 | 6.0 | **4.6** |
| Hypertension during pregnancy (%) | 9.0 | 6.6 | NA | 12.9 | 3.8 | **9.9** |

8. Expected no. of pregnancies =population X CBR

# Part 3 – 2012 data tables

| Field | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| **21.13 - DELIVERY CARE** | | | | | | |
| Expected deliveries (no.) | 27,382 | 5,454 | NA | 42,514 | 13,062 | 88,412 |
| a - Reported deliveries (no.) | 25,293 | 4,896 | NA | 39,957 | 12,192 | 82,338 |
| b- Reported abortions (no.) | 2,084 | 558 | NA | 2,557 | 672 | 5,871 |
| a+b - Known delivery outcome (no.) | 27,377 | 5,454 | NA | 42,514 | 12,864 | 88,209 |
| Unknown delivery outcome (no. / %) | 5 (%0.02) | 0 | NA | 0 | 198 (%1.5) | 203 (%0.2) |
| **Place of delivery (%):** | | | | | | |
| Home | %0.1 | %0.2 | %3.7 | %0.0 | %0.2 | %0.3 |
| Hospital | %99.9 | %99.7 | %94.6 | %95.9 | %99.7 | %97.7 |
| Private clinics | %0.02 | %0.10 | %1.66 | %4.07 | %0.07 | %2.00 |
| Deliveries in health institutions (%) | %99.7 | %97.9 | %96.2 | %99.9 | %99.6 | %99.4 |
| Deliveries assisted by trained personnel (%) | %100 | %99.8 | %99.8 | %99.9 | %99.9 | %99.9 |
| **21.14 - MATERNAL DEATHS** | **Jordan** | **Lebanon** | **Syria** | **Gaza** | **West Bank** | **Agency** |
| **Maternal deaths by cause (no.):** | | | | | | |
| Haemorrhage | 0 | 1 | 1 | 2 | 1 | 5 |
| Pulmonary embolism | 0 | 0 | 0 | 4 | 0 | 4 |
| Septicaemia | 0 | 0 | 0 | 2 | 0 | 2 |
| Cardiac causes | 1 | 0 | 0 | 0 | 0 | 1 |
| Intestinal perforation | 1 | 0 | 0 | 0 | 0 | 1 |
| H1N1 | 0 | 0 | 0 | 0 | 1 | 1 |
| Eclampsia | 0 | 1 | 0 | 0 | 0 | 1 |
| Total maternal deaths | 2 | 2 | 1 | 8 | 2 | 15 |
| C-Section among reported deliveries (%) | 20.7 | 33.8 | 42.0 | 14.6 | 22.0 | 20.8 |
| **21.15 - POSTNATAL CARE** | | | | | | |
| Post natal care coverage (%) | 83.5 | 97.5 | NA | 99.3 | 84.7 | 92.1 |
| **21.16 - CARE OF CHILDREN UNDER FIVE YEARS** | | | | | | |
| Registered refugees (no.) | 2,110,114 | 474,053 | 528,711 | 1,263,312 | 895,703 | 5,271,893 |
| Estimated surviving infants (no.) [3] | 57,748 | 9,301 | 14,386 | 45,661 | 26,435 | 151,531 |
| Children < 1 year registered (no.) | 26,189 | 5,251 | 5,622 | 40,140 | 9,982 | 87,184 |
| Children < 1 year coverage of care (%) | 45.4 | 56.5 | 39.1 | 87.9 | 37.8 | 56.8 |
| Children 2 > -1 years registered (no.) | 28,280 | 4,966 | 6,279 | 39,472 | 10,469 | 89,466 |
| Children 3 > -2 years registered (no.) | 30,641 | 4,956 | 6,653 | 39,985 | 20,399 | 102,634 |
| **Total children 3-0 years registered (no.)** | **85,110** | **15,173** | **18,554** | **119,597** | **40,850** | **279,284** |

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

# Part 3 – 2012 data tables

| Field | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| **21.17 - IMMUNIZATION COVERAGE** | | | | | | |
| **Immunization coverage children 12 months old (%):** | | | | | | |
| BCG | 99.9 | 99.7 | NA | 100.0 | 100.0 | 99.9 |
| Poliomyelitis(IPV) | 99.5 | NA | NA | 100.0 | 100.1 | 99.8 |
| Poliomyelitis(OPV) | 99.5 | 99.7 | NA | 100.0 | 100.0 | 99.8 |
| Triple (DPT) | 99.5 | 100.0 | NA | 100.0 | 100.0 | 99.8 |
| Hepatitis B | 99.6 | 99.7 | NA | 100.0 | 100.0 | 99.8 |
| Hib | 98.6 | 100.0 | NA | 100.0 | 0.0 | 99.5 |
| Measles | 99.3 | 99.5 | NA | NA | 0.0 | 99.3 |
| All vaccines | 98.6 | 99.5 | NA | 100.0 | 100.0 | 99.3 |
| **Immunization coverage children 18 months old - boosters (%)** | | | | | | |
| Poliomyelitis(OPV) | 99.0 | 99.2 | NA | 99.8 | 100.0 | 99.5 |
| Triple (DPT) | 99.0 | 99.2 | NA | 99.8 | 100.0 | 99.5 |
| MMR | 99.0 | 99.2 | NA | 99.8 | 100.0 | 99.5 |
| **21.18 - GROWTH MONITORING AND NUTRIONAL SURVEILLANCE** | | | | | | |
| **Children 3 - 0 years underweight:** | | | | | | |
| New cases among registered children 3-0 yrs (%) | 0.05 | 2.1 | NA | 2.8 | 1.1 | 1.6 |
| Period prevalence 2012 (%) | 1.05 | 3.7 | NA | 6.6 | 1.9 | 4.0 |
| Prevalence year end 2012 (%) | 0.04 | 1.3 | NA | 2.1 | 0.9 | 1.2 |
| **21.19 - SCHOOL HEALTH** | | | | | | |
| **4th grade students screened for vision (No.) :** | | | | | | |
| Boys | 5,870 | 1,678 | 3,189 | 15,042 | 2,597 | 28,376 |
| Girls | 5,376 | 1,764 | 3,104 | 12,274 | 3,312 | 25,830 |
| **Total** | **11,246** | **3,442** | **6,293** | **27,316** | **5,909** | **54,206** |
| **4th grade students with vision impairment (%)** | | | | | | |
| Boys | 11.9 | 9.9 | 9.2 | 12.6 | 8.7 | 11.5 |
| Girls | 19.3 | 13.2 | 11.9 | 16.4 | 10.8 | 15.5 |
| **Total** | **15.5** | **11.6** | **10.5** | **14.3** | **9.9** | **13.4** |
| **7th grade students screened for vision (No.) :** | | | | | | |
| Boys | 5,827 | 1,519 | 2,587 | 10,687 | 2,413 | 23,033 |
| Girls | 5,600 | 1,709 | 2,605 | 10,130 | 3,464 | 23,033 |
| **Total** | **11,427** | **3,228** | **5,192** | **20,817** | **5,877** | **46,066** |
| **7th grade students with vision impairment (%)** | | | | | | |
| Boys | 15.5 | 14.2 | 9.0 | 13.0 | 10.3 | 13.0 |
| Girls | 16.3 | 14.9 | 12.4 | 21.5 | 13.5 | 17.9 |
| **Total** | **15.9** | **14.5** | **10.7** | **17.1** | **12.2** | **15.5** |

# Part 3 – 2012 data tables

| Field | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| **STRATEGIC OBJECTIVE 3** | | | | | | |
| **21.20 – NON COMMUNICABLE DISEASES ( NCD) PATIENTS REGISTERED WITH UNRWA** | | | | | | |
| Diabetes mellitus type I (no/%) | %1.7) 1.195) | 236 (%1) | NA | 1,050 (%1.6) | 621 (%1.8) | 3,102 (%1.6) |
| Diabetes mellitus type II (no/%) | 10,591 (%15.2) | %10) 2,380) | NA | 11,365 (%17.5) | 6,007 (%17.2) | 30,343 (%15.7) |
| Hypertension (no/%) | 29,020 (%41.6) | 12,488 (%52.7) | NA | %47.4) 30,786) | %39) 13,662) | 85,956 (%44.5) |
| Diabetes mellitus & hypertension (no/%) | 28,920 (%41.5) | 8,602 (%36.3) | NA | %33.4) 21,699) | 14,706 (%42) | 73,927 (%38.2) |
| **Total** | **69,726** | **23,706** | **NA** | **60,900** | **34,996** | **193,328** |
| **21.21 - PREVALENCE OF HYPERTENSION AND DIABETES** | | | | | | |
| Served population ≥ 40 years with diabetes mellitus (%) | 10 | 10.4 | NA | 11.2 | 13.2 | 11.0 |
| Served population ≥ 40 years with hypertension (%) | 14.5 | 19.6 | NA | 17.4 | 17.8 | 16.5 |
| **21.22 – MANAGEMENT** | | | | | | |
| Hypertensive patients on lifestyle management only (%) | 2 | 9 | NA | 4 | 1 | 4 |
| Diabetes patients on insulin (%) | 32.0 | 21.9 | NA | 32.7 | 31.5 | 31.1 |
| **21.23 - RISK SCORING** | | | | | | |
| **Risk status - patients with diabetes mellitus type 1 (%):** | | | | | | |
| Low | 66.1 | 71.4 | NA | 72.1 | 66.8 | 70.1 |
| Medium | 26.6 | 26.0 | NA | 25.4 | 85.5 | 26.4 |
| High | 7.3 | 2.6 | NA | 2.5 | 14.5 | 3.5 |
| **Risk status - patients with diabetes mellitus type 2 (%):** | | | | | | |
| Low | 26.8 | 32.6 | NA | 32.2 | 35.1 | 32.7 |
| Medium | 56.8 | 53.2 | NA | 52.5 | 53.5 | 53.0 |
| High | 16.5 | 14.1 | NA | 15.3 | 11.4 | 14.2 |
| **Risk status - patients with hypertension (%):** | | | | | | |
| Low | 21.1 | 22.1 | NA | 11.3 | 30.7 | 18.7 |
| Medium | 56.0 | 54.7 | NA | 48.4 | 56.4 | 51.9 |
| High | 22.9 | 23.2 | NA | 40.4 | 12.9 | 29.4 |
| **Risk status - patients with diabetes & hypertension (%):** | | | | | | |
| Low | 11.6 | 14.1 | NA | 29.3 | 12.0 | 22.9 |
| Medium | 48.7 | 55.2 | NA | 52.8 | 52.3 | 52.5 |
| High | 39.7 | 30.7 | NA | 17.9 | 35.7 | 24.5 |

# Part 3 – 2012 data tables

| Field | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| **Risk factors among NCD patients (%):** | | | | | | |
| Smoking | 16.1 | 33.5 | NA | 9.5 | 16.3 | 14.9 |
| Physical inactivity | 51.5 | 21.2 | NA | 48.3 | 22.2 | 45.7 |
| Obesity | 60.6 | 49.9 | NA | 60.3 | 63.4 | 60.1 |
| Raised cholesterol | 35.2 | 42.6 | NA | 42.9 | 44.2 | 39.2 |
| **21.24 - LATE COMPLICATIONS AMONG NCD PATIENTS (%)** | | | | | | |
| Diabetes mellitus type I | 1.2 | 0.0 | NA | 2.4 | 0.9 | 1.5 |
| Diabetes mellitus type II | 4.3 | 12.8 | NA | 6.1 | 5.4 | 5.5 |
| Hypertension | 7.4 | 9.5 | NA | 5.7 | 5.6 | 6.8 |
| Diabetes mellitus & hypertension | 13.6 | 16.7 | NA | 14.1 | 11.8 | 13.8 |
| All NCD patients | 9.3 | 12.3 | NA | 8.6 | 8.0 | 9.1 |
| **21.25 – DEFAULTERS** | | | | | | |
| NCD patients defaulting during 2012 (no.) | 4918 | 935 | NA | 2638 | 1594 | 10085 |
| NCD patients defaulting during 2012/total registered end 2011 (%) | 7.20 | 4.0 | NA | 4.4 | 4.8 | 4.8 |
| **21.26 - FATALITY** | | | | | | |
| Reported deaths among registered NCD patients (no/%) | 978 (%1.4) | 436 (%1.9) | NA | 871 (%1.4) | 673 (%2.0) | 2,958 (%1.4) |
| **Reported deaths among registered NCD patients by morbidity (no):** | | | | | | |
| Diabetes mellitus | 97 | 36 | 0 | 101 | 91 | 325 |
| Hypertension | 308 | 183 | 0 | 305 | 187 | 983 |
| Diabetes mellitus & hypertension | 573 | 217 | 0 | 465 | 395 | 1,650 |
| **21.27 - COMMUNICABLE DISEASES** | | | | | | |
| Registered refugees (no.) | 2,110,114 | 474,053 | 528,711 | 1,263,312 | 895,703 | 5,271,893 |
| Refugee population served (no.) | 1,175,021 | 260,408 | NA | 1,224,383 | 474,920 | 3,134,732 |
| **Reported cases (no.):** | | | | | | |
| Acute flaccid paralysis [10] | 0 | 0 | 0 | 1 | 0 | 1 |
| Poliomyelitis | 0 | 0 | 0 | 0 | 0 | 0 |
| Cholera | 0 | 0 | 0 | 0 | 0 | 0 |
| Diphtheria | 0 | 0 | 0 | 0 | 0 | 0 |
| Meningococcal meningitis | 0 | 0 | 0 | 5 | 0 | 5 |
| Meningitis – bacterial | 0 | 2 | 1 | 11 | 0 | 14 |
| Meningitis – viral | 0 | 1 | 3 | 29 | 19 | 52 |
| Influenza A(H1N1) | 0 | 0 | 0 | 0 | 64 | 64 |

10. Among children <15 years

# Part 3 – 2012 data tables

| Field | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| Tetanus neonatorum | 0 | 0 | 0 | 0 | 0 | 0 |
| Brucellosis | 6 | 0 | 76 | 0 | 2 | 84 |
| Watery diarrhoea (>5years) | 7762 | 8070 | 1154 | 12852 | 9269 | 39107 |
| Watery diarrhoea 5-0years) | 9896 | 6382 | 3723 | 24673 | 11234 | 55908 |
| Bloody diarrhoea | 490 | 64 | 93 | 3317 | 634 | 4598 |
| Viral Hepatitis | 124 | 48 | 239 | 551 | 28 | 990 |
| HIV/AIDS | 0 | 3 | 0 | 0 | 0 | 3 |
| Leishmania | 0 | 0 | 70 | 0 | 3 | 73 |
| Malaria | 0 | 0 | 0 | 0 | 0 | 0 |
| Measles ( suspected)[11] | 6 | 0 | 2 | 3 | 4 | 15 |
| Gonorrhoea | 15 | 8 | 0 | 0 | 147 | 170 |
| Mumps | 22 | 11 | 10 | 53 | 19 | 115 |
| Pertussis | 0 | 0 | 0 | 0 | 1 | 1 |
| Rubella[12] | 6 | 0 | 1 | 0 | 2 | 9 |
| Tuberculosis, smear positive | 0 | 4 | 13 | 9 | 1 | 27 |
| Tuberculosis, smear negative | 0 | 1 | 3 | 0 | 0 | 4 |
| Tuberculosis, extra pulmonary | 0 | 6 | 38 | 0 | 0 | 44 |
| Typhoid fever[12] | 0 | 2 | 20 | 33 | 0 | 55 |
| **CROSSCUTTING SERVICES** | | | | | | |
| **21.28 - LABORATORY SERVICES** | | | | | | |
| Laboratory tests (no.) | 1,133,913 | 307,431 | 157,075 | 2,113,481 | 848,989 | 4,560,889 |
| Productivity ( workload units / hour ) | 48.2 | 35.7 | NA | 89.5 | 48.1 | 58.2 |
| **21.29 - RADIOLOGY SERVICES** | | | | | | |
| Plain x-rays inside UNRWA (no.) | 2,656 | 18,078 | NA | 36,165 | 25,465 | 82,364 |
| Plain x-rays outside UNRWA (no.) | 2,212 | 7,675 | NA | - | - | 9,887 |
| Other x-rays outside UNRWA (no.) | 7 | 7,553 | NA | - | - | 7,560 |

11. Include suspected and confirmed cases
12. Decayed Surface

# Part 3 – 2012 data tables

| Field | HQ | Jordan | Lebanon | Syria | Gaza | West Bank | Agency |
|---|---|---|---|---|---|---|---|
| **21.30 - HUMAN RESOURCES** | | | | | | | |
| **Health staff as at end of December 2012 (no.)** | | | | | | | |
| **(a) Medical care services :** | | | | | | | |
| Doctors | 3 | 102 | 47 | NA | 164 | 106 | 422 |
| Specialist | - | 10 | 15 | NA | 13 | - | 38 |
| Pharmacists | 1 | 2 | 32 | NA | 4 | 3 | 42 |
| Dental Surgeons | - | 30 | 16 | NA | 31 | 26 | 103 |
| Nurses | - | 267 | 112 | NA | 348 | 283 | 1010 |
| Paramedical | 2 | 131 | 61 | NA | 191 | 221 | 606 |
| Admin./Support Staff | 6 | 91 | 62 | NA | 135 | 96 | 390 |
| Labour category | - | 104 | 32 | NA | 151 | 108 | 395 |
| **Sub-total (a)** | 12 | 737 | 377 | 0 | 1037 | 843 | 3006 |
| **(b)Environmental health services :** | | | | | | | |
| Engineers | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| Admin/Support Staff | 0 | 0 | 0 | 0 | 0 | 31 | 31 |
| Labour category | 0 | 0 | 0 | 0 | 0 | 195 | 195 |
| **Sub-total (b)** | 0 | 0 | 0 | 0 | 0 | 231 | 231 |
| International | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| **Grand total (a+b)** | 17 | 737 | 377 | 0 | 1037 | 1074 | 3242 |
| **Health personnel per 100,000 registered refugees:** | | | | | | | |
| Doctors | - | 4.8 | 9.9 | NA | 13.0 | 11.8 | 7.9 |
| Dental surgeons | - | 1.4 | 3.4 | NA | 2.5 | 2.9 | 2.0 |
| Nurses | - | 12.7 | 23.6 | NA | 27.5 | 31.6 | 19.2 |

# Part 4 - selected survey indicators

## DMFS survey, 2010

Table 22 - Descriptive: total DS, FS and DMFS sorted by age group

| Age group | DS[6] Mean, SE (%95CI) | FS[7] Mean, SE (%95CI) | DMFS[8] Mean, SE (%95CI)8 |
|---|---|---|---|
| 12-11 year | 0.34 ,3.27 (3.94 – 2.61) | 0.13 ,0.49 (0.74 – 0.24) | 0.38 ,3.83 (4.58 – 3.08) |
| 13year | 0.08 ,3.20 (3.36 – 3.04) | 0.03 ,0.58 (0.63 – 0.52) | 0.09 ,3.92 (4.10 – 3.74) |
| > 13 year | 0.49 ,3.09 (4.06 – 2.11) | 0.24 ,0.94 (1.42 – 0.46) | 0.54 ,4.22 (5.29 – 3.16) |

Table 23 - DMFS, DS and FS sorted by age group and gender

| Age group | gender | DS *Mean, SE (%95CI)* | FS *Mean, SE (%95CI)* | DMFS *Mean, SE (%95CI)* | DS/ DMFS % | FS/ DMFS % |
|---|---|---|---|---|---|---|
| 12-11 year | males | 3.38 4.32 – 2.43) 0.47) | 0.39 0.64 – 0.14) 0.12) | 3.90 4.94 – 2.86) 0.52) | 86.5 | 10.0 |
| | females | 3.16 4.12 – 2.20) 0.48) | 0.59 1.05 – 0.14) 0.23) | 3.75 4.86 – 2.64) 0.56) | 83.0 | 14.1 |
| 13year | males | 3.23 3.47 – 3.00) 0.12) | 0.55 0.63 – 0.46) 0.04) | 3.90 4.15 – 3.65) 0.13) | 77.2 | 22.8 |
| | females | 3.16, 3.40 – 2.93) 0.12) | 0.60 0.68 – 0.52) 0.04) | 3.9 4.20 – 3.67) 0.13) | 84.2 | 15.8 |
| > 13 year | males | 3.75 5.48 – 2.03) 0.85) | 1.11 2.06 – 0.16)0.47) | 4.87 6.68 – 3.05) 0.90) | 80.4 | 15.3 |
| | females | 2.57, 3.70 – 1.43) 0.57) | 0.81 1.25 – 0.36) 0.22) | 3.72 5.03 – 2.42) 0.65) | 69.0 | 21.8 |

Table 24 - DMFS, DS and FS sorted by Field

| Field | DS Mean, SE (%95CI) | FS Mean, SE (%95CI) | DMFS Mean, SE (%95CI) | DS/ DMFS % | FS/ DMFS % |
|---|---|---|---|---|---|
| **Jordan** | 2.48 2.78 – 2.19) 0.15) | 0.55 0.64 – 0.45) 0.05) | 3.23 3.56 – 2.89) 0.17) | 76.9 | 17.0 |
| **Lebanon** | 2.99 3.41 – 2.57) 0.21) | 0.77 0.92 – 0.61) 0.08) | 3.78 4.23 – 3.33) 0.23) | 79.2 | 20.3 |
| **Syria** | 3.37 3.72 – 3.02) 0.18) | 0.7 0.93 – 0.59) 0.09) | 4.22 4.62 – 3.82) 0.20) | 80.0 | 18.0 |
| **Gaza** | 2.21 2.42 – 1.99) 0.11) | 0.34 0.42 – 0.25) 0.04) | 2.66 2.87 – 2.38) 0.12) | 82.9 | 12.7 |
| **West Bank** | 5.02 5.44 – 4.60) 0.21) | 0.54 0.66 – 0.42) 0.06) | 5.88 6.34 – 5.42) 0.23) | 85.4 | 9.2 |

12. Decayed Surface
13. Filling Surface
14. Decayed, Missing, Filled Surface

# Current practices of contraceptive use among mothers of children 0-3 years survey, 2010

Table 24 - DMFS, DS and FS sorted by Field

| Indicators | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| Mean birth interval (months) | 32.7 | 36.9 | 35.1 | 29.3 | 32.8 | 33.3 |
| Percentage of women married by the age < 18 years | 22.2 | 18.9 | 18.5 | 33 | 30.2 | 24.6 |
| Percentage of women with birth intervals < 24 months | 42.2 | 37.9 | 40.5 | 48.9 | 43.7 | 42.7 |
| Prevalence of modern contraceptives among women of reproductive age utilizing UNRWA MCH services | 60.6 | 47.7 | 67.4 | 47.1 | 59.1 | 61.7 |
| Mean marital age (women) | 20[5] | 21 | 21 | 19.2 | 19.4 | 20.2 |

Table 26 - Total fertility rates among mothers of children 0 to 3 years of age who attended the Maternal and Child Health clinics

| Field | 1995 | 2000 | 2005 | 2010 |
|---|---|---|---|---|
| Jordan | 4.6 | 3.6 | 3.3 | 3.5 |
| Lebanon | 3.8 | 2.5 | 2.3 | 3.2 |
| Syria | 3.5 | 2.6 | 2.4 | 2.5 |
| Gaza Strip | 5.3 | 4.4 | 4.6 | 4.3 |
| West Bank | 4.6 | 4.1 | 3.1 | 3.9 |
| **Agency** | **4.7** | **3.5** | **3.2** | **3.5** |

# Prevalence of anaemia among pregnant women, nursing mothers and children 6-36 months of age survey, 2005

Table 27 - Selected anaemia survey indicators

| Indicator | Jordan | Lebanon | Syria | Gaza | West Bank | Agency |
|---|---|---|---|---|---|---|
| Percentage of infants breastfed for at least one month | 75.9 | 87.2 | 78.3 | 65.0 | 87.1 | 78.9 |
| Prevalence of exclusive breast feeding up to 4 months | 24.0 | 30.2 | 40.3 | 33.3 | 34.5 | 32.7 |
| Prevalence of anaemia among children < 3 years of age | 28.4 | 33.4 | 17.2 | 54.7 | 34.2 | 33.8 |
| Prevalence of anaemia among pregnant women | 22.5 | 25.5 | 16.2 | 35.6 | 29.5 | 26.3 |
| Prevalence of anaemia among nursing mothers | 22.2 | 26.6 | 21.7 | 45.7 | 23.0 | 28.6 |
| Prevalence of anaemia among school children | | | | | | |
| 1 st grade | 14.4 | 22.3 | 9.1 | 36.4 | 14.6 | 19.5 |
| 2 nd grade | 11.6 | 16.9 | 6.0 | 11.4 | 14.9 | 12 |

Table 28 - Expenditure on medical equipment, 2011 (GF: General Fund, P: Project Fund) in USD

| Field | Laboratory Services | | Out Patient Services | | MCH services | | Disease Prevention and Control | | Physical Rehabilitation services | | Oral Health Services | | Qalqilia Hospital | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GF | P | GF | P | GF | P | GF | P | GF | P | GF | P | GF | P |
| Jordan | 92504 | 0 | 196119 | 61556 | 6746 | 0 | 0 | 0 | 0 | 0 | 14103 | 0 | 0 | 0 |
| Lebanon | 67314 | 0 | 130827 | 13590 | 14999 | 0 | 11732 | 58000 | 0 | 0 | 40671 | 0 | 0 | 0 |
| Syria | 19617 | 0 | 57130 | 4205 | 14237 | 5720 | 0 | 0 | 3262 | 0 | 11015 | 0 | 0 | 0 |
| Gaza | 85694 | 181141 | 257824 | 618332 | 1961 | 0 | 0 | 759 | 106390 | 308047 | 68278 | 70440 | 0 | 0 |
| West Bank | 117594 | 79870 | 326422 | 104054 | 4363 | 0 | 32254 | 85450 | 18359 | 0 | 50302 | 0 | 166099 | 0 |
| Sub total | 382723 | 261011 | 968322 | 801737 | 42306 | 5720 | 43986 | 144209 | 128011 | 308047 | 184369 | 70440 | 166099 | 0 |
| Grand total | 643734 | | 1770059 | | 48026 | | 188195 | | 436058 | | 254809 | | 166099 | |

Table 29 - Expenditure on Laboratory Services 2011

| Expenditure (USD) | Jordan | Lebanon | Syria | Gaza Strip | West Bank | Agency |
|---|---|---|---|---|---|---|
| Supplies | 135,697 | 78,867 | 108,820 | 295,370 | 385,103 | 1,003,857 |
| % | **13.5** | **7.9** | **10.8** | **29.4** | **38.4** | **100** |
| Equipment-GF | 92,504 | 67,314 | 19,314 | 85,694 | 117,594 | 382,420 |
| Equipment-P | 0 | 0 | 0 | 181,141 | 79,870 | 261,011 |
| Equipment-Total | 92,504 | 67,314 | 19,617 | 266,835 | 197,464 | 643,734 |
| % | **14.4** | **10.5** | **3.0** | **41.5** | **30.7** | **100** |

# Annex1: Health Department Field Implementation Plan (FIP) 2012 / 2013

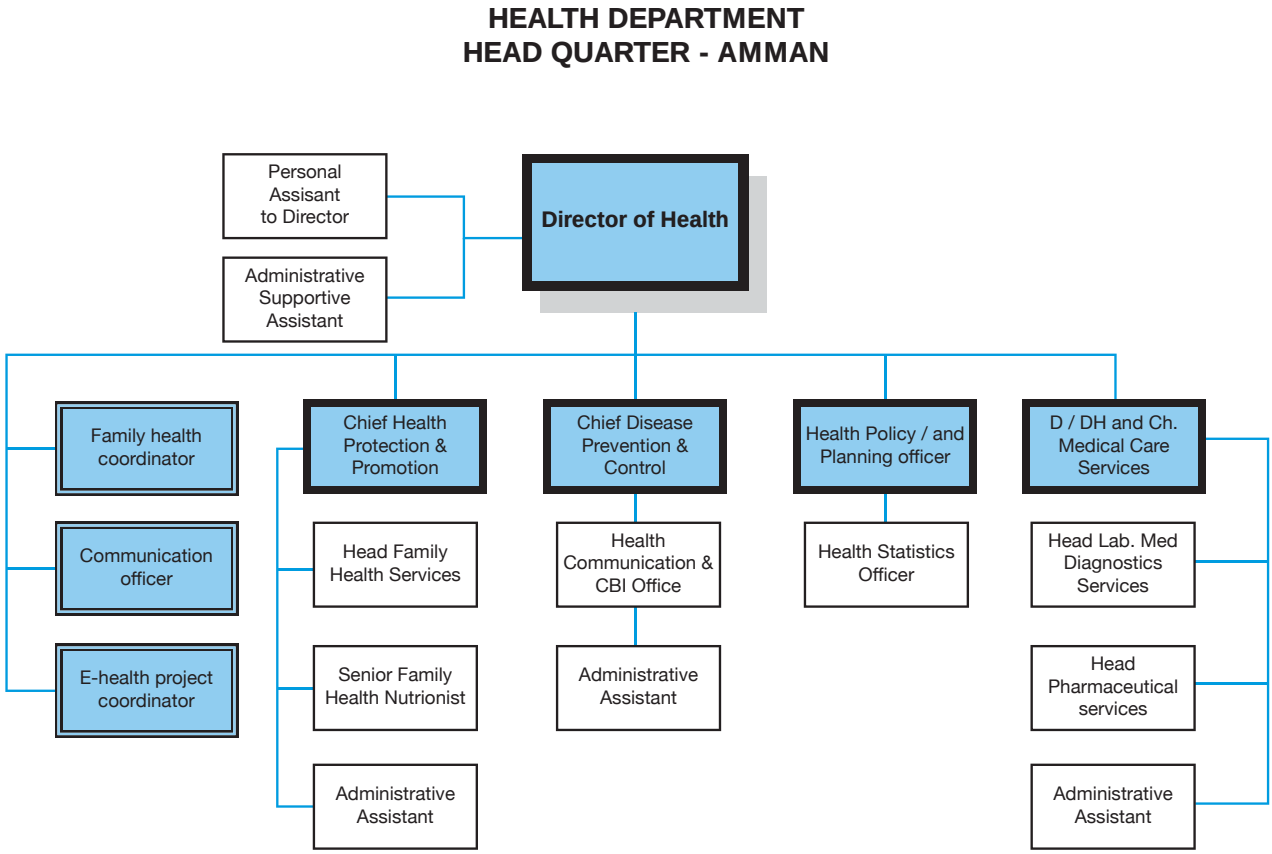
Table 29 - Expenditure on Laboratory Services 2011

| Strategic Objective | Outcome | Outcome Indicators | Output | Output Indicators |
|---|---|---|---|---|
| 1. Ensure access to quality comprehensive primary health care services | 1.1 Quality of health services maintained and improved | Average daily medical consultations per doctor | General outpatient services maintained & improved | Antimicrobial prescription rate (%) |
| | | | | % preventive dental consultations of total dental consultations |
| | | | | % 4th grade school children identified with vision defect |
| | | | Access to hospital care ensured | Total no. of hospitalizations (secondary and tertiary) |
| | | | Health management support strengthened | % Health centres implementing at least one Ehealth module |
| | | | Drug management system in place | % Health centres with no stock rupture of 15 tracer items |
| | | | Emergency health services maintained and improved | % Health centres with emergency preparedness plans in place |
| | | | Health centre Infrastructure improved | % Upgraded health centres meeting UNRWA's infrastructure security, safety and accessibility standards* |
| 2. Protect and promote family health | 2.1 Coverage and quality of maternal & child health services maintained & improved | % Pregnant women attending at least 4 antenatal care visits<br>% 18 month old children that received 2 doses of Vitamin A | Comprehensive maternal and child health services delivered | No. of women newly enrolled in pre-conception care program |
| | | | | % Women attending postnatal care within 6 weeks of delivery |
| | | | | No. of continuing family planning acceptors |
| | | | | % HCs with at least one clinical staff member trained on detection and referral of gender based violence cases |
| | | | School health services strengthened | Diphtheria and tetanus (dT) coverage among targeted students |
| 3. Prevent and control diseases | 3.1 Coverage and quality non-communicable disease (NCD) care improved | % target population ≥40 years screened for diabetes mellitus<br>% patients with diabetes under control according to defined criteria | Appropriate management of NCDs ensured | No. of new NCD patients in program (DM, HT, DM&HT disaggregated) |
| | | | | Total no. of NCD patients in program (DM, HT, DM&HT disaggregated) |
| | 3.2 Communicable diseases contained and controlled | No. of vaccine preventable disease outbreaks | Prevention and control of communicable diseases maintained | % 18 month old children that have received all EPI vaccinations according to host country requirements |
| | | | | No. of new TB cases detected |
| | | | Current level of environmental health services maintained | % shelters connected to public water network* |
| | | | | % shelters connected to public sewerage network* |
| *Monitored by Infrastructure and Camp Improvement Program | | | | |

Table 31 - Agency-wide Common Indicators

| Indicator | Calculation |
|---|---|
| Average daily medical consultations per doctor | Total workload (All patients seen by all medical officers)<br>No. of medical officers X working days |
| Antimicrobial prescription rate | No. of patients receiving antimicrobial prescription x 100<br>All patients attending curative services (general outpatient clinic + sick babies + sick women sick NCD) |
| % Preventive dental consultations of total dental consultations | No. of preventive dental consultations x 100<br>Total no. of preventive & curative dental consultations |
| % 4th grade school children identified with vision defect | No. of 4th grade school children identified with vision defect x 100<br>No. of 4th grade school children screened by UNRWA school health program |
| Total no. of hospitalizations (secondary and tertiary) | Total no. of hospitalizations |
| % Health centres implementing at least one Ehealth module | No. of HCs implementing at least one Ehealth module x 100<br>Total No. of HCs |
| | No. of HCs with no stock-outs of 15 tracer items x 100<br>Total no. of HCs |
| % Health centres with emergency preparedness plans in place | No. of HCs with emergency preparedness plan in place x 100<br>Total no. of targeted HCs |
| % Pregnant women attending at least 4 ANC visits | No. of pregnant women attending at least 4 ANC visits x 100<br>No. of deliveries |
| % 18 months old children that received 2 doses of Vitamin A | No. of children 18 months old that received 2 doses of Vit A x 100<br>No. of registered children 2 > - 1 years |
| No. of women newly enrolled in Pre-Conception Care program | No. of women newly enrolled in Pre-Conception Care program |
| % Women attending PNC within 6 weeks of delivery | No. of women attending postnatal care within 6 wks of delivery x 100<br>Total no. of deliveries |
| No. of continuing family planning acceptors | No. of continuing family planning acceptors |
| % Health centres with at least one clinical staff trained on detection & referral of GBV cases | No. of HCs with at least one clinical staff trained on GBV x 100<br>Total no. of HCs |
| Diphtheria and tetanus (dT) coverage among targeted students | No. of school children that received dT x 100<br>Total no. of school children targeted |
| % Targeted population 40 years and above screened for diabetes mellitus | No. of patients 40 years and above screened for diabetes x 100<br>(Total no. of served population 40 years and above) – (total no. of diabetes patients currently registered in NCD program) |
| % Patients with diabetes under control according to defined criteria | No. of DM patients defined as controlled according to HbA1C or postprandial glucose criteria x 100<br>Total no. of DM patients |
| No. of new NCD patients in programme (Diabetes mellitus) | No. of new NCD patients in programme (Diabetes mellitus; Hypertension; Diabetes mellitus & Hypertension) |
| Total No. of NCD patients in programme (Diabetes mellitus) | Total No. of NCD patients in programme (Diabetes mellitus; Hypertension; Diabetes mellitus & Hypertension) |
| No. of EPI vaccine preventable diseases outbreaks | No. of EPI vaccine preventable diseases outbreaks |
| 18% month old children that have received all EPI vaccinations according to host country requirements | No. of children 18 months old that received all doses for all required vaccines x 100<br>Total no. of children 18 months old |
| No. of new TB cases detected | No. of new TB cases detected (smear positive + smear negative + extra pulmonary) |

# Annex 2: functional chart of the unrwa health programme



# Annex 3: 2012 health maps

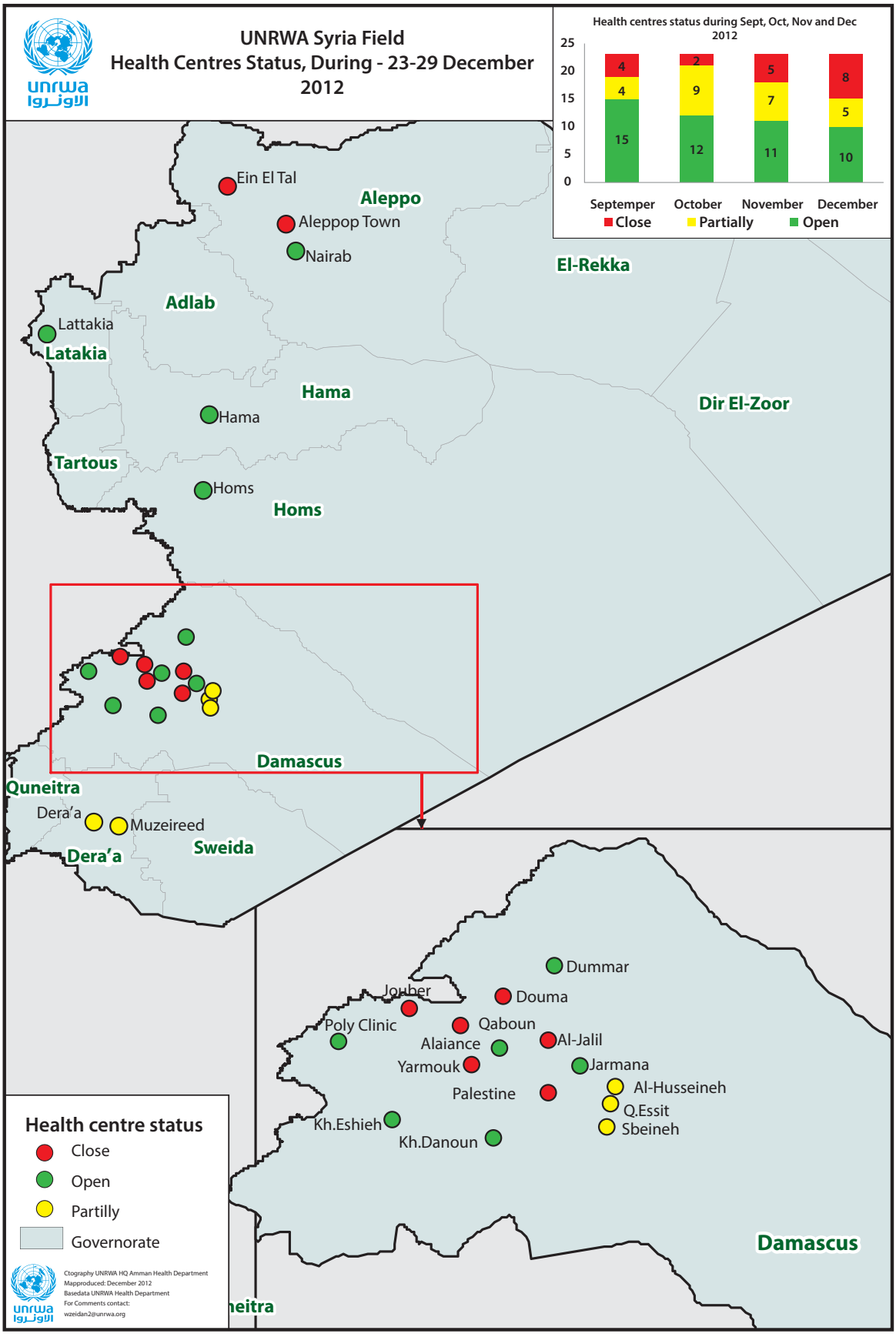
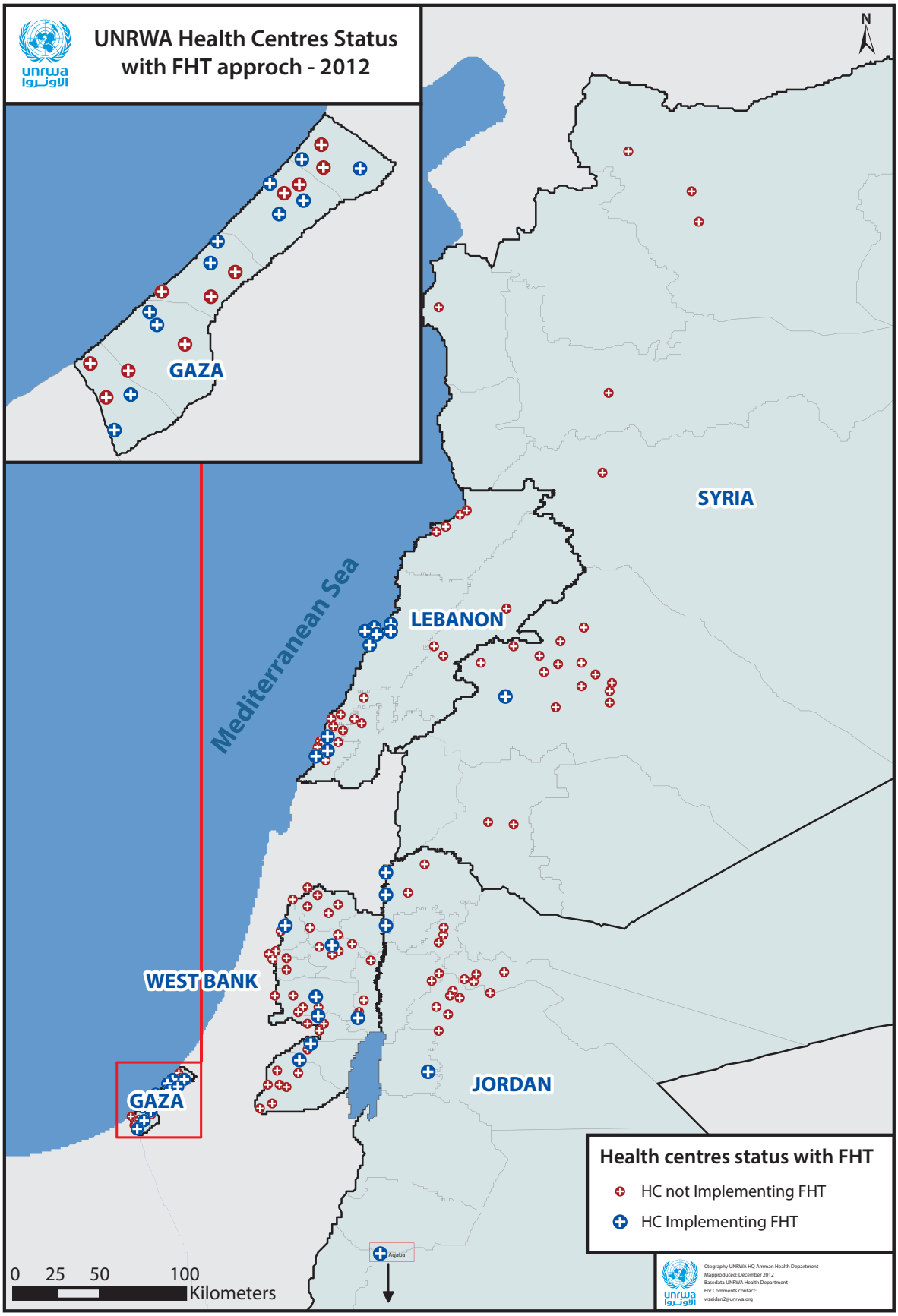



Figure 39- UNRWA Syria Field with health centres status, Dec - 2012

# Annex 3: 2012 health maps



# Annex 4: contacts of senior staff of the unrwa health programme

## Technical staff in the Health Department

### Headquarters staff

| Post Title | Incumbent | Telephone | E-mail address |
|---|---|---|---|
| **WHO Special Representative** | Dr. Akihiro Seita | 5808300 | a.seita@unrwa.org |
| **Deputy Director of Health &** | | Vacant | |
| **Health Policy & Planning Officer** | Ms. Yoshiko Hasumi | 5808304 | y.hasumi@unrwa.org |
| **Family Health Coordinator** | Dr. Ali Khader | 5808316 | a.khader@unrwa.org |
| **E-Health Project coordinator** | Ghada Ballout | 5808359 | g.ballout@unrwa.org |
| **Communication Officer** | Ms. Irina Prentice | 5808309 | i.prentice@unrwa.org |
| **Health Communication and Community-Based Initiative** | Dr. Yassir Turki | 5808309 | y.turki@unrwa.org |
| **Health Statistics Officer** | Ms. Wafa Zeidan | 5808311 | w.zeidan2@unrwa.org |
| **Division of Health Protection & Promotion** | | | |
| **Chief, Health Protection & Promotion** | Dr. Majed Hababeh | 5808167 | m.hababeh@unrwa.org |
| **Head Family Health Services** | | Vacant | |
| **Senior Health Nutritionist** | Ms Nada Abu-Kishk. | 5808308 | n.abu-kishk@unrwa.org |
| **Division of Disease Prevention & Control** | | | |
| **Chief, Disease Prevention & Control** | Dr. Yousef Shahin | 5808315 | y.shahin2@unrwa.org |
| **Division of Medical Care Services** | | | |
| **Head Laboratory & Medical Diagnostics Services** | Mr. Ahmad Al-Natour | 5808305 | a.alnatour@unrwa.org |
| **Head Pharmaceutical Services** | Ms. Rawan Saadeh | 5808306 | r.saadeh@unrwa.org |
| **Jordan** | Dr. Ishtaiwi Abu-Zayed | 5809279 | i.abu-zayed@unrwa.org |
| **West Bank** | Dr. Umaiyeh Khammash | 5890400 | u.khammash@unrwa.org |
| **Gaza Strip** | Dr. Moh'd Maqadma, | 6777269 | m.maqadma@unrwa.org |
| **Lebanon** | Dr. Mona Osman | 840491 | m.osman@unrwa.org |
| **Syrian Arab Republic** | Dr. Husam Tibi | 6133035 | h.tibi@unrwa.org |

# Annex 5: abbreviations

| | |
|---|---|
| **AIDS** | Acquired Immune Deficiency Syndrome |
| **AO** | Area Office |
| **CBR** | Crude Birth Rate |
| **CDC** | Centers for Disease Prevention & Control |
| **CIA** | Central Intelligence Agency |
| **CBR** | Crude Birth Rate |
| **CPI** | Community Periodontal Index |
| **CFHP** | Chief Field Health Programme |
| **COOP** | Continuity of Operations Planning |
| **DMFS** | Decayed, Missing, Filled Surface |
| **DM** | Diabetic Mellitus |
| **DS** | Decayed Surface |
| **DT/Td** | Tetanus – diphtheria |
| **DOTs** | Directly Observed Treatment, short-course |
| **DUO** | Director of UNRWA Operation |
| **EMRO** | Eastern Mediterranean Regional Office |
| **EPI** | Expanded Programme of Immunization |
| **ESRF** | End Stage Renal Failure |
| **ERP** | Enterprise Resources Planning |
| **EOAS** | External Quality Assurance System |
| **FHT** | Family Health Team |
| **FS** | Filling Surface |
| **FIP** | Field Implementation Plan |
| **GAP** | Gender Action Plan |
| **GBV** | Gender Based Violence |
| **GMS** | Gender Mainstreaming Strategy |
| **HCBI** | Health Center Budget Initiative |
| **Hib** | Haemophilus Influenza |
| **IMR** | Infant Mortality Rate |
| **MCH** | Maternal Care Health |
| **MO** | Medical Office |
| **MTS** | Medium Term Strategy |
| **NCD** | Non-Communicable Diseases |
| **NGO** | Non-Governmental Organizations |
| **OPV** | Oral Polio Vaccine |
| **PHC** | Primary Health Care |
| **PRS** | Palestinian Refugees from Syria |
| **PIMS** | Pharmacy Information Management System |
| **PLD** | Procurement and Logistic Department |
| **SCSN** | Special Children & Special Need |
| **TB** | Tuberculosis |
| **Td** | Tetanus/Diphtheria |
| **THIH** | Tropical Medical & International Health |
| **UNICEF** | United Nations Children's Fund |
| **UNRWA** | United Nations Relief & Works Agency for Palestine Refugees in the Near East |
| **VSD** | Ventricular Septal Defect |
| **WBFOs** | West Bank Field Office |
| **WDF** | World Diabetes Foundation |

unrwa
الاونروا

health department
unrwa hq amman
po box 140157 amman 11814, jordan

t: amman (+962 6) 580 8301, f: (+962 6) 580 8318/9

www.unrwa.org

united nations relief and works agency
for palestine refugees in the east

وكالة الأمم المتحدة لإغاثة وتشغيل
اللاجئين الفلسطينيين في الشرق الادنى