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Message of the UNRWA Commissioner General and of the WHO Regional Director

Health and dignity are not to be earned; those are basic rights and should not be denied by natural or man-made calamities. UNRWA, with strong support of and partnership with host countries, donors, World Health Organization (WHO) and other UN agencies, continues to work for protection and promotion of Palestine refugees' health. Today, 5.8 million Palestine refugees are registered with UNRWA across our five fields of operation – the West Bank, Gaza, Syria, Lebanon and Jordan. Through a network of 143 health care centres, UNRWA is providing comprehensive primary health care services and subsidizing secondary and tertiary care.

Disease burden and health needs of Palestine refugees have been dramatically shifting in a more challenging way for the Agency. The on-going blockade of Gaza and related protracted crisis has diminished access to adequate medical care, in particular for some conditions that need advanced care. Population ageing and poverty have been leading to an epidemiological transition with more Palestine refugees suffering from the increased burden of non-communicable diseases (NCDs). There is no doubt that needs for humanitarian and development assistance for Palestine refugees in health will continue to grow over the years to come.

This year marks 50 years of Israeli occupation of the West Bank and 10 years of the blockade of Gaza. UNRWA has been providing assistance to Palestine refugees registered with UNRWA in Syria where this March also marked the sixth anniversary of its crisis.

UNRWA has been instrumental in providing essential services to Palestine refugees in the Middle East, yet serious financial constraints put at risk UNRWA's ability to carry out the mandate entrusted to it by the UN General Assembly, and those challenges facing the Agency must be addressed as a collective priority.
In December 2016, the General Assembly inserted a new provision into the annual resolution on UNRWA's operations, requesting Member States and other donors to explore all ways and means to ensure sufficient, predictable and sustained funding for the duration of the Agency's mandate.

Despite such challenging and emotional environments, in 2016, achievements include many favourable health-related outcomes. This is a result that can be attributed in large part to UNRWA's health reform strategies, including shifting to the person-centred comprehensive Family Health Team (FHT) approach and introducing e-Health, and moreover, to the strength of UNRWA's programmes and remarkable dedication of our staff. An important cornerstone in our achievement is the longstanding collaboration with WHO in all matters related to the health of Palestine refugees including, mother and child health, family medicine, mental health and psychosocial support, nutrition, NCD care, special support to Syria in addition to operational research, consultations and technical evaluation.

Despite the fact that UNRWA operates in a complex and unpredictable environment with protracted political tensions in the region, the world cannot afford to abandon Palestine refugees. The stakes are too high. Pending a just and lasting solution to their plight in accordance with UN resolutions and international law, UNRWA remains committed, together with the WHO and other UN sister agencies and authorities, to its mission to help Palestine refugees achieve their full human development potential and well-being.

Pierre Krähenbühl

UNRWA Commissioner General

Dr. Mahmoud Fikri

Regional Director, WHO/EMRO

Foreword of the Director of Health

The impact of instability on the welfare of Palestine refugees continued throughout 2016 in each of our fields of operation. The on-going conflict situations in Syria as well as the lasting Israeli occupation in the West Bank and blockade in Gaza have threatened the well-being of Palestine refugees, and created its own set of challenges for them to access necessary health care. Double displacement of Palestine refugees from Syria (PRS) is becoming more of an issue, in Lebanon and Jordan, as they compete for scarce resources in refugee camps, schools and health centres. We have struggled to continue with the provision of quality health services, and feel that demands for humanitarian and development assistance for Palestine refugees are becoming more important, and will only grow. We realize, more than ever, the importance and the unmistakable link between health and peace.

UNRWA provides a variety of primary health care services. As it is estimated that 1.25 million more Palestine refugees will be registered by 2021 with population living longer and ageing at a faster rate, more than 75% of deaths among Palestine refugees today are caused by NCDs. By the end of 2016, 250,000 patients were reported having diabetes mellitus (DM) and/or hypertension. In response to the increasing rates of NCDs and rising costs of treatment, UNRWA marked an important milestone in one of its health reform strategies, Family Health Team (FHT) approach, in 2016. FHT approach has now become operational in all health centres in four fields, with on-going efforts in Syria being made to roll out . The approach also included introduction of e-Health, and together with FHT, this resulted in more efficient services, shorter waiting time, increased patient consultation times, improved health care facilities, and satisfaction from both staffs and patients.

In parallel, 15 UNRWA staff members in Gaza completed Family Medicine Diploma Programme in 2016, which enhance their practical and clinical skills to better contribute to the FHT approach. In Gaza, pilot project to integrate mental health and psychosocial support (MHPSS) was launched at Saftawi Health Centre. The integration of MHPSS within its primary health care is a turning point for the Agency, enabling us to provide more comprehensive services to Palestine refugees.

The Agency also strengthened the hospitalization support in Lebanon in 2016: the percentage of the Agency's coverage for secondary care was adjusted. This new policy brought greater sustainability and increased support for tertiary care. This was a long-standing request from Palestine refugees in Lebanon whose access to medical care is restricted. UNRWA will focus on those experiencing most life-threatening illnesses that require life-saving/life-supporting care, but who lack the necessary financial assets or insurance coverage to attain such treatment.

The Health Department continues to generate scientific evidence on its activities through conducting research and publishing the findings, which will enable us to strengthen evidence-based practices and to improve quality of care. The modernization of the UNRWA health programme would not have been possible without the generous contributions from concerned countries, partnerships with the host countries' authorities, the WHO and UN agencies, local and international organizations, and most importantly, dedication and commitment of our staffs. We are committed to improving the well-being of Palestine refugees, and UNRWA will continue to advocate and protect the rights of Palestine refugees.

Dr. Akihiro. Seita

WHO Special Representative
Director of the UNRWA
Health Programme

Executive Summary

UNRWA has been operational since 1950. UNRWA provides assistance and protection for approximately 5.8 million Palestine refugees in the five Fields of operations today – Jordan, Lebanon, Syria, West Bank and Gaza. For the seventh decade, UNRWA Health Programme continues to deliver comprehensive preventive and curative primary health care (PHC) services to Palestine refugees through a network of 143 PHC facilities, and supports patients to access secondary and tertiary health care services. Currentlly, around 3.5 million Plaestine refugees receive health care at UNRWA health centres. During 2016, our Fields of operation continued to suffer the effects of instability in the region. In Lebanon and Jordan, refugees from Syria (PRS) have been straining the system for years, while the occupation by Israel and the on-going conflict continues to challenge Palestine refugees' access to deliver of health care by UNRWA in the West Bank, Gaza and Syria.

The Palestine refugee population is predominantly young. Population ageing, however, is advancing with longer life expectancy. The demographic shift has resulted in changes in disease burden, particularly increased prevalence of non-communicable diseases (NCDs) which accounts for approximately three fourths of mortality today. In response to this, UNRWA has established health reform strategies which marked a significant milestone in 2016. Family Health Team (FHT) Approach is a new, person-centred approach, devoted to improving the quality and delivery of public primary health care for Palestine refugees. Now FHT approach is being implemented in 135 health centers: operational in all health centres in Jordan, Lebanon, West Bank and Gaza with exceptional on-going effort to expand the approach in Syria.

Introduced with the FHT approach is an electronic patient health-record system referred to as e-health. As a complement to the FHT approach, e-health ensures that family health teams can readily follow up and/or offer health services as result of having consolidated information about the patient's health. Being introduced to 114 health centers, e-Health FHT version is now operational across all health centres in Gaza, and Lebanon, and the system is expected to be fully operational in both Jordan and West Bank and by mid-2017. An important dimension of the FHT approach in 2016 also involved Family Medicine Diploma Programme which trained 15 UNRWA doctors in Gaza.

The Medium Term Strategy (MTS) presents the Agency's strategic vision and objectives for its programmes and operations for the period 2016-2021, with the aim of maximizing its use of resources and the impact of its operations in serving Plaestine refugees. The Department of Health is primarily responsible for its Strategic Outcome 2: Refugees' health is protected and the disease burden is reduced, which includes the implementation of people-centred primary health care system using the FHT model. In Gaza, pilot project to integrate Mental Health and Psychosocial Support (MHPSS) was launched at Saftawi health centre. The integration of MHPSS within its primary health care is a turning point for the Agency, enabling the provision of more comprehensive services to Palestine refugees. In January 2016, Saftawi health centre in North Gaza became the first MHPSS pilot health centre, integrating the full package of services. In response to the increasing incidence of NCDs among the Palestine refugee population, UNRWA has introduced new tests, medicines and public awareness campaigns to promote NCD prevention and condition management.

In addition to passive case detection, screening for diabetes among high-risk groups were continued to be provided. In 2016, the prevention and control of communicable diseases was successful, as no cases of outbreaks were reported among Palestine refugees. Maternal and child health outcomes, including immunisation rates, remain strong. In 2017, UNRWA will continue to partner with domestic and international agencies to maintain such strong health outcomes, and to investigate areas where services can be further improved

Another health-related outcome of MTS is the provision of efficient hospital support services. In January 2016, UNRWA introduced adjustments to its hospitalisation policy in Lebanon to achieve greater sustainability in the Agency's support for the Palestine refugees. This was a reflection to the voices of the Palestine refugee population who had concerns with the cost-sharing element previously introduced for secondary hospitalization support. The Agency took these concerns very seriously and as a result, developed and implemented a refined hospitalization policy. UNRWA will continue to focus on the most life-threatening illnesses and on those who lack the necessary financial resources to attain life-saving/life-supporting treatment.

Finally, this Annual Report is thus organized in the following manner:

Section 1 – Introduction and Progress to Date
This section includes an introduction to UNRWA and to the activities of the Department of Health over the past seven decades, introducing the population and examining its demographics. It highlights progress in the health reform process, namely FHT approach and e-Health system, which respond to the changing disease burden and increasing health demands of Palestine refugees. Moreover, this section presents the way forward regarding the implementation of the MHPSS model, improved hospitalization support, and a new innovative approach to medicine and medical supplies procurement. Lastly, it introduces some of the innovations implemented during 2016 by the health programmes both at HQ and Fields' levels.

Section 2 – Strategic Outcome 2: Refugees' health is protected and the disease burden is reduced
This section outlines outcomes based on one of the MTS 2016-2021 set by UNRWA. The activities and achievements of all sub-programmes by the Department of Health are presented. Those include outpatient care, community mental health, non-communicable diseases (NCDs), communicable diseases, maternal health services, child health services, school health, oral health, physical rehabilitation and radiology services, disability care and pharmaceutical services. It also outlines information and data about inpatient care, outsourced hospital services, and crosscutting issues.

Section 3 – Data
Under this section, major indicators are presented in four parts followed by annexes. Part 1: Agency-wide trends for selected indicators, presented in figures. The 24 selected indicators show the overall health programme performance Agency-wide from 2009 to 2016. Part 2: Common Monitoring Matric (CMM) indicators (2016-2021). Trends in selected 27 indicators under strategic objectives 1-3, for the years 2016-2021, per Field and Agency-wide, are presented in tables. Part 3: 2065 data Tables, presenting aggregated 2016 data and details on all relevant information and indicators per Field and Agency-wide. Part 4: Selected survey indicators, presenting results of surveys conducted at the Health Department. Part 5: Health Department Research Activities and Published Papers Part 6: Director of health and senior staff of department of health participated in the Meeting/ Conference and Part 7: Donor support to UNRWA health program me. Additionally, annexes include list of strategic outcomes, health maps, contacts of senior staff of the UNRWA Health Department and finally, the list of abbreviations.

SECTION 1 – INTRODUCTION AND PROGRESS TO DATE

UNRWA

UNRWA is a United Nations Agency established by the General Assembly in 1949 following the 1948 Arab-Israeli War, and became operational in 1950. It is mandated to provide assistance and protection to a population of over 5.8 million registered Palestine refugees. Its mission is to help Palestine refugees in Jordan, Lebanon, Syria, West Bank and the Gaza Strip to achieve their full potential in human development, pending a just solution to their plight. UNRWA's services encompass education, health care, relief and social services, camp infrastructure and improvement, microfinance and emergency assistance. UNRWA is funded almost entirely by voluntary contributions. UNRWA has its Headquarters (HQ) in Amman, Jordan, and in Gaza Strip, and act to coordinate the activities of the five Field Offices (FOs).

UNRWA's health system has three tiers:

- Headquarters: handles policy and strategy development.
- 5 Field Departments of Health: concerned with operational management.
- 143 Health Centres: provide health services to Palestine refugees.

The Department of Health employs over 3,000 staff throughout the three tiers, including around 500 doctors, and it offers health care services to about 3.5 million Palestine refugees; the served population or beneficiaries. UNRWA does not operate its own hospitals (except for one, Qalqilia hospital, in West Bank), but instead it implements a reimbursement scheme for its beneficiaries, which varies fro one Field to another.

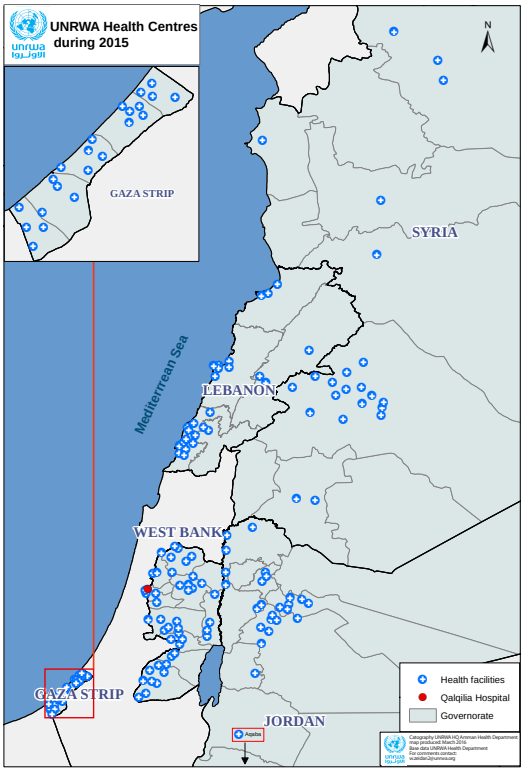


Figure 1- Distribution of UNRWA health facilities in the five Fields of its operations.

Health Profile

UNRWA has contributed to sizeable health gains for Palestine refugees since the beginning of its operations in 1950. More than 5.8 million Palestine refugees are registered with UNRWA. The population is ageing, but it is still predominantly young, with enduringly high fertility rates and increasing life expectancies. Across UNRWA's areas of operation, 31.0% of refugees are children below 18 years. A high dependency ratio of 56.1% suggests a particularly great economic burden on families living in a context of conflict, high unemployment rates and worsening poverty conditions.

Approximately 28.5% of registered refugees live in 58, densely populated, official UNRWA camps. The remaining refugees live in unofficial camps, towns and villages, side by side with host countries' populations.

The infant mortality rate (IMR) declined from 160 per 1000 live births in the 1960s to less than 25 in the 2000s. Nevertheless, a follow up study conducted by UNRWA in 2015 has revealed that the trend of IMR among Palestine refugees in Gaza increase slightly from 20.2 in 2008 to 21.3 in 2015 in 2016, UNRWA services cared for 409,571 infant and children 0-5 years.

There has been a sharp reduction in maternal mortality and morbidity over the past 50 years. Principal features of UNRWA healthcare for Palestine refugee women of reproductive age include: universal access to antenatal care; safer delivery care, with referrals to and subsidies for hospital delivery, and the availability of modern contraceptive methods. There has been a reduction thin stablisation in the overall fertility rate over time. Despite this, fertility and maternal mortality rates remain relatively high. Unless additional resources are secured, further reductions will be a challenge. In 2016, UNRWA health care services cared for 158,296 family planning users and 93,747 pregnant women.

The reduction in the incidence of communicable diseases, combined with a longer life expectancy and lifestyle modifications, have led to a change in refugees' morbidity profile. Non-communicable diseases (NCDs), such as cardiovascular diseases, chronic respiratory diseases, diabetes mellitus, hypertension and cancer, are emerging as today's leading health concerns. These diseases are costly to treat and are often the result of sedentary lifestyles including obesity, unhealthy diets, physical inactivity and smoking. In 2016, UNRWA health centres cared for more than 256,765 Palestine refugee patients with diabetes and hypertension.

UNRWA will continue working hand in hand with the Palestine refugee community, host countries and other stakeholders to check the advance of these diseases, applying a multidimensional strategy that focuses on three dimensions: disease surveillance to collect, analyse and interpret health-related data on NCDs and their determinants; health promotion and prevention interventions to combat the major risk factors and their environmental, economic, social and behavioural determinants among Palestine refugees across the life cycle; and the provision of cost-effective interventions for the management of established NCDs.

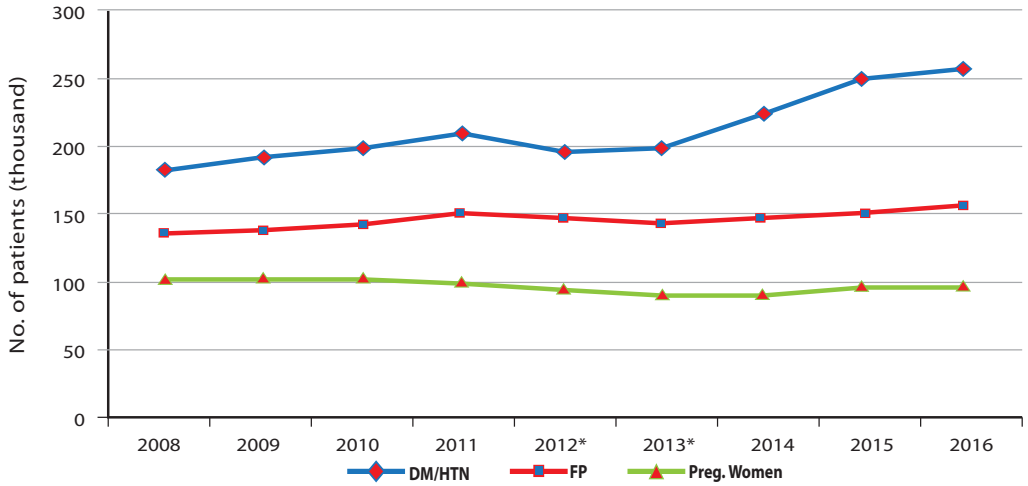


Figure 2- Patients with diabetes mellitus and/or hypertension, family planning and newly registered pregnant women (*data not available from Syria)

Communicable diseases are largely under control, thanks to the high vaccination coverage and the early detection and control of outbreaks. Diseases related to personal hygiene and poor environmental sanitation are under control, though refugees continue to suffer from food insecurity and the burden of micronutrient deficiencies.

The ongoing protracted and acute conflicts, occupation, and the lack of a just and durable solution for Palestine refugees' sufferings continue to affect the population's physical, social and mental health. There is a scientific evidence of high prevalence of mental distress among Palestine refugees. Mental health and psychosocial-related disorders are major issues to address when working to ensure that these refugees enjoy the highest attainable level of health.

The crisis in Syria has entered its seventh year, with no lasting, peaceful solution in the horizon. Over 280,000 Palestine refugees from Syria (PRS) have been internally displaced, and more than 80,000 have fled to neighboring countries, including Jordan and Lebanon, where all PRS have been accessing UNRWA services for years. This has placed additional pressures on camps, schools and health centres with scarce resources. The blockade and recurrent emergencies in Gaza, and the occupation the West Bank, remain major obstacles to socioeconomic development of Palestine refugee communities, and on the health-care provision.

To respond to these challenges, UNRWA's strategy is to focus on: improving the quality of healthcare delivered through a Family Health Team (FHT) model; improving the quality of medical consultations and care for NCDs; providing staff with training in family medicine; integrating Mental Health and Psychosocial Support (MHPSS) and protection into the day-to-day activities of health centres; engaging communities in health prevention and promotion activities; and improving hospitalization support to ensure financial protection for the most vulnerable. UNRWA will continue to roll out the health information system, the e-health system, and strengthen the FHT primary health-care model, the new norm at all health centers in the four Fields, and expanding it to new health centres in the fifth Field, namely Syria.

UNRWA Response: Health Reform

Family Health Team (FHT) Approach

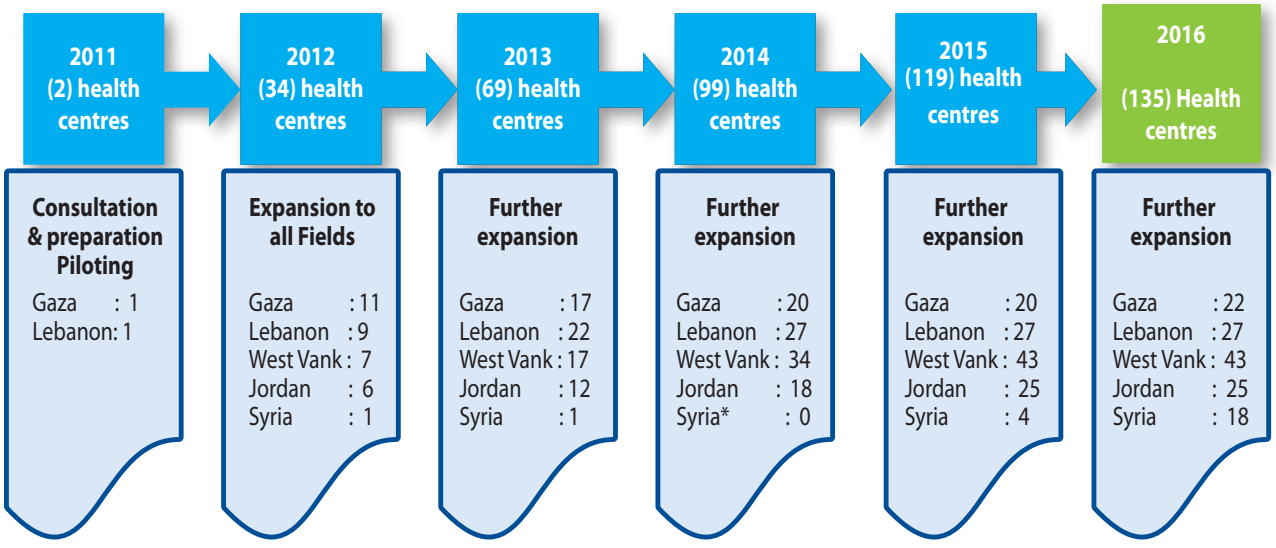
In response to the change in the health needs of Palestine refugee population, late in 2011 UNRWA launched a health reform package based on the FHT approach. Through this model, UNRWA health services are organised to provide comprehensive and holistic primary health care package for the entire family, emphasizing long-term provider-patient/family relationships and designed to improve the quality, efficiency and effectiveness of health services, particularly those relevant to NCDs.

Under the FHT, approach families are registered and assigned to a team of health professionals which consists of a doctor, nurse and midwife. The provider team is responsible for all health care needs for the family through all stages of the lifecycle.

The FHT approach is supported by the concurrent introduction of electronic medical records (e-health) and the necessary infrastructure.

By the end of 2016, the FHT approach was operational in 135 health centres in the five Fields, serving 95% of the Agency served population. In Syria, exceptional efforts were made by the field to roll out FHT achieving substantial progress to additional 14 health centres in 2016, making the total number of health centres implementing FHT 18 health centers.

It is expected that by the end of 2017 the FHT model will be expanded to all clinics in Syria, and to onclude the remaining eight helath centres.



"Syria Field started the implementation of the FHT in Khan El-Sheih health centre in April 2014. This health centre was heavily affected by the conflict and it is not functioning

Figure 3- Progress in the implementation of the Family Health Team approach at health centres in the five Fields.

Several assessments have been conducted in health centres implementing the FHT approach since 2012, including focus group discussions, client flow analysis exercises and patient and staff satisfaction surveys. These assessments have expressed very positive responses to the approach from both staff and patients, as well as quantitative improvements to patient waiting times and staff workload. Equitable workload distribution – a consequence of the new teamwork structure and switch from specialized services to comprehensive general primary services – had been cited as one of the key positive factors perceived by all staff. In addition, improved professional satisfaction and the opportunity to build relationships with patients over time have also been cited by staff. Patients appreciate having a doctor who knows the health profile of the whole family. Moreover, patients have indicated that the health centre is more organized and less congested since the transition to FHT model.

Improvements in quality of services were observed, including a decrease in the average number of daily medical consultations per doctor, increase in consultation time, and decrease in antibiotics prescription rate. Maternal and child health indictors such as vaccination coverage, early registration to preventive care and percentage of pregnant women attending at least four antenatal visits remained at a high level.

In the process of implementation of the FHT, the friendship committee established at each helath centre generates the appropriate environment for community participation to make the FHT practice more responsive to the community needs and demands.

The FHT approach will continue to work as platform to coordinate all crosscutting issues within the Agency as well as with all other stakeholders. It is an ideal structure to address the full spectrum of mental health and psychosocial support and protection issues, in a systematic, comprehensive and effective way.

Through the FHT approach, health teams currently provide basic counselling and education to promote healthy living and well-being among clients. Integrating mental health and psychosocial well-being within UNRWA's FHT primary health care services is central to the values and principles of the FHT approach and is the optimal solution for preventing and managing both ill-physical and mental health.

An important dimension of the FHT reform is the continues capacity building of health professionals. Most of the physicians working in UNRWA primary health care facilities are general practitioners, who are certified to work without further specialized training after graduation. In 2016, jointly with local partners (Al- Azhar University) and international Partners (RILA) institute for health sciences, Imperial college and Middlesex University in UK) 15 doctors in Gaza were graduated with one year Diploma in Family Medicine from Middlesex university. It is expected that this training programme will be expanded to more doctors in Gaza and other fields.

Electronic Medical Records (E-Health)

In 2009, UNRWA began developing and piloting the electronic medical records (EMRs) named as the classical e-health system in its health centres, transitioning away from the time consuming, costly and labor-intensive unprecise paper-based system.

Developed in-house, the e-health system included originally four principal modules: NCD, outpatient, child health, and maternal health, and the support modules; pharmacy, laboratory, dental, and specialist care. Following the implementation of the FHT approach in 2011, a major reform to healthcare delivery, the 'classical' e-health system was redesigned into a new FHT-based one. The new package is more comprehensive; it incorporates a synergised interface that accommodates the information technology and management needs for the FHT model.

On the ground, the use of e-health system facilitated and streamlined the daily operation of the health centres. It led to better documentation and follow-up of referrals, more efficient use of space, less use of stationary and printed forms and streamlined patient movement. It eased the burden of paperwork on staff, reduced patient waiting times, and increased provider-patient contact time; thereby increased opportunities for the delivery of better health services and the delivery of health education messages.

At the administrative level, e-health has facilitated the de-centralization of the health centres, and strengthened the continuous process of quality improvement, which in turn enhanced staff managerial and administrative capacity. The system enables the compilation of health data, the production of data on all health indicators and the automatic generation of health reports. The improved accuracy and reliability of statistical information, enables the development of evidence-based policies in the future that are essential to sustain and improve the outcomes of the health reforms.

To further enhance UNRWA's capacity for monitoring the health of patients, an innovative e-health monitoring system, ("cohort analysis") was developed in 2012. This cohort analysis allows the comprehensive monitoring of NCD care: incidence, prevalence, treatment, compliance, outcomes, and non-attendance to follow-up. This monitoring system has led to the publication of research in international peer-reviewed journals such as the Lancet.

At the end of 2016 e-health FHT version was implemented in 114 health centres.

Table 1- Number of health centres using classical and FHT e-health versions by the end of 2016.

e-health version	Jordan	Lebanon	Gaza	West Bank	Syria	Agency
FHT version	20	27	22	42	3	114
Classical version	2	0	0	0	0	2
Total	22	27	22	42	3	116

UNRWA aims at implementing its FHT e-health system across all Fields by 2017, including Syria if the situation on the ground allows. In Syria Field, training of staff and deployment of the e health system started at 3 HCs in January 2016.

E-health system was developed in collaboration with other UNRWA departments, in particular the Information Management Systems Division (IMSD) at UNRWA Headquarters and the five Fields, and the United States of America has been the main supporter for the e-health program, in addition to the contributions by the governments of Denmark, Japan, Switzerland and Brazil.

Human Resources

Occupational Health Salary Scales (OHSS)

Successful health reform could not have been achieved without the extraordinary dedication and commitment of health staff, which produced creative models, shaped the atmosphere of team spirit, developed their technical capacity, strengthened community engagement, and expanded collaboration with new partners. Their efforts were acknowledged and highly praised by the refugees, other UNRWA programmes, WHO, host countries, and donors.

Following UNRWA reform of the health services based which on the FHT model which was implemented in parallel with electronic medical record system, (e-health) in addution to the introduction of appointment systems there was a need to revise the human resources scale for health staff.

UNRWA maintained one generic salary scale comprised of 20 grades with 24 steps per field of operations. This salary scale applied to more than 1,000 different functions and job titles, and is used to compensate more than 30,000 staff members. In 2016 salary surveys were held in all five fields pursuant to the Agency's Pay Policy, in close consultation with staff representatives. A fact-finding mission has been deployed to the West Bank and Gaza to clarify the salary survey results and a report was submitted to the Executive Office.

To address market conditions as well as the Agency's interest in the best talent acquisition and retention, and in close consultations with relevant stakeholders in the Agency, including programme staff, Health Department leadership and Staff Representatives, a new salary scale was introduced effective January 2017 which is applicable specifically and only to certain medical-and paramedical-related functions.

The introduction of this scale has no impact on other positions or grade levels in other occupations. the OHSS is comprised of 11 grade levels with 26 within-grade-step-increments, and covers medical and paramedical staff, as well as middle and senior health programme staff.

Medicine and Medical Supplies Procurement

Health Purchasing Strengthening

As a continuation of 2015 Health Procurement Strengthening Project conducted via Long Term Agreement (LTA) with Empower School of Health[1] (ESH), and based on 2011 study to analyse UNRWA's medicine procurement prices and processes which highlighted several areas for improvement, to ensure procuring high quality drugs with low prices,[2] a three-phase work plan was developed at the beginning of the assignment with ESH.

The objective of Phase One was to establish Quality Assurance standards for pharmaceuticals and medical devices for UNRWA in accordance with WHO and other Stringent Drug Regulatory Authorities (SRA).

In November 2016, UNRWA carried out a comprehensive review of the current pharmaceutical list in line of WHO-Essential Medicines List (EML) 2015, through a joint discussion between Chiefs and Deputy/Chiefs Health Programme, Field and Deputy/ Field pharmaceutical Services from all field offices, with all concerned health staff at HQ(A). Some alternative sources were also suggested for the current list of 134 drugs and 49 non-drugs. This will be followed by market research and pre-qualification of suppliers to ensure that these newly introduced items are at our central warehouses by beginning of 2018. Standard treatment guidelines and relevant technical instructions will be updated accordingly.

The tender exercise for the Top 36 medicines (this category accounts for almost 80% of the budget) has been completed. With the introduction of UNRWA Pharmaceutical Quality Assurance policy and Strategic Sourcing for qualified pharmaceutical manufacturers, the Agency was able to build sufficient buffer stock and to introduce statins as the treatment of choice for lowering cholesterol.

In Phase Two, the main objective was to improve internal procurement procedures and deficiencies, through mapping of all procurement and supply chain management processes. To achieve this objective, phase two dealt with quantification of products, reviewing and editing/developing vendor registration forms for pharmaceutical and medical commodities, pre-qualification of products and suppliers and reviewing and strengthening of tender documents to incorporate quality assurance standards. In November 2016, a template was developed by HD-HQ for the purpose of standardising quantification methodology by all Fields, ensuring buffer stock of 3-6 months depending on the items.

The main objective of Phase Three, which is still running, is to develop new procurement strategy which will include, but not limited to rationalizing the product list for procurement purposes. However, several challenges were encountered during implementation process, as pre-qualified suppliers for some items could not be found by Procurement & Logistic Division (PLD), which has led to delays in deliveries resulting in stock out phase of some essential items. Ad-hoc corrective measures were identified and implemented.

1. Empower School of Health is a training and consultancy organization; more details can be found at www.empowerschoolofhealth.org
2. medicine procurement prices and processes in the united nations relief and works agency for palestine refugees in the near east (UNRWA) https://www.unrwa.org/userfiles/201210212936.pdf

Integrating Mental Health and Psychosocial Support (MHPSS) into UNRWA's Primary Health Care (PHC) and the Family Health Team Model

The Agency MHPSS vision is to protect and promote the right of every Palestine refugee to achieve the best possible mental health and psychosocial well-being through UNRWA's basic services. The rationale for the MHPSS program is the relative paucity of mental health professionals available to serve a population in psychological distress.
In UNRWA Health Programme, the MHPSS interventions aim to enhance the psychological and social well-being of individuals and their communities through empowering community and individual resilience. These interventions are not limited to an emergency situation or are only oriented at problems or deficits but they aim to support psycho-social wellbeing and processes of empowerment. It is not relevant not only to Palestine refugee clients, but also to the health professionals themselves.

The Department of Health has defined the MHPSS activities in a stepped - care model to manage common MHPSS issues within health centres and their surrounding communities. The least intensive intervention appropriate for a person is provided first, and individuals can "step up or down" in response to treatment and according to changing needs.

Doctors, staff nurses and midwives will receive psychosocial and mhGAP training. Core competencies for all staff members at health centres include improved communication skills, psychoeducation, awareness of social determinants of health and the ability to detect emergency cases. Doctors, staff nurses and counsellors (where available) will be equipped with knowledge, skills and tools to conduct specialized assessments, case management and more individualized counselling, while only medical officers will prescribe medication. Midwives and nurses will be prepared to facilitate community outreach activities, group counselling sessions and support groups, and low-level identification and detection of mental health disorders, with knowledge of intern.

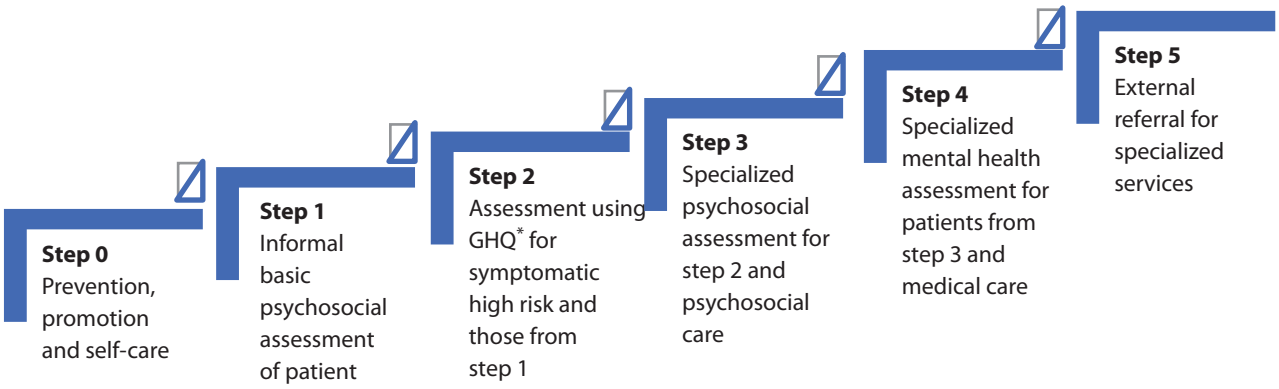


Figure 4-UNRWA MHPSS stepped – care model

* General Health Questionnaire.

Saftawi a model of integration of MHPSS into the FHT approach

On the 3rd of February 2016, Saftawi health centre started field testing of UNRWA's MHPSS package. This health centre is located in North Gaza, and it has been implementing FHT approach and e-health since 2012. It is run by 48 staff members serving 77, 000 individuals. Staff received 17 days of training on the basic concepts of MHPSS and the WHO mhGAP. In addition, a recording and reporting system was established, on the job supervision was provided, a referral system was developed, and community engagement and participation were granted.

The role of each staff was defined within the stepped-care model according to the WHO pyramid of care. Support groups sessions (5-8 sessions) for high risk groups were run by the counselor and nurses.

Data collected from the records, group discussions with staff, individual feedback from the patients and using the Quality of Life Questionnaire indicated that: of the 39,858 patients who visited the clinic in 2016, a total of 4773 patients with psychosocial issues were identified by nurses. Of these, 326 were considered with important MHPSS issues, and medical special files were opened for them. Out of these,175 improved and their files were closed, 95 were referred to group counseling, 22 referred to the psychosocial counselor and 116 and still under care.

Doctors diagnosed 167 cases including 105 cases with depression, 25 with epilepsy, 19 with stress, and 8 with unexplained medical symptoms, 3 bipolar and 2 developmental problems. Out of the 105 cases of depression, 50 cases were put on medication, 48 cases on psycho-education and only 7 cases were referred to specialized care.

Support Group sessions had significant impact on the lives of 190 clients enrolled into them. Regular outreach activities were conducted jointly with NGOs and CBOs. Ten volunteers were trained to conduct support group session reaching 1500 by the end of 2016.

Feedback from staff showed that in spite of increased workload, they finally felt doing fully their job; were able to provide better care that addressed both mind and body; and developed a better understanding pf patients' needs and stronger relationship with them. However, training on self-care and outher issues is still needed.

Saftawi experience shows that the Integration of MHPSS in resource limited settings is feasible and can bridge an important part in the MHPSS gap. Key factors of success include building a system, training and motivating staff, ensuring adequate supportive supervision and engaging the community.

Case study from Saftawi health centre

Fatima is 28 years, diabetic and works as a teacher, presented to the health centre to register her new pregnancy. She was complaining of morning sickness and mild epigastric pain. When the midwife asked her about her feelings concerning her current pregnancy she said: "I'm very happy, however I am very anxious about it."
When the midwife asked about her concerns, she responded: "I am worried about the effect of diabetes on my pregnancy. Would I have complicated pregnancy and labor? Would I experience abortion or premature labor or would the baby come with birth defects? Would I have to go through a caesarian section? In the future, will the baby suffer from DM too?
She frequently requested that her blood sugar be examined, she also asked a lot of questions relating to her condition and about her pregnancy. She always looked anxious and used to say that she feels nervous almost every day. She worried about many things, and she had different thoughts that she could not stop. Her husband was not supportive for her, and continued to complain about her disease condition; diabetes, all the time.

All of this affected her social life; as she preferred to stay at home and she stopped contacting any of her friends or relatives. Her condition and thoughts affected her work-life balance as she started to miss many working days.

The case of Fatima, and several similar cases, was effectively managed by the Family Health Teams at Saftawi health centre, where MHPSS is integrated in the services provided by that health centre.

Hospitalization support

UNRWA provides assistance towards essential and affordable hospital services through the partial reimbursement of costs incurred at government or NGO hospitals and /or through contractual agreements with NGO or private hospitals. In addition, the Agency directly provides hospital care in one hospital at Qalqilia in the West Bank. The level of support for Palestine refugees varies across the five Fields according to the rights granted to the Palestine refugees in each host country.

UNRWA hospitalization services are managed by the Health Department (HD) at UNRWA Headquarters (HQ) and Field Offices (FOs) in line with the Agency's decentralization policies to provide equitable, affordable and sustainable hospital services to the eligible Palestine refugees. Each Field manages its own resources for hospitalization services and establishes its coverage limits and reimbursement policies.

Financial support to hospitalization services is the second highest health-related expenditure after personnel. It has been always essential to ensure effectiveness and efficiency of this support despite the tight UNRWA financial situation.

At the beginning of June 2016, UNRWA started implementing a refined adjusted hospitalization policy in Lebanon according to which the coverage by UNRWA is 90 percent for the expenses at private hospitals and 100 percent for the expenses at Palestine Red Crescent hospitals.

An increased reimbursement for tertiary care cases from 50% to 60% – where services are more expensive and catastrophic health expenditure is more likely – was also introduced.

Hospital contracts were renegotiated and strengthened with quality indicators. A mechanism to provide additional support for the most vulnerable patients was flagged as a possibility in the adjusted policy.

A new hospitalization policy was developed in 2016 to be implemented at the beginning of 2017. This policy represents the strategic approach to prioritize the hospitalization programme support, tailored to the local circumstances, and to provide robust and equitable outcomes to the Palestine refugees within the Agency's financial reality. This is to ensure the optimal financial protection to those most in need of hospitalizations.

An Agency-wide hospitalization database is still under development. The database will allow in-depth analysis to better understand the impact of the support provided that is not captured through current data collection.

By collecting data that is currently obtained through both electronic and manual techniques, the database will capture characteristics of the beneficiary population, utilization rates and expenses in contracted hospitals, and utilization trends over time.

Innovations

During 2016, UNRWA Health Programmes at the Fields introduced a number of innovations that aimed at strengthening and complementing the successes achieved by implementing the FHT approach and e-health. Through these innovations, Fields were working in creative and innovative ways to improve the quality and efficiency of UNRWA's health services.

Gaza Field

Breast cancer campaign and mammography services

Breast cancer is the most common type of cancer among women and the second common cause of death from cancer. Gaza Field office (GFO) has set breast cancer awareness and screening as a priority in its projects' plan for 2016. For the first time in UNRWA health centres, GFO launched mammography services for women aged 40 years old and above and conducted through breast cancer campaign and launched mammography services. The campaign started by conducting a training of trainers (ToTs) workshop for 21 senior staff nurses (SSNs) (ToTs), through a project funded by the Basque government, who were responsible for the campaign in all health centres. The awareness raising campaign was conducted and completed in all 21 UNRWA HCs and other installations such as schools, community based organizations in remote areas and the Women Programme Centres throughout the Gaza Strip targeting women of various ages. The campaign provided information about the importance of both breast self-examination and clinical breast examination under the theme of "How to protect yourself from breast cancer". Promotional materials including posters, mugs, and brochures were distributed during the campaign. The mammography services targeted the following groups:

- Women aged 40 years and above.
- Women at risk who have a strong family history of breast cancer.
- Suspected cases at any age.

when the findings of the mammography were highly suspicious, confirmatory breast ultrasound was performed. In addition, ultrasound alone was performed for the women younger than 35 years and for pregnant women. All types of pathologically suspicious case were referred to the Ministry of Health (MoH) for further investigations and management.

A total of 8288 cases received mammography or ultrasound and mammography with ultrasound. 69 cases were identified with abnormal findings, with 52 cases proved to be malignant and 17 as benign. Moreover, addetinal 23 of confirmed malignant cases reported to our health centres in 2016. This highlights denotes the magnitude of the problem and the importance of further action at both UNRWA and national levels.

West Bank Field

Increasing the Resilience among the Youth/Children
Summer Camps for Resilience against Conflict-related Violence "We Are the Youth, We Are Tomorrow"

In response to the substantial increase in conflict-related violence in refugee camps in 2016, the community Mental Health / Child and Family Protection Programme conducted annual summer camps specifically for children and youth who have experienced conflict-related violence. The objectives of this four-days programme aimed to improve knowledge on children's rights and human rights, to strengthen children's and youth's ability to express and manage their emotions (i.e. coping mechanisms, stress management, and how to ask for help), to strengthen their leadership and advocacy skills and to increase their knowledge about health issues (such as healthy lifestyles, nutrition, sexual and reproductive health and unhealthy habits or coping strategies, including smoking) by using a youth-to-child approach.

A total of 70 youth (ages 18-24) were initially selected to participate in a centralized Youth Summer Camp. All were victims of violence as well as active members of advocacy groups in refugee camps, and eight of them were with disabilities.

Following that, these youth organized a Children Protection Summer Camp for younger children by applying the methods and tactics they learned during the training sessions. in 2016, 33 Children Protection Summer Camps were held wuth the participation of 2990 schoolchildren, of whom 176 were with disabilities. They have lived in refugee camps and Bedouin communities, where the most severely affected by conflicts, and were reported by their schools for their need to treatments for their trauma and anxiety caused by conflict-related violence. During the camp, educational, awareness and amusement activities were conducted to provide participants with protective and psychosocial support, to improve their coping skills, and to foster their leadership abilities. The children were provided with capacities to help them play, learn, and grow despite of the physical and mental stress they have received during their childhood.

Syria Field

Evaluation of the psychological status of UNRWA health staff in Syria

After 5 years of the crisis in Syria, the armed conflict had and still has a profoundly impact on the psychological status of Palestine refugees. Health staff in Syria field office (SFO), who were supposed to provide MHPSS for Palestine refugees, have also been suffering from the same psychological and mental disorders due to displacement, losing relatives and living in hot spot areas such as Dera'a and Aleppo.

The aim of this study was to evaluate the psychological status of health staff in Syria and the related variables and factors, and to provide these staff with suitable support. A cross sectional study was conducted during 6–17 Nov. 2016 using the General Health Questionnaire (GHQ), which is one of the most widely used screening questionnaires with 12 items (GHQ-12) that are able to identify 80% of people with common mental disorders. It also provides an indication to those who have been experiencing psychosocial distress and may benefit from basic psychosocial support and counselling services.

The questionnaire in this study also inclides demographic and social information related to psychological status of the employee. The GHQ-12 copies were distributed via e-mail and WhatsApp to all health staff who were willing to participate in the study (either fixed term or daily paid contracts), the total number of participants was 349. All questionnaires that missed one of the core 12 questions or more were discarded. The total number of questionnaires fully completed was 316.

The table below summarizes the classification of participating health staff according to their scores and the interpretation and the percentage for each category:

Table 2- Classification of the results according to scores.

Scoring	Interpretation	Number	Percentage
0-5	Minimum presence of mental illness or PSS distress	241	76.3%
6-7	Mild presence of mental illness or PSS distress	44	13.9%
8-12	Moderate-Severe mental illness likely	31	9.8%
Total		316	100%

Of participating staff, 13.9% suffered from mild mental illness or PSS distress, while 9.8% suffered from moderate to severe mental illness or PSS distress.

"The emotional experiences over the previous two weeks" which might refer to a certain problem are presented in the following table:

Table 3- The emotional experiences that refer to a certain problem from staff point of view (No./%).

	Number	Percentage
Felt constantly under strain (yes)	207	65.50%
Lost much sleep over worry (yes)	207	65.50%
Been able to enjoy your normal day to day activities (no)	195	61.70%
Been feeling unhappy and depressed (yes)	193	61.07%
Been feeling reasonable happy, all things considered (no)	155	49.05%
Been able to concentrate on whatever you are doing (no)	75	23.73%
Felt capable about making decisions about things (no)	53	16.72%
Felt you could overcome your difficulties (no)	52	16.45%
Been able to face up to your problems (no)	34	10.75%
Been losing confidence in yourself (yes)	30	9.49%
Felt that you are playing a useful part in things (no)	25	7.91%
Been thinking of yourself as a worthless person (yes)	12	3.79%

It was found that the following variables have strong relation with high scores according to the GHQ12. The interventions that will be introduced will focus on these vulnerable groups (especially on which have statistical significant):

- The age group between 45 to 54 years are under stress or suffering from common mental disorders more than other age groups (19.5% scoring 6-7 and 11% scoring 8 -12) without statistical significant.
- Females are more often under stress than men (17% scoring 6-7 and 10.5% scoring 8-12) with statistical signifi cant (P value = 0.03).
- Nurses have higher scores than other staff categories with 22.3% scoring 6-7 and 8.9% scoring 8-12 without statisti cal significant.

- Employees who have changed their houses are more often under stress with 15% scoring 6-7 and 10% scoring 8-12 without statistical significant
- Employees who have one of their close relatives travelling outside the country are more often under stress with 20.5% scoring 6-7, and 13.6% scoring 8-12 with statistical significant (P value = 0.01).
- Employees who work in the area are more often under stress with 71.34 % scoring 8-12 with statistical signifi cant (P value = 0.01).

Our conclusions and recommendations included the following:

- Allocate separate budget to provide psychosocial support for our health staff.
- Concentrate on vulnerable groups mentioned above by peer support groups and self-care techniques.
- Conduct focus group discussions especially for vulnerable groups to understand their problems and to find out suitable solutions.
- Communicate MHPSS services and referral system to staff, especially for those who have high scores, confidentially

Lebanon Field

Medical Hardship Fund (MHF)

The Health Department has decided to establish a Medical Hardship Fund (MHF) to ensure that those Palestine refugees in abject poverty and those suffering from catastrophic health conditions can access needed treatment in a sustainable and dignified manner. The former CARE Programme (Catastrophic Ailment Relief Programme) has been folded into the MHF which now includes complementary secondary hospitalization support for the most vulnerable refugees.

Vision

The MHF serves as a continuation of UNRWA Health Department's vision to improve the health of Palestine refugees. It ensures better access to treatment for the abject poor and those with catastrophic health conditions, thus a better future.

Mission

To make a real difference in the lives of Palestine refugees suffering from catastrophic health conditions and to support the most vulnerable group of Palestine refugees who struggle to access secondary care through meaningful financial support that allows them to access the needed treatment in a sustainable and dignified manner.

Support from the MHF

UNRWA allocates a small amount of funding to the programme on an annual basis, but the majority of costs are dependent upon the generous support of donors. Therefore the provision of services under the MHF are subject to availability of funding.

The MHF aims to provide support for the following situations and conditions.

- Support for Tertiary Hospitalization: The MHF supports patients suffering from catastrophic conditions and whose cost of admission for in-patient treatment is US$ 8,000 and above. The percentage of support depends on the total value per admission in both contracted and non-contracted hospitals.

- Support for Secondary Hospitalization for the most vulnerable members of the Palestine refugee community: to complement the adjusted hospitalization policy, UNRWA has taken the decision to add an additional service to its existing (CAREP) rogramme. The MHF will provide support for the most vulnerable (abject poor) Palestine refugees from Syria and Lebanon (PRS and PRL) who can't afford to pay for secondary care under UNRWA's adjusted hospitalization policy. Those considered abject poor under UNRWA's Social Safety Net Programme (SSNP) are eligible to receive this additional support. Under MHF, UNRWA will cover eligible refugees' share of secondary hospitalization cost under the adjusted hospitalization policy.

Jordan Field

Improving NCD patients compliance through piloting Short Message Service (SMS) appointment reminder service

In 2016, UNRWA Health Department piloted SMS appointment reminder service for patients with diabetes and hypertension at AL-Taybeh health centre through the implementation of two-way communication (TWCs) pilot project.

The system allows the sender to initiate mass communications from their computer to recipients via SMS, while allowing the recipient (refugees) to respond to it free of charge. The unique feature is that they can reply to SMSs they receive, and even to postpone their appointments without charge.

The main advantage of this SMS reminder is to encourage NCD patients to attend for assessment appointments, since every NCD patient should conduct four assessment visits during one year and each visit should include measuring PPG test, blood pressure, height, and weight. Based on his/her overall situation, a patient is classified as controlled or uncontrolled.

TWCs pilot project at AL-Taybeh HC proved the efficiency of SMS appointment reminder service by improving the compliance of NCD pationts with their appointments, which increased from 34% to 68% after 6 months' implementation as in the table below.

Table 4- Two-way communication (TWCs) pilot project results

	Before SMS intervention	After SMS Intervention		
		First Month	Second Month	Third Month
Attended at the given date & time	34.0%	73.0%	62.0%	68.0%
Attended on the given date but at different time	16.0%	3.0%	10.0%	1.0%
Attended at the given time , but on a different date	13.0%	0.0%	0.0%	0.0%
Did not comply with either date or time	37.0%	24.0%	28.0%	31.0%

Jordan Field office Partnership to Serve Palestine Refugees from Syria hosted at King Abdullah Park

By the end of 2016, the Syrian conflict resulted in fleeing of 16,852 PRS to Jordan, 178 of them were hosted at King Abdullah Park (KAP) established by the government in Ramtha – North Jordan to cater for these PRS, in addition to 166 Syrian refugees.

UNRWA managed to provide preventive and curative care to PRS at this place through Jordan Health Aid Society (JHAS) clinic funded by UNRWA and UNHCR since 2013.

During 2016, UNRWA health centres in Jordan and JHAS clinic provided health care services to 1396 PRS patients at refugee communities, camps and KAP. Secondary and tertiary health care services were provided to 224 PRS patients who benefit only from UNRWA as the main health care provider.

SECTION 2: STRATEGIC OUTCOME 2 : REFUGEES' HEALTH IS PROTECTED AND THE DISEASE BURDEN IS REDUCED

Output 2.1: People-centred primary health care system using FHT model

Services under output 2.1 include outpatient health care, non-communicable diseases, communicable diseases, maternal health care, child health care, school health, oral health, community mental health, physical rehabilitation & radiology services, disability care and pharmaceutical services.

Outpatient Care

Within UNRWA health system, outpatient care encompasses all services that can be done in a health centre during a routine visit, and which do not require an overnight stay at a hospital. At UNRWA health centres, these services include, but are not limited to, basic consultations, antenatal and postnatal care, infant and child care, NCD management, basic laboratory testing and medicine distribution.

Utilization

UNRWA currently provides comprehensive primary health care (PHC) through a network of 143 health centres in its five Fields, of which 69 (48.3%) are located inside Palestine refugee camps. In addition, UNRWA operates six mobile health centres in 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 7.0 % in 2016 compared to 2015, with a total of approximately 8.6 million medical consultations. Of these consultations, 144,906 were specialist consultations. This decrease in utilization was observed in all Fields, and could be attributed to the implementation of the appointment system, e-health system and the FHT approach in most health centres.

Table 5- No. of medical consultations, Agency-wide in 2015 and 2016

	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
2015	1,598,989	1,218,279*	1,051,195	4,010,882	1,312,576	9,191,921
2016	1,552,936	1,104,705*	927,913	3,810,791	1,157,173	8,553,518

*Data include medical consultations provided to Palestine Refugees from Syria (PRS)

In UNRWA health system, out-patient medical consultations are classified into two groups: first visits and repeat visits. First visits reflect the number of persons attending a health centre during a calendar year, while repeat visits measure the frequency of service utilization. The ratio of repeat to first visits was decreased from 3.3 in 2015 to 3.2 in 2016, with wide variation, both among Fields, and between health centres in the same Field.

The highest ratio (5.1) was observed in Lebanon, while the lowest (2.5) was in Syria. The variability of this ratio within and between Fields reflects the access to other health care providers. It is quite higher in health centres located inside camps where people can easily reach services, and in the Fields with limited access to other health care providers – like Lebanon. The security situation in Syria may account for the low utilization rate in this Field, which is still affected by the closure of health centres, and the limited access to health services due to the prevailing security constraints.

Workload

The average number of medical consultations per doctor per day decreased from 86 in 2015 to 85 in 2016. The highest workload was 100 as reported by Lebanon Field, and the lowest was 82 in Jordan, Syria and Gaza.

The introduction of the FHT approach has begun to help reduce the workload, mainly through the shifting of some preventive tasks from medical officers to nurses, such as authority to approve monthly refills of medicines for controlled NCD patients, and through the introduction of an appointment system. In addition, the individualized care provided through this approach may have helped to reduce irrational health care seeking behaviour.

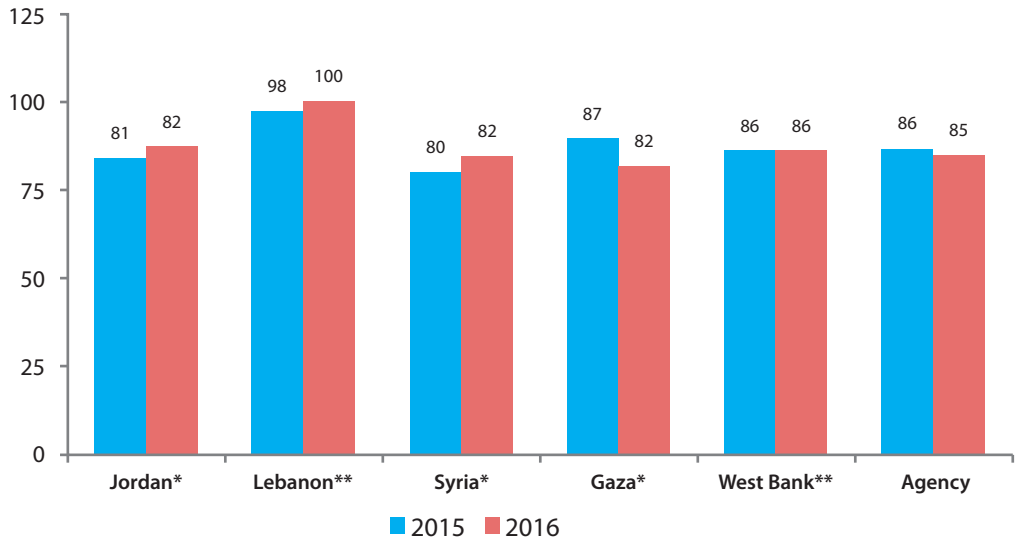


Figure 5- Average daily medical consultations per doctor, in 2015 and 2016 (*HCs open for six days/week, **HCs open for 5 days/week)

Community Mental Health

Community Mental Health Programme (CMHP)

Mental Health is a major public health priority. Hundreds of millions of people worldwide are affected by psychosocial problems, signs of psychological distress and mental health disorders. Mental health and psychosocial wellbeing have a direct effect on the physical health and well-being of individuals and their families.

For decades, Palestine refugees have suffered the trauma due to forced displacement, coupled with human rights violations, poverty, poor living conditions, and recurring episodes of conflict and violence. In 2002, in response to a situation of on-going and often severe psychological stress, particularly in Gaza Strip and West Bank, UNRWA launched a Community Mental Health Programme (CMHP). The programme aimed to protect and improve the mental health status and well-being of Palestine refugees through integrated, community-based psychosocial and mental health services.

CMHP - West Bank

CMHP started in 2002 as a vertical programme to mitigate psychosocial disorders resulting from the trauma that has been endured by the Palestinian people due to the second intifada with the devastating political situation and exposure to excessive violence. In 2009 the programme undertook a paradigm shift from "emergency" to 'development" and from 'psychosocial' to 'mental health" in order to respond to challenges that were facing the Palestine refugee population.

The programme provides psychological support, life skills and defense mechanisms to enhance resilience against adverse influences and life pressure.

Furthermore, in response to the increasing levels of domestic violence and abuse, the Health Programme established the Family and Child Protection programme in 2009 which aims at protecting the rights of vulnerable groups living in refugee camps including children, youth, women, elderly, and people with special needs from all forms of violence, abuse, neglect, and discrimination.

In 2016, a total of 7,975 men, women, boys, and girls received individual, family, and group psychosocial counseling and support services from CMHP in the West Bank, and more than 29,324 beneficiaries participated in, and benefited from awareness raising activities, open days, and summer and winter camps. Topics included gender-based violence, mental health, nutrition, sexual and reproductive health, human rights, sexual abuse, and other family and child protection matters.

Moreover, in 2016, a total of 456 survivors of gender-based and domestic violence and abuse, and 536 cases of neglect of elderly and families were detected through home visits. 23 critical cases were referred to services outside UNRWA. 497 Bedouin community members participated in skills training related to psychosocial first aid, team building, leadership, prevention and response to psychosocial and mental health matters.

To meet the needs and to keep pace with the continuous development of the programme, the Health Programme continued to work for staff development and capacity-building. In 2016 a total of 12 training sessions were conducted for 192 staff members.

Among the 10 most common mental health symptoms reported about the refugee population, general anxiety was the most frequently reported (659 cases), followed by neglect (234 cases), behavioral problems (193), elimination problems (176), psychological abuse (159), psychosocial problems (157) and physical abuse (142) cases.

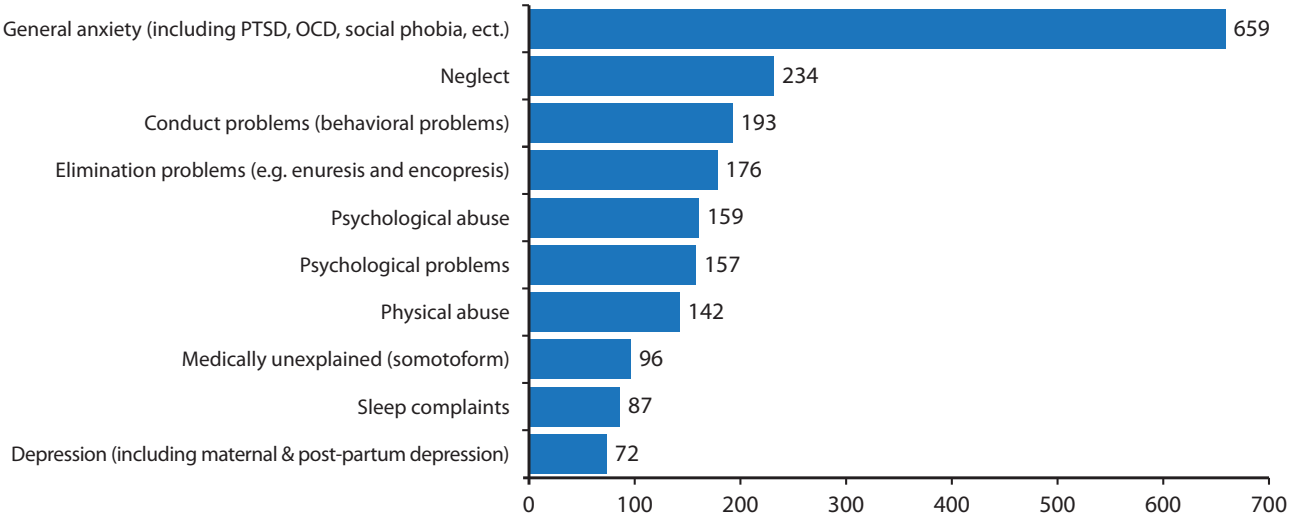


Figure 6- The most communally reported MHPSS symptoms (no.)

In 2016, a total of 327 beneficiaries were referred externally to specialized organizations, while 2042 individuals were referred internally between UNRWA's departments.

The Emergency Community Mental Health Project provides psychosocial and counseling services to Bedouins and herding communities in Area C, the Seam Zone and East Jerusalem which are at risk of forced displacement, violations of human rights and are having difficulties accessing psychosocial and mental health services. In 2016, Health department targeted 55 vulnerable Bedouins and herding communities

Table 6- Beneficiaries of the Community Mental Health Project (CMHP) during 2016

Service	Total number of beneficiaries
Individual, group and family counseling	7975
Group psychosocial activities	29324
Support to neglected elderly and families	478
Internal Referral	2042
External Referral	327
Training for community members	58
Training for psychosocial counselors	134
Individual, group and family counseling	7975

A total of 70 youth aged from 18 to 24 were trained on leadership skills, health issues, sexual and reproductive health and GBV. Participants subsequently became leaders of sub- Summer Camps in their respective areas. The total number of sub- Summer Camps was 32, with 2800 children participating, from both refugee camps and Bedouin communities.

To strengthen MHPSS services to refugees and Bedouins, the CMHP works in close coordination with national governmental and non-governmental stakeholders, UN agencies, and international organizations. Key partners are the Ministry of Health (MoH), Palestinian Counseling Center, Juzoor for Health & Social Development, Women's Centre for Legal Aid and Counseling, Save the Children, Union of Health Work Committees, Palestine Red Crescent Society, Doctors without Borders, Mental Health Network Team in Hebron, and Young Men's Christian Association (YMCA).

Community Mental Health Programme- Gaza

The Community Mental Health Programme (CMHP) in Gaza delivers Mental Health and Psychosocial Support Services to Palestine refugees through the main core programmes of UNRWA, supported by 204 school counsellors, 25 health centre counsellors and 26 managers, supervisors and support staff, providing a wide range of services targeting children, youth, parents, elderly and disabled people as well as local committees, local organizations, professionals and students.

The residual psychosocial impacts of the 2014 conflict, compounded by socio-economic consequences of the blockade, continue to have significant repercussions on the psychosocial well-being of Palestine refugees in Gaza. A recent survey conducted by the CMHP in Gaza found that 55 per cent of sampled patients attending UNRWA health centres demonstrated poor psychosocial well-being, with 70 per cent being identified as potentially depressed. In schools, 15 per cent of Grade 9 students were assessed as having difficulties in their daily life, either in their studies or in their relationships with their peers. This problem faced 36 per cent of grade 3 students.

CMHP currently provides mental health and psychosocial support interventions services in each of UNRWA's 21 health centres in Gaza, and for the first time, is providing psychosocial support in each of UNRWA's 267 schools. The services are provided by 285 full or part-time counselors and 82 psychosocial facilitators in the schools. In addition, five legal counselors work for the 21 health centres to support identified gender-based violence (GBV) cases.

To enhance its services to Palestine refugees, during 2016, the CMHP has, undertaken a programmatic reform aimed at strengthening its services to both children and adults. This reform is based on a comprehensive programming approach to ensure that all children and adults have access to some form of psychosocial support. This includes individual and group counselling for children who are experiencing more pronounced difficulties, many of which can be linked to the 2014 conflict and the ongoing impacts of the blockade.

These difficulties include poor academic performance, depression, anger and aggression, poor peer relations, as well as nightmares and poor sleep.

To enhance the overall coping skills of Palestine refugee children, the CMHP introduced structured life skills and school guidance sessions. These activities aim to provide core lessons across all classes in all UNRWA schools. Lessons are directed to improve self-awareness, stress management, peer relations, self-esteem, coping skills and problem-solving. The CMHP is also cooperating with the Gaza Community Mental Health Programme to implement a school mediation initiative to reduce bullying and promote pro-social behaviours in schools.

Table 7- Activities of the Community Mental Health Programme (CMHP) at health centres in Gaza,2016.

Activities	Beneficiaries		
	Male	Female	Total
Individual counselling	7110	6831	13,941
Group counselling	6460	5682	12,142
Public awareness sessions	27779	83338	111,117

*Data include medical consultations provided to Palestine refugees from Syria (PRS)

During 2016 CMHP provided individual counseling to 13,941 at-risk children (49 per cent girls) and structured group counseling to 12,142 children (46.8 per cent girls) attending UNRWA schools. This is in addition to supporting 224,000 of students who participate in structured psychosocial activities aimed at strengthening their coping and life skills. School counselors also conducted 6,000 public awareness sessions to support parents, care-givers and other community members who have an important role in raising and supporting children. A total of 111,117 parents and teachers (75 per cent female) attended these sessions.

Through its health centres, UNRWA provided psychosocial and protection interventions to 14,589 clients (92 per cent female), primarily in the form of individual as well as group counselling interventions. Some 1,179 individuals (94 per cent female) received individual support from legal counsellors. The CMHP legal counsellors also conducted 188 awareness raising sessions that reached 3,937 beneficiaries (95 per cent females).

Non Communicable Diseases (NCDs)

The burden of NCDs

The number of patients with NCDs is increasing consistently by approximately 5.0% per year. By the end of 2016, a total of 256,765 patients, including Palestine refugees from Syria (PRS), with diabetes mellitus and/or hypertension were registered for UNRWA NCD services across the five Fields of UNRWA operations. In addition, the Agency-wide prevalence rates of diabetes mellitus and hypertension were 12.1% and 18.6% respectively for patients who were 40 years and older. This resulted in increased workload on health centre staff and a financial challenge for the Agency. Age group disaggregation showed that patients 40 years of age and older represented 92.0% of all patients under UNRWA NCD care in 2016, which is consistent with that in 2015. The percentage of male patients diagnosed with NCDs has been increasing steadily from 25.0% in 2012, to 38.0% in 2013, to 39.0% in 2014 and to 40% in 2015 and 39% in 2016. Similar to 2015 the distribution by morbidity showed that 39.4% of patients had both hypertension and diabetes mellitus; 15.8 % had diabetes mellitus only, and 44.8% had hypertension only. The number of patients with type I diabetes mellitus Agency-wide was 3,776 by the end of 2016, representing 1.5% of all NCD patients, and 2.7% of all patients with diabetes mellitus.

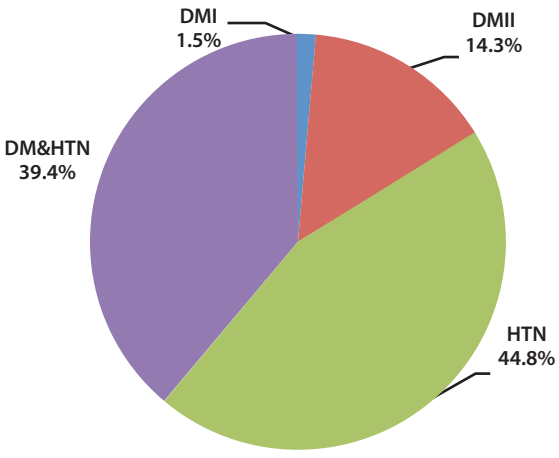


Figure 7- Percentage of NCD's by morbidity

The total expenditure on medicines in 2016 was US$ 17.75 million. Analysis for drugs expenditure revealed 46.0% (US$ 8.2 million) was spent on medicines for the treatment of NCDs[3] .

3. Medicines & Medical Supplies section for drug cost calculations

Table 8- Patients with diabetes mellitus and/or hypertension by Field and by type of morbidity (*PRS data included)

Morbidity type	Jordan	Lebanon*	Syria	Gaza Strip	West Bank	Agency
Type I diabetes mellitus	1,151	309	433	1,230	653	3,776
Type II diabetes mellitus	11,289	3,425	3,387	12,600	5,977	36,678
Hypertension	30,533	14,935	17,226	36,788	15,589	115,071
Diabetes mellitus & hypertension	32,403	10,573	11,205	28,099	19,006	101,240
Total	75,376	29,242	32,205	78,717	41,225	256,765

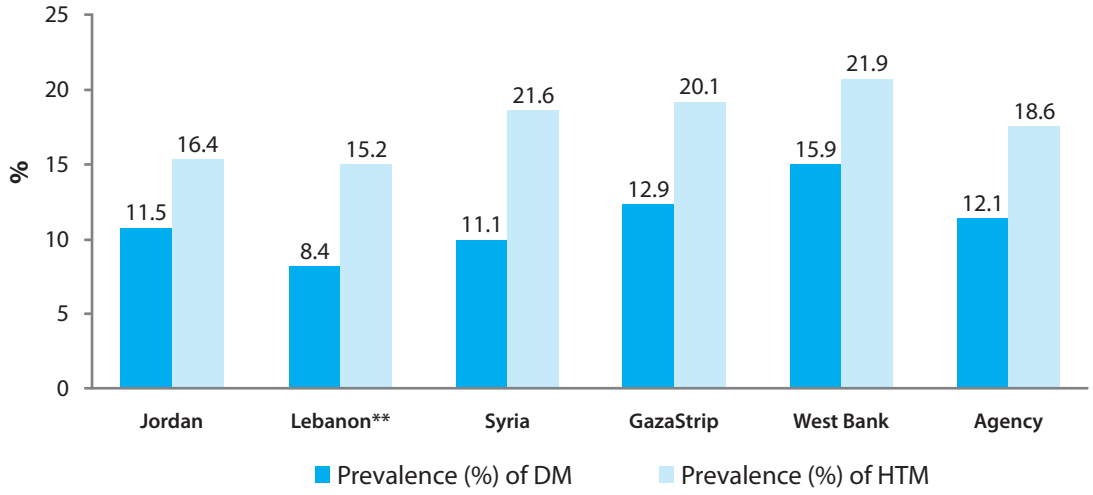


Figure 8- Prevalence (%) of patients diagnosed with type I and type II diabetes mellitus and hypertension among served population ≥40 years of age, 2016 (**PRS data included)

Risk scoring

A risk assessment system is used to assess the risk status of NCD patients. The system assesses the presence of modifiable risk factors such as smoking, hyperlipidaemia, physical inactivity, blood pressure, blood sugar and non-modifiable risk factors such as age and family history of the disease. The system helps health staff to manage patients according to their risk score and to refer them for specialist care when necessary. During 2016, all patients registered with the NCD programme at all UNRWA health centre were assessed using the risk scoring assessment system. The risk scoring assessment revealed that an average of 26.4% of all NCD patients were considered to be at high risk. This includes 29.3% of patients with hypertension, 28.6% of patients with both diabetes mellitus and hypertension, 14.6% of patients with type II diabetes mellitus and 4.1% for type 1 diabetes. While the total of patients at moderate risk was 51.5% and only 22.1% were considered as normal. There is a need for UNRWA to revise the scoring tool currently used and start using the WHO risk scoring system based on new PEN package as soon as it is released in 2017.

Treatment

UNRWA's guidelines for treatment of NCD are currently under the process of updating. The analysis of the consumption of anti-hypertensive drugs shows tendency among Medical Officers to use newly introduced drugs as losartan and amlodipine. In Gaza, Bisoprolol is used within non catalogue items. The Health Department plan to replace Atenolol, that no more recommended as first line treatment in hypertension patients, with Bisoprolol.
Health care providers at UNRWA health centres counsel the NCD patients on the use of healthy life style practices. For example, the use of non-pharmacological disease management among hypertensive patients was at 3.2% Agency wide with the highest at 6.5. % in Lebanon, 4.7% in Gaza, 1.5.0% in West Bank, 1.8% in Jordan, and .9% in Syria. The proportion of patients with type I or type II diabetes who were treated with insulin as part of their management also varied among Fields, with an average of 27.5% Agency-wide, which is less than that in 2015 (30.1%). As per Field, this proportion ranged from 21.8% in Syria, to 24.4% in Lebanon, followed by 28.2. % in Jordan, and 28.6.0% in Gaza, and the highest range was 29.6% in West Bank.

Late complications

Late complications of NCDs include, but are not limited to: cardiovascular diseases (myocardial infarction and/or congestive heart failure), cerebrovascular disease (stroke), end-stage renal failure (ESRF), above-ankle amputation and blindness. Usually, random samples of NCD files are analysed for the presence of late complications through a rapid assessment. The rapid assessment technique is used to determine the indicators among NCD patients that impact late complication rates (risk factors such as obesity, smoking and control status). The NCD files are selected randomly from each health centre and analysed to come up with health centre, Field, and Agency-wide indicators During 2016, the reported rate by all Fields was at 10.8% of all registered NCD patients.

Patients with both diabetes mellitus and hypertension had the highest incidence of late complications (15.7%), followed by patients with hypertension only (8.2%), and patients with diabetes mellitus type 2 only (7.1%). The same trend was observed in 2015. There were some differences in the distribution of late complications of diseases between the Fields. These variations can be attributed in part to following lifestyle advice, enforcement of the appointment system and proper case management, as well as variations in treatment offered by different doctors as mentioned previously, in addition to possible variation in recording the complication in patients file and subsequently reporting.

Defaulters

Defaulters are defined as patients who did not attend to the health centre for NCD care at all during a calendar year, neither for follow-up, nor for collection of medicines (in person or via relatives for those unable to travel to the health centre). To reach patients who miss follow-up appointments, health staff use all possible means, including home visits, telephone calls and notifications via family members. The Agency-wide rate of defaulter NCD patients increased from 5.9 % (13,698 patients) in 2015 to 6.3% (15,415). The Field-specific defaulter rate ranged from as low as 4.9 % in Gaza to as high as 8.1% in Syria where the continued conflict and displacement of patients has likely led to an increased defaulter rate. Lebanon's defaulter rate was 5.9 %, while in West Bank it was 5.5%. Defaulters in Jordan Field was 7.6%, which showed improvement (decrease) compared to that in 2015 (8.9%).

Case fatality

Similar to 2015 the mortality rate was at (1.5%) in 2016. A total of 3,686 of UNRWA's NCD patients were reported to have died during 2016; however, deaths may, be under-reported. Patients with co-morbidities (hypertension and diabetes mellitus) comprised 57.0% of all deaths, while patients with only hypertension represented 33.0% and those with only diabetes mellitus represented 10 % of all 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 raising the awareness on risk factors among Palestine refuges about diabetes mellitus and hypertension. UNRWA will focus in the future on the revision of the guidelines and the essential list of NCD medications, mainly antihypertensive medicines, to meet the new guidelines recommended globally.

The use of an e-health-based cohort monitoring system is helping in monitoring NCD care in UNRWA health centres. It allows for comprehensive follow up of NCD care, including incidence, prevalence, treatment compliance and control status of patients. The system has been featured in an international peer-reviewed journal[4,5], and also by the Lancet.[6] This cohort monitoring system is now integrated into the monitoring system for NCD care, and currently as part of the FHT approach, at health centres that implement e-health.

UNRWA introduced life-saving lipid-lowering agents into the UNRWA essential drugs list in 2016, Statins are prescribed for all patients with diabetes and or hypertension with blood cholesterol level of ≥ 200mg/dl.

4. Khader A et al., Cohort monitoring of persons with diabetes mellitus in a primary healthcare clinic for Palestine refugees in Jordan. Trop Med Int Health. 2012 Oct 11. (also in accompanying CD-Rom with hard copy of report).
5. Cohort monitoring of persons with hypertension: an illustrated example from a primary healthcare clinic for Palestine refugees in Jordan. Khader A, et al. Trop Med Int Health. 2012 Sep;17(9):1163-70 (also in accompanying CD-Rom with hard copy of report).
6. Cohort reporting improves hypertension care for refugees. Mullins J. Lancet. 2012 Aug 11; 380(9841):552.

In 2016, the joint project between UNRWA Health Programme and Microclinic International (MCI) on the provision of health education on diabetes continued and more health centres were involved in provision of MCI sessions reaching 104 health centres. A total number of 12,024 patients were recruited into the programme, and the number of secondary people reached through the project was 63,548. UNRWA also managed to train 43 nurses at Ministry of Health in Gaza and 60 nurses at West Bank.

Communicable Diseases

In 2016, the prevention and control of communicable diseases did not face big challenges, as no cases of polio or other emerging diseases were reported among Palestine refugees. A mumps outbreak was reported by Ministry of Health, Palestine in Hebron city starting in October 2015. Cases were reported at Arroub camp in March 2016 with some epidemiological links to that reported in Hebron Town. Total reported cases at Arroub health centre were 351 out of 364 total cases reported from West Bank.

UNRWA continued its cooperation with host authorities and WHO, and participated in immunisation campaigns for polio, in all Fields. In addition, focus on strengthening the surveillance of emerging and re-emerging diseases continued to be active. Close coordination was maintained with the host countries' Ministries of Health for surveillance of communicable diseases, outbreak investigation, supply of vaccines, and exchange of information. UNRWA also collaborated with host authorities for laboratory surveillance of HIV/AIDS and other communicable diseases that require advanced laboratory investigations which cannot be performed at UNRWA facilities.

Expanded Programme on Immunisation (EPI): Vaccine-preventable Diseases

In each Field, UNRWA's immunisation services are linked to the host country's Expanded Programme on Immunisation (EPI). In all Fields, immunisation coverage, for both 12 month old and 18 month old children registered with UNRWA, continued to be above WHO target of 95.0%. Factors contributing to UNRWA's success in immunisation coverage include a consistent supply of vaccines, the enforcement of an appointment system for vaccination, and continuous follow-up of defaulters by health centre staff.

Other communicable diseases

Viral hepatitis

The Agency-wide incidence of suspected cases of viral hepatitis (mainly hepatitis A) showed decline (24.7 per 100,000 populations) in comparison with last 3 years, 2013 at 33.0 per 100,000 populations and at 36.8 per 100,000 populations in 2014, and 53.5 per 100,000 populations in 2015. The highest increase during 2016 was reported by Syria at 132.6 per 100,000 population which much less than that in 2015. This could be still attributable to the poor quality of water and hygienic conditions, in addition to the very difficult environmental conditions caused by on-going armed conflict and displacement of refugees. Gaza's incidence declined from 49.4 in 2015 to 23.7 per 100,000 populations in 2016, while in Lebanon's was 8.6 per 100,000 populations.

Typhoid fever

The Agency-wide incidence of suspected typhoid fever cases increased from 5.4 per 100,000 populations in 2014, to 9.7 cases per 100,000 in 2015 and declined to 8.8 cases per 100,000 in 2016. No cases were confirmed. The highest and main incidence was observed in Syria (67.1 per 100,000 populations) which is also explained by poor quality of water and hygienic conditions in addition to the very difficult environmental conditions caused by on-going armed conflict and displacement of refugees. As for 2016, both Jordan and West Bank Fields reported no cases.

Tuberculosis

During 2016, 28 cases of tuberculosis were reported, compared to 24 in 2015. Although reported cases from Syria Field were higher in previous years, namely before the conflict started, in 2016,19 cases were reported which represent 68% of all reported cases. Lebanon reported 7 cases, one case reported in each of Gaza and West Bank and no cases were reported in Jordan. Of the 28 reported cases, 10 cases were smear-positive, 8 were smear-negative and 10 were extra pulmonary. Syria reported 6 confirmed cases and Lebanon reported 4. Gaza and West Bank reported one smear negative case for each, 2 cases in Lebanon, and 4 cases in Syria. With the exception of Syria, detection rates in all Fields remain below the WHO target of 70.0% of the expected number of cases for the country.[7] Patients diagnosed with tuberculosis are managed, in close coordination, through national tuberculosis programmes.

Brucellosis

During 2016, out of 225 total cases, the majority (204) were reported from Syria. The other Fields reported few cases.

Maternal Health Services

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

Family planning

Family planning (FP) services, including counselling and provision of modern contraceptives, are available at all times to women accessing UNRWA health centres. FP services are also provided as an integral part of the maternal and child health services through preconception care, antenatal, post-natal care and growth monitoring of children under-five years of age. The FHT approach offers a good opportunity to enhance male participation in family planning services.

During 2016, a total of 25,961 new family planning users were enrolled in the FP programme. The total number of continuing users of modern contraceptive methods Agency-wide increased from 153,030 in 2015 to 158,296 in 2016 with an annual increase of 3.4%.

Table 9- Utilization of UNRWA family planning services, 2016

Indicator	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
New users	6,468	1,687	2,900	12,185	2,721	25,961
Total continuing users at year end	37,512	14,452	10,551	72,225	23,556	158,296
Discontinuation rate (%)	6.0	6.0	7.3	4.0	4.4	5.5

The distribution of family planning users according to contraceptive method remained stable. The intra-uterine devices (IUD's) continued to be the most popular method (49.3% of the users) followed by oral contraceptive (24.9%), condoms (23.3%) and injectable (2.5%).

Couple-Years of Protection (CYP) is an output indicator used by UNRWA to estimate the number of clients (or couples) who were protected from pregnancy in a year by an UNRWA dispensed contraceptive.

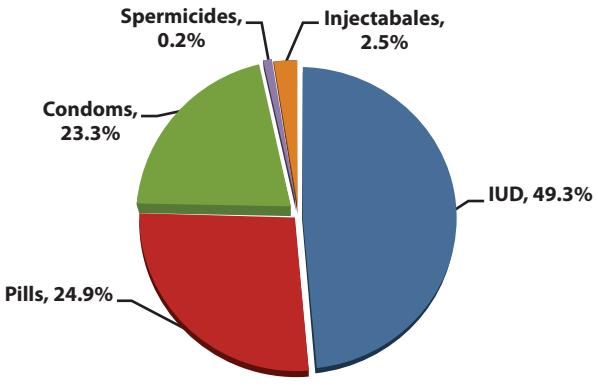


Figure 9- Contraceptive method mix, Agency-wide, 2016

7. Bulletin of the World Health Organization 2009; 87:296-304

The fifth FP follow-up study

From June - December 2015, a follow-up study was conducted using the same methodology of the previous studies to assess the current situation regarding contraceptive practices among the target population. This study came after five years from the 2010 follow-up study to identify future program needs. The study revealed that, the overall prevalence of modern contraceptive use was 59.3% compared to 61.7 in 2010.

The preferred method continued to be IUD followed by pills and condoms. UNRWA was the main provider of modern contraceptives methods for 82.6% of mothers. Among non-user mothers, child wish (21.7%) and family/husband opposition (22.9%) were the most commonly stated reasons for non-utilization, followed by pregnancy (18.6%) and lactation. Women with 3-6 pregnancies are significantly more likely to use contraceptives as are women with > 6 pregnancies. Women with at least one male child are significantly more likely to use contraceptives.

The mean birth interval increased from 37.2 months in 2010 study to 39.2 months in 2015 study. The total fertility rate Agency-wide was 3.5 in 2010 and was 3.2 in 2015.

Preconception care

To achieve further reduction in infant and maternal mortality, UNRWA introduced a Preconception Care (PCC) programme in 2011 as an important component of the maternal health care and was fully integrated within the primary health care system. The aim of preconception care is to prepare women of reproductive age to enter pregnancy in an optimal health status. Women are assessed for risk factors, screened for hypertension, diabetes mellitus, anaemia, oral health diseases, given folic acid supplementation to prevent congenital malformation - in particular neural tube defects - and are provided with medical care where relevant.

During 2016, a total of 29,080 women had been enrolled in UNRWA's PCC programme, cepresenting an increase of 51.0% compared with 2015 (19,264). This increase can be attributed to the health awareness sessions on preconception care which targeted women who were attending a health centre for medical, dental and NCD consultations. Additionally, the expansion of FHT to the majority of health centres may have had an impact on enrolment, given the increased focus on family health and patient/family relationship.

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.

UNRWA uses selected indicators of coverage and quality to monitor the performance of antenatal care services including: antenatal care coverage, percentage of registration for antenatal care in the 1st trimester, number of antenatal care visits, tetanus immunisation coverage, risk status assessment and diabetes mellitus and hypertension in pregnancy.

Antenatal care coverage

During 2016, UNRWA primary health care facilities cared for 93,747 pregnant women, representing a coverage rate of 86.6% of all expected pregnancies among the served refugee population. The antenatal care coverage was calculated based on the expected number of pregnancies in the served refugee population.

In Syria, the utilization of antenatal care services was still affected by the closure of a large number of health centres and limited access to health services caused by the prevailing security constraints.

Table 10- UNRWA antenatal care (ANC) coverage, 2016

	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
Served population	1,041,680	338,413	375,667	1,287,291	452,372	3,495,423
Expected No. of pregnancies*	29,167	6,768	10,519	47,501	14,250	108,205
Newly registered pregnancies	25,488	4,617	6,305	43,206	14,131	93,747
ANC Coverage (%)	87.4	68.2	59.9	91.0	99.2	86.6

* Expected No. of pregnancies = Total No. of served population (from UNRWA registration system) X crude birth rate.

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 positive outcomes for the mother and the baby. The proportion of pregnant women who were registered during the 1st trimester of pregnancy in 2016 was 83.7%, while it was 14.2% for women registered during the 2nd trimester and 2.1% for those registered during the 3rd trimester. The proportion in registration in the 1st trimester increased in all fields except in Syria, this could be attributed to the expansion of preconception care services and the introduction of the FHT approach.

Number of antenatal care visits

A key objective of the maternal health care programme is to ensure that women register for antenatal care as early as possible in pregnancy to allow ample time for risk identification follow up and management, and to meet the WHO recommended standard of at least four antenatal visits during the course of pregnancy. In 2016 the average number of antenatal care visits per client ranged from 4.3 in Syria to 6.7 visits in Gaza giving an Agency-wide average of 5.9 antenatal care visits.

Analysis of the 2016 data reveals that the Agency-wide percentage of pregnant women who paid ≥ 4 antenatal visits was 89.8%. The highest was in Gaza at 91.5% and the lowest was in Syria at 64.3%. The utilization of antenatal care services was still affected by the closure of a large number of health centres and limited access to health services caused by the prevailing security constraints.

Table 11- Number and percentage of antenatal care visits during 2016

Indicator	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
% of pregnant women who paid ≥ 4 antenatal visits or more	85.5	94.2	64.3	95.2	91.5	89.9
Average number of antenatal visits per pregnant women	5.1	6.2	4.3	6.7	5.1	5.9

Tetanus Immunisation Coverage

Results of the annual rapid assessment survey of antenatal records for 2016 showed that 98.4% of registered pregnant women were adequately immunized against tetanus. As a result of the optimal immunisation coverage maintained, 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 who likely need only routine antenatal care, and those with specific health conditions or risk factors that necessitate special care (46.6% in UNRWA). UNRWA currently uses a risk scoring classification based on three risk categories (high, alert, low). During 2016, and Agency-wide, 16.4% of women were classified as high risk, while 30.2% 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 during pregnancy

Pregnant women attending UNRWA health services are screened regularly for diabetes mellitus and hypertension all through pregnancy. Globally, the reported rates of gestational diabetes range from 2% to 10% of pregnancies (excluding pre-existing DM) depending on the population studied and the diagnostic tests and criteria employed.[8] Agency-wide, during 2016 the prevalence of diabetes mellitus during pregnancy (pre-existing and gestational) was 4.6%, with wide variation between fields. The lowest rate was 1.9% in Syria and the highest rate was 6.7% in West Bank. Whereas some fields achieved the expected detection rate of DM, some did not. Therefore, efforts need to be exerted to improve the detection rate.

The prevalence of hypertension during pregnancy (including pre-existing and pregnancy-induced hypertension was 6.9% in 2016, the lowest rate was 4.9% in Syria and the highest rate was 8.3% in Gaza.

Delivery Care

Place of delivery

UNRWA subsidizes hospital delivery for pregnant women classified as high-risk. During 2016, 99.9% of all reported deliveries Agency-wide took place in hospitals, while home deliveries represented 0.1% only.

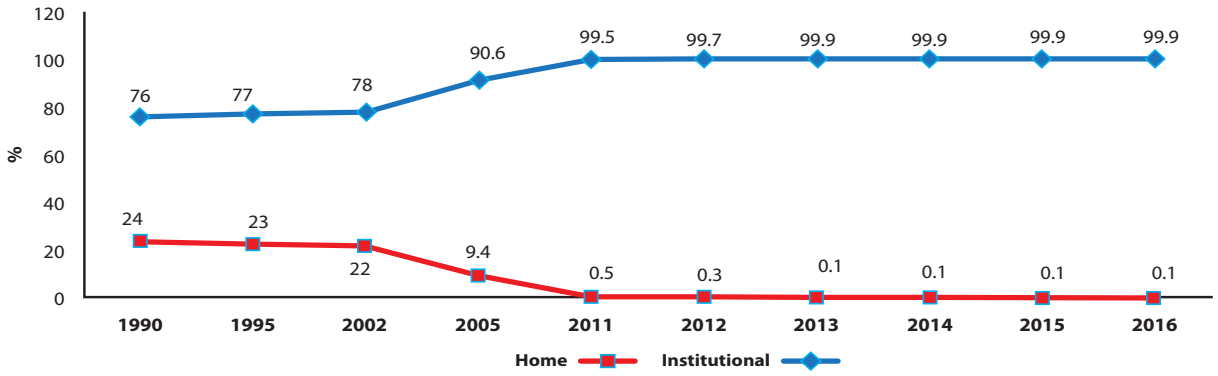


Figure 10- Trends (%) of home versus institutional deliveries, 1990 -2016, Agency-wide.

Caesarean sections

Despite the wide variation among regions and countries, worldwide, caesarean section rates are estimated at 33%.[9] The proportion of deliveries by caesarean section among Palestine refugees served by UNRWA was 25.4% during 2016, compared to 23.1% during 2015. The substantial variation among Fields may reflect a combination of client preference and prevailing medical practice.

Table 12- Caesarean section rates among UNRWA reported deliveries, 2016

Field	Total deliveries 2016	Caesarean section rate
Jordan	22,767	25.1
Lebanon	4,135	47.1
Syria	5,288	55.0
Gaza Strip	39,517	18.9
West Bank	13,259	26.4
Agency	84,966	25.4

8. 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.
9. 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.

Monitoring the outcome of pregnancy

In 2002, UNRWA established a registration system (based on the expected date of delivery) to track pregnancy outcomes of women at each health facility. During 2016, the total number of pregnant women who were expected to deliver was 89,572. Of those, 83,399 (93.1%) delivered normally, 6,025 resulted in miscarriages or abortions (6.7%) and the outcome of 148 pregnant women (0.17%) remained unknown.

The percentage of unknown outcomes dropped from 2.8% in 2002 to 0.2% in 2007, and had since that time remained low. The highest proportion of unknown outcomes was reported from Syria (2.0%). This could be attributed to the prevailing security constraints; 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 places inside and outside the country.

Monitoring maternal deaths

During 2016, a total of 24 maternal deaths were reported Agency-wide which was equivalent to maternal death ratio of 27.9 per 100,000 live births among women registered with UNRWA antenatal services. UNRWA health staff conducts a thorough assessment following each reported maternal death using a standardized verbal autopsy questionnaire. Seven women died during pregnancy, 15 deaths occurred in the post-natal period and two cases during delivery. Twenty three women died in hospitals while one died at home. The main reported causes of death were haemorrhage in eight cases (33.3%), pulmonary embolism in seven cases (29.2%), two cases (8.3%) for each of septicaemia and acute hepatic failure induced by pregnancy, and one case (4.2%) for each of eclampsia, nephrotic syndrome aggravated by pregnancy, mesenteric occlusion-bowel gangrene, Valvular heart disease aggravated by pregnancy and brain tumour aggravated by pregnancy. The majority of these deaths could have been prevented.

Globally, the common medical causes for maternal death include bleeding, high blood pressure, prolonged and obstructed labour, infections and unsafe abortions.

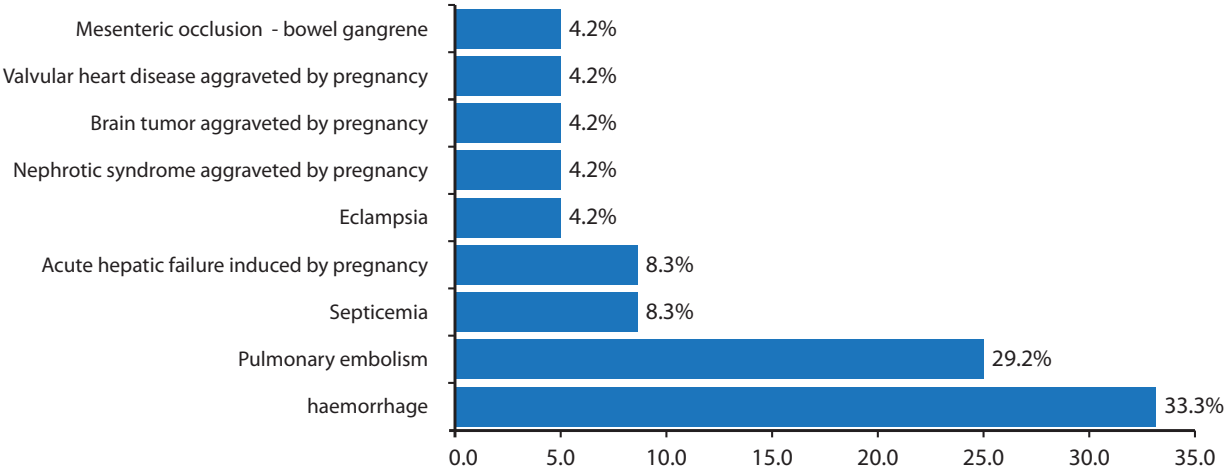


Figure 11- Underlying causes of maternal deaths, 2016

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 and counselling on family planning, breast feeding and new-born care. During 2016 a total of 80,650 women received post-natal care within six weeks of delivery, representing a coverage rate of 93.8%.[10] The highest rate was 98.2% in Gaza and lowest rate was 86.4% in Syria.

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 one to five years of age and school-aged children. Both preventive and curative care is provided, with a special emphasis on prevention.

10. Postnatal coverage calculated based on WHO definition

Services include new-born assessment, periodic physical examinations, immunisation, 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

Before 2010, UNRWA registered only children up to the age of three years. However, for the past five years a registration system for children up to five years (60 months) of age has been maintained.

This system enables the follow-up of children who have missed important appointments for services such as immunization, growth monitoring, and screening.

Child care coverage

During 2016, UNRWA primary health care facilities cared for 346,376 children up to five years of age, a coverage rate of 81.3% of all expected number of children. Service coverage rates were estimated based on the number of infants below 12 months of age who have been registered for care and the expected number of surviving infants which is calculated by multiplying the crude birth rates (as published by the Host Authorities) by the number of registered refugees in each country. (See section 3: Data).

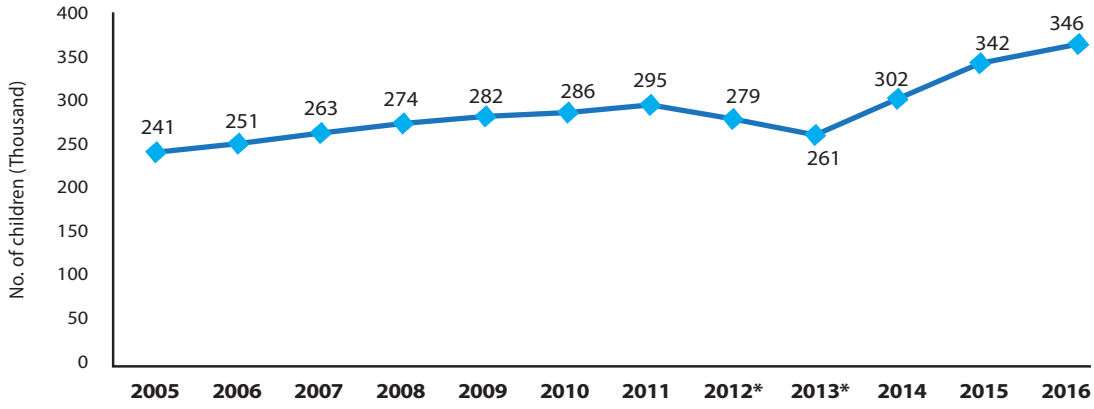


Figure 12- Children 0-5 years registered at UNRWA health centres, 2005 – 2016 (*Data not available for Syria)

Immunisation

UNRWA health services provide immunisation against ten diseases: tetanus, diphtheria, pertussis, tuberculosis, measles, rubella, mumps, polio, haemophilus influenza type B (Hib) and hepatitis. Pneumococcal vaccine is only provided in West Bank and Gaza. The percentages of children aged 12 months and 18 months who have received all required vaccines among the served population in the five Fields were 99.7% and 99.3%, respectively. Coverage has been close to 100% for more than a decade. This extraordinary achievement has led to a substantial decrease in the incidence, morbidity and mortality of communicable diseases.

Growth monitoring and nutritional surveillance

Growth and nutritional status of under-five children 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 integrated into e-Health.

The system documents the four main growth and nutrition related problems among under-five children: underweight, wasting, stunting and obesity. At the end of 2016, the prevalence rate for under-weight was 3.19%, for stunting was 4.39%, for wasting was 2.14% and for the overweight /obesity was 2.96%. There was no disparity between girls and boys.

Surveillance of Infant and Child Mortality

Infant mortality

During 2016, a total of 635 cases of death among infants below one year were reported from all Fields. The main causes of deaths reported by fields were: LBW/prematurity (31.3%), followed by congenital malformations or metabolic disorders (28.0%), respiratory infections and other respiratory conditions (14.6%), septicaemia (3.6%), birth trauma (0.6%), gastroenteritis (0.5%).

Child mortality

In addition, during 2016, a total of 156 cases of death among children 1-5 years were reported. The main causes of child death were congenital malformations (25.0%), followed by LBW/ prematurity (19.0%), respiratory tract infections and other respiratory conditions (12.2%). In terms of the distribution of deaths by sex, child mortality was higher among males than females at 55.0 % and 45.0% respectively, eventhogh there is no direct correlation between the sex of the child and the cause of death. Almost (16.1%) of the children who died during 2016 died at home and were not hospitalized.

School Health

School Health

UNRWA's existing School Health Programme (SHP) consists of a number of health services provided in cooperation between the Health and Education Departments. The health services provided are: new school entrants medical examination, immunizations, hearing and vision screening, dental screening, de-worming and vitamin A supplementation. Additionally, the SHP follows up on children with special health needs and conducts school environment and canteen inspection. These health services are provided to UNRWA schools, via health centres and School Health Teams (including a medical officer and nurses) who visit schools according to scheduled visits to cover all schools within a scholastic year.

During the school year 2015/2016, a total of 500, 698 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.

As a result of the SHP activities during 2016, a total of 7,759 students were referred to UNRWA health facilities for further care, and an additional 7,431 were referred for specialist assessment. Furthermore, 11,900 students were assisted with the cost of eyeglasses, and 153 received assistance for the cost of hearing aids.

New school entrants medical examination

During the school year 2015/2016, UNRWA schools registered 57382 new entrants. They received thorough medical examination, immunization and follow-up. Morbidity conditions detected among new students included: dental caries (33.4%), vision defects (5.6%), heart disease (0.8%), bronchial asthma (1.0%) and epilepsy (0.2%). Health problems related to personal hygiene remain present at low levels: pediculosis was found in 2.3% and scabies in 0.5% of new entrants. Children with disabilities were assisted towards provision of eyeglasses, hearing aids and other prosthetic devices according to their condition and available resources.

Screening

UNRWA screening activities during the school year 2015/2016 targeted pupils in the 4th and 7th grades in all Fields and included assessment for vision and hearing impairment and for oral health problems.

Among 4th grade students, 54,507 were screened, achieving 98.1% coverage rate. The main morbidity conditions detected were vision defects (10.4%) and hearing impairment (0.3%). Among students in the 7th grade, 48,692 were screened, with 96.9% coverage rate. The main morbidities were again vision defects (13.3%) and hearing impairment (0.5%).

Oral health screening

Oral health screening is conducted for 1st, 4th and 7th grade students in all Fields, and for 3rd grade students in the West Bank. A total of 85,859 students were screened at different grade levels. Screening is coupled with other dental caries prevention activities such as pit and fissure sealant for 1st graders, erupted molar for students at the 1st and 2nd grade, fluoride mouth rinsing, and teeth brushing campaigns. Pit and fissure sealant application achieved 39.2% coverage rate. 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 2015/2016, a total of 3,566 school children were identified with special health needs. Of these, 845 students had bronchial asthma, 166 students were affected by type 1 diabetes mellitus, 366 had heart disease, 656 showed behavioural problems, and 194 were living with epilepsy. These children receive special medical attention from teaching staff and the school health team and their school records were maintained separately to facilitate follow-up.

Immunisation

UNRWA Immunisation programme for school children is streamlined with host country requirements. During the school year 2015/2016:

- New entrants in all Fields received a booster dose of tetanus-diphtheria (DT/Td) immunisation. The Agency-wide coverage was 99.4%.
- Coverage of oral polio vaccine (OPV) for new entrants was 99.9%, and coverage of Td vaccination among 9th grade school children in the five Fields was 99.9%.

De-worming programme

In order to improve the health status of school children, UNRWA in accordance with WHO recommendations, maintains a de-worming programme for children enrolled at UNRWA schools. This programme of de-worming used a single dose of an effective wide-spectrum anti-helminthic drug. The de-worming programme targeted school children in 1st, 2nd and 3rd grades. During the 2015/2016 school year, two rounds of deworming were conducted in Gaza, Syria and West bank while only one round was conducted in Lebanon and Jordan.

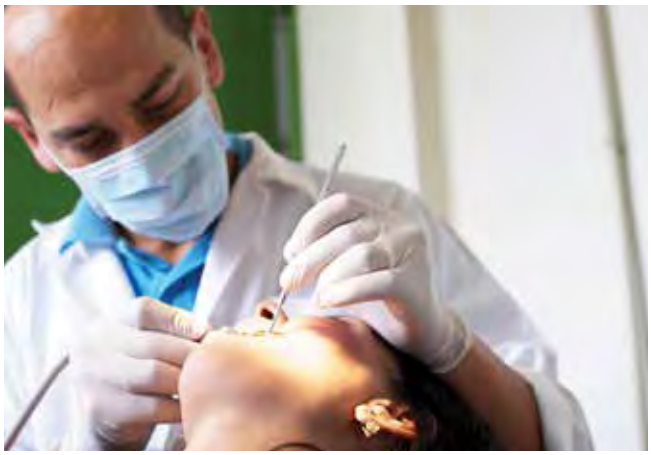
- The first round was conducted during the months of September- November 2015 targeting 174,395 students in the first three grades in all fields reaching coverage of 96.5%.
- The second round was conducted during the months of March- April 2016 targeting 125,767 students in the first three grades in Gaza, West bank and Syria fields reaching a coverage of 98.9%.

In addition, health awareness campaigns were carried out to emphasize the importance of personal hygiene in preventing transmission at all schools.

Vitamin A supplementation

During the 2015/2016 school year, children from grades one to six at all UNRWA schools received two doses of Vitamin A 200,000 International Units (IU) at six-month intervals.

Oral Health



During 2016, oral health services were provided through 106 fixed and 9 mobile dental clinics. The total number of curative oral health consultations in 2016 decreased by 7.7% compared to 2015, reaching a total of 558,424. This decrease could be due to the change in UNRWA strategy to focus on oral health preventive interventions.

Oral health screening activities, including pre-school children, school children, patients with non-communicable diseases, women at the first preconception care visit and pregnant women increased by 3.8% compared to 2015, reaching a total of 356,288.

As a part of the reinforcement of the preventive component of oral health, UNRWA introduced oral health education 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.

Comprehensive oral health assessment was conducted for all children at the age of one and two years, in addition to the application of sealant. A total of 55,506 assessments were conducted among pre-school children. Regular dental screening for school new entrants and for 7th and 9th grade students, along with oral hygiene education continued in all Fields except Gaza where they targeted only first graders with comprehensive dental care.

Assessment of the workload, productivity and efficiency of oral health services is conducted annually in each of the five Fields. A workload unit method is a standardized counting method for measuring technical workload in a consistent manner. With this method, one work unit is equal to one minute of productive technical, clerical and aide time. 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.

Table 13- Utilization of dental services in 2016

Indicator	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
No. of curative interventions	137,321	49,149	56,388	265,233	50,333	558,424
% of curative services	64.5	60.6	62.6	57.8	69.9	61.0
No. of preventive interventions	75,677	31,932	33,757	193,287	21,635	356,288
% of preventive services	35.5	39.4	37.4	42.2	30.1	39.0
Average daily dental consultations (workload per dental surgeon) (target 25)	31	27	29	80	25	42

The highest workload was 80.0 as reported by Gaza Field, and the lowest was 25.0 in West Bank. Despite the variation throughout the Fields, the Agency-wide average workload per dental surgeon per was 42.

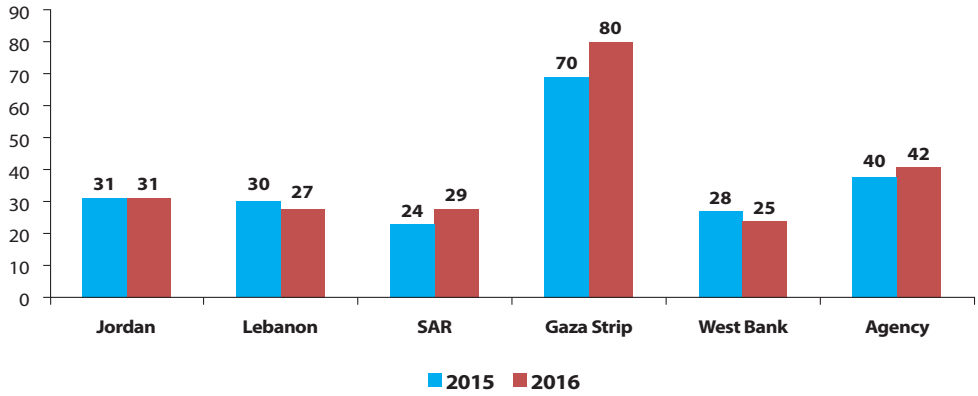


Figure 13- Average daily dental consultations (per dental surgeon) in 2015 and 2016.

Oral health survey: Decayed / Missing / Filled Teeth (DMFT)

The second oral health survey, Decayed/Missing/Filled Teeth (DMFT), was carried out among all 7th grade school children in all five Fields during the school year 2015/2016. A representative sample from each UNRWA Field was selected, and a total of 1,842 school children participated in the survey. The survey was conducted according to standardized WHO guidelines and with the technical support of the WHO Collaborating Centre in Milano, Sassari University and Cooperazione Odontoiatrica Internazionale (COI) in Italy. A structured questionnaire on socio-behavioral risk factors was completed by child/parent under supervision. The following principal variables were covered: socioeconomic status, dietary habits, oral hygiene habits and attendance to the dental clinic. The preliminary results of the survey showed that:

1- Prevalence of dental caries
   - The prevalence of dental caries in the permanent dentition of 7th grade school children was 72.8%.
   - The prevalence of untreated decayed teeth was 69.4%.
2- Severity of dental caries (DMFT, DMFS and Significant Caries Index)
   - The mean DMFT score was 2.52. The lowest DMFT scores were found in Jordan (mean=1.79) and in Gaza (mean=2.05). The index was slightly higher in Lebanon (mean= 2.19) and West Bank (mean= 2.37). The lowest score was found in Syria (mean=1.26).
3- Dental sealants
   - The percentage of school children with one or more sealed permanent tooth was the highest in Lebanon (31.5%), followed by Jordan (6.1%), and it remained less than 2% in Gaza and West Bank, while in Syria, nobody had sealed teeth.
4- Socio-behavioural factors related to caries prevalence and severity
   - Statistically significant associations were found between the prevalence of dental caries and frequency of sugar intake between meals, soft drinks consumption during meals and tooth brushing habit.

The report containing the results is expected to be finalized by the first quarter of 2017.

Physical Rehabilitation and Radiology Services

Physiotherapy services

Physiotherapy services were provided to 3,149 patients through six physiotherapy units in the West Bank, to 13,430 patients through 11 units in Gaza Strip and to 372 patients through one unit in Jordan. The patients received 27,762 sessions through 11 physiotherapists in the West Bank, 195,863 physiotherapy treatment sessions through 34 physiotherapists in Gaza Strip and 3,687 sessions through one physiotherapist in Jordan.

These units provide a wide range of physiotherapy and rehabilitation services including: manual treatment, heat therapy, electrotherapy, and gymnastic therapy. In addition, an outreach programme, using advanced equipment around 50 facilitated the provision of therapeutic exercise, manipulation massage, functional training, hydrotherapy, electrotherapy and self-training.

The outcome of the physiotherapy treatment sessions provided at UNRWA physiotherapy units in Gaza Field was the discharge of 81% of treated patients without any disability (full recovery) and 17.0% with mild disability. Only 3.0% remained disabled due to the nature of injury or disorder. The outcome of the treatment sessions provided at UNRWA physiotherapy units and through home visits in West Bank was the discharge of 80.0% of treated patients without any disability (full recovery) and 17.0% with mild disability, only 3.0% remained disabled due to the nature of injury or disorder.

The patients with permanent disability, together with their family members, were educated on how to handle the physical aspect of the disability in their daily lives, which will lead to more independence and self-reliance. Consequently, this will enable the health professional staff to devote more time for other patients.

Radiology services

UNRWA operates 20 radiology units (seven units in Gaza, eight units in the West Bank, four in Lebanon and one 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 and ultrasounds, are provided through different contractual agreements with hospitals and private radiology centres to patients, to newly recruited UNRWA staff, to UNRWA local staff during periodic medical examinations, and as part of medical board examinations.

During 2016, radiology services included: 101,319 X-rays for 89,669 patients. Out of these, 90,607 were plain X-rays for 78,981 patients conducted through UNRWA X-ray facilities and 10,712 X-rays for 10,688 patients conducted at contracted X-ray facilities.

Disability Care

Disability is a crosscutting issue relevant to the work of all UNRWA Programmes. UNRWA adopts the definition of disability in the UN Convention on the Rights of Persons with Disabilities, which states that "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 2016, disability awareness was addressed among staff through a variety of activities related to incorporating disability awareness within all UNRWA operations. Current Health Programme initiatives relating to disability take a comprehensive approach, addressing physical, mental, and social aspects. There is a strong focus on the prevention of disability, including provision of quality family planning services, antenatal, intra-natal, postnatal care, growth monitoring, immunization, disease prevention and control and screening activities to early detect and correct disability for new born infants and school children.

Folic Acid supplementations are prescribed for mothers in the preconception care period, which can help prevent certain birth defects, such as neural tube defects. The Health Programme also implements a number of specific interventions related to disability care. UNRWA health centres record data about children under the age of five years who have permanent physical or mental impairments such as hypothyroidism and phenylketonuria in order to facilitate appropriate medical follow-up.

Registered refugees identified by UNRWA's health centres as suffering from permanent physical disability and/or visual and hearing impairments are eligible for financial support from the Department of Health to cover the cost of prosthetic devices such as hearing aids, eye glasses, artificial limbs, wheel chairs and other aids. During 2016, more than 11,900 students were assisted with the cost of eyeglasses and 153 students received assistance to cover the cost of hearing aids.

While Physiotherapy Centers (operating in Jordan, Gaza and West Bank) do not target specifically persons with disabilities, it is recognized that a significant proportion of beneficiaries of this service are likely to be considered 'persons with disabilities' under the definition contained in the UNRWA Disability Policy. Currently, data collection regarding physiotherapy services does not differentiate between beneficiaries with disabilities and others.

Pharmaceutical Services

Total expenditure

In 2016, the total value of medical supplies and equipment from all funds (General Fund and projects) was approximately US$ 22.3 million, representing a slight increase compared with 2015 (US$ 21.99 million) . Expenditure from general fund was US$ 19.2 million (86.1%), and from projects US$ 3.11 million (13.9%).

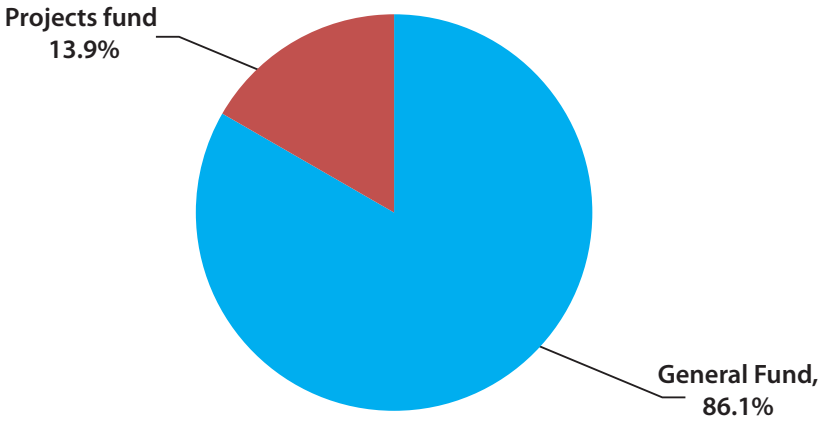


Figure 14- Total value of medical supplies and equipment from different resources, 2016

Expenditure on medical supplies

In 2016, the average expenditure Agency-wide on medical supplies per outpatient medical consultation was US$ 2.6, showing a slight increase compared to 2015 (US$ 2.40). The average annual expenditure on medical supplies per served refugee was US$ 6.49 Agency-wide, compared with US$ 6.25 in 2015. The relatively high cost per served refugee in Gaza and Syria (US$ 8.55, 7.63 respectively) is due to the necessity of procuring large quantities, including buffer stock, to avoid any shortages during emergencies.

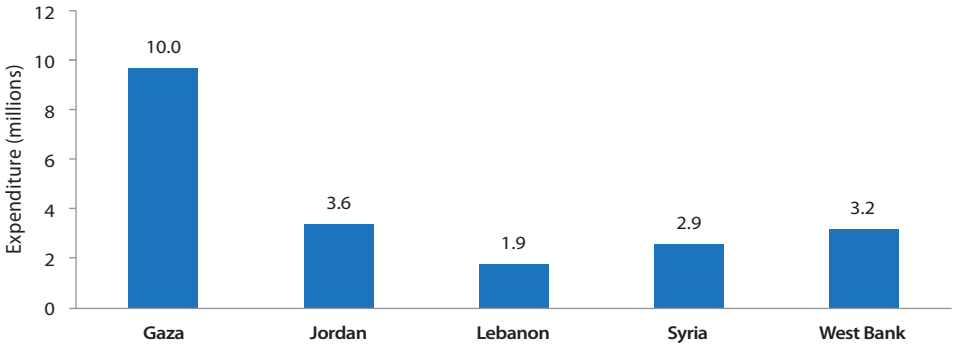


Figure 15- Expenditure on medicines by Field 2016

Table 14- Average medical products expenditure (USD) for medical supplies per outpatient medical consultation and per served refugee, 2016

	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
Expenditure (US$) for medical supplies per medical consultations	2.3	1.7	3.2	2.9	2.8	2.6
Expenditure (US$) for medical supplies per served population	3.46	5.59	7.63	8.55	7.44	6.49

Expenditure on medicines

The total expenditure on medicines in 2016 was US$ 17.75 million. Analysis for drugs expenditure revealed that 46.0% was spent on medicines for the treatment of NCDs, 15.0% on antimicrobials and 39.0% for other medicines.

Further analysis of expenditure on NCD drugs shows that 45.0% of the expenditure was on anti–diabetics, followed by 22.0% on antihypertensive medications, 20.0% on cardiovascular drugs , 7.0% on diuretics, and 6.0% on lipid lowering agents.

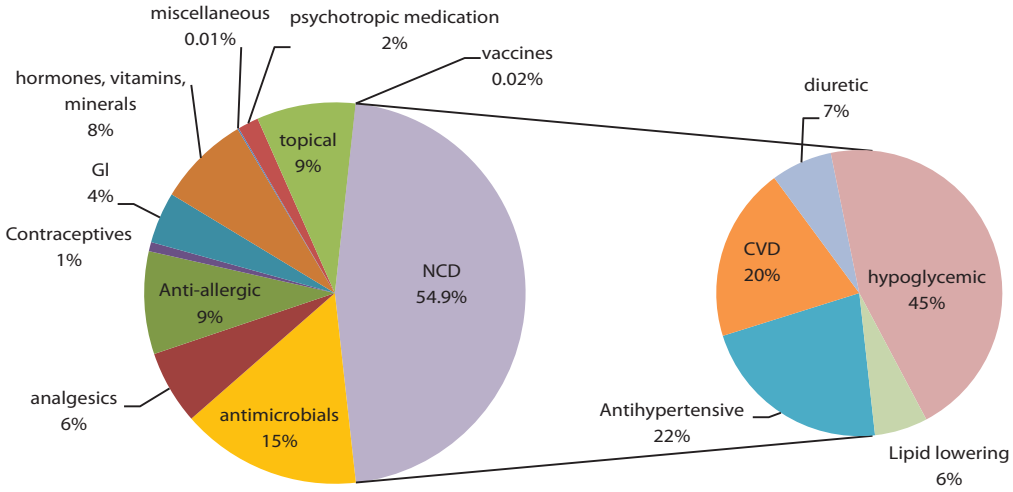


Figure 16- Expenditure on Drugs in 2016.

During 2016, medical equipment and related supplies accounted for 20.0% (US$ 4.55 million) of the total expenditure for medical supplies (US$ 22.3 million).

Antibiotic prescription rate

UNRWA aims for an antibiotic prescription rate below 25.0% in line with WHO recommendations. Antibiotic prescription rates ranged from 21.7% in Jordan to 35.4% in Syria in 2016. It is worth mentioning that in Syria Field the rate decreased significantly in 2016 compared to 2015 (40.0%), as efforts were exerted to rationalize antibiotic prescription.

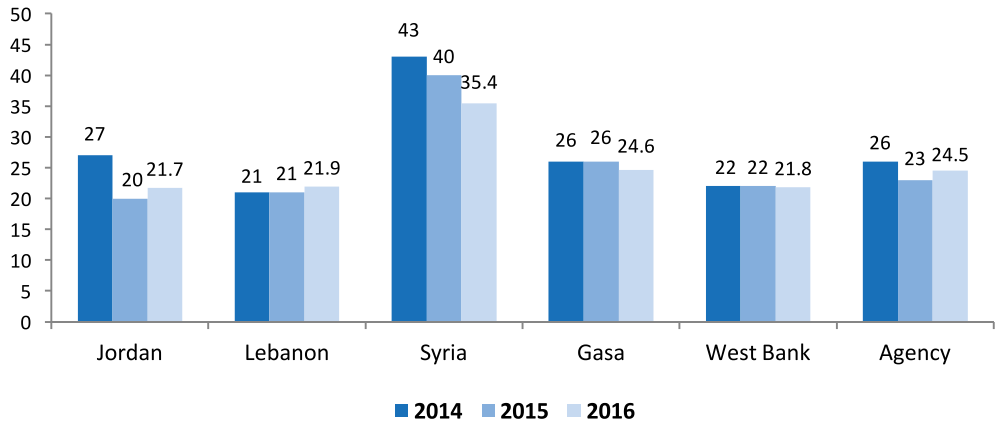


Figure 16- Antibiotics prescription rate (%) by Field, 2014-2016

Donations of medical supplies

In 2016, UNRWA received in-kind donations of medical supplies (medicines, medical equipment and others) equivalent to US$ 5.4 million, of which Gaza Field received (60.0%) followed by Jordan (24.0%), West Bank (8.0%), Lebanon (3.5%), and Syria (2.2%).

The following medicines and consumables were donated during 2016:

- The Ministry of Health of the Palestinian Authority and UNFPA provided 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 miscella neous drugs.

Output 2.2: Efficient hospital support services

In-patient Care

UNRWA continued to provide assistance towards essential hospital services either by contracting beds at non-governmental and private hospitals or by partially reimbursing costs incurred by refugees for treatment. In addition, the Agency directly provides hospital care in one hospital at Qalqilia in the West Bank.

Outsourced Hospital Services

During 2016, a total of 96,098 refugees benefited from assistance for hospital services. The average length of stay was 1.5 days across UNRWA's five Fields of operation.

Table 15- Patients who received assistance for outsourced hospital services during 2015 and 2016

	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
2015	14,652	33,086	19,346	12,653	22,727	102,464*
2016	11,904	28,475	20,737	13,079	21,903*	96,098*

*Numbers exclude Qalqilia Hospital

Of all the patients hospitalized, 46.0% were between 15 and 44 years old, while 30.6 % were children below the age of 15. Almost 66.1% of the patients were women. There was a significant variation among Fields concerning the number and type of hospital cases reimbursed by UNRWA. In Jordan and Gaza, deliveries represented the majority of the cases reimbursed, in Syria the majority of the cases were surgical cases, while in Lebanon and West Bank the majority were internal medicine cases. The variation is not related to any significant morbidity variations, but is rather a consequence of differences in access to public health services in host countries, and the resource allocation and reimbursement policies implemented in the various Fields.

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-registered Palestine refugees and non-refugee Palestinians from the surrounding municipalities. A total of 5,892 patients were admitted to the hospital in 2016 compared to 5,624 in 2015. The average bed occupancy in Qalqilia Hospital was 55.3% in 2016, compared with 57.6% the previous year. The average length of stay in 2016 was 2.2 days

Table 16- In-patient care at the UNRWA hospital (Qalqilia, West Bank) in 2015 and 2016

Indicators	2015	2016
Number of beds	63	63
Persons admitted	5,624	5,892
Bed days utilized	13,247	12,711
Bed occupancy rate (%)	57.6	55.3
Average stay in days	2.4	2.2

Crosscutting Services

Nutrition

Preparation, coordination and composition of a study proposal for the "Anemia prevalence among new entrant children registering at UNRWA schools" were conducted with preliminary discussion with the Field Family Health Officers. During the school year 2015/2016 around 59,000 first grade pupils were enrolled in UNRWA schools in the five fields and were provided with health care through a comprehensive school health programme. Moreover, UNRWA has conducted several studies to assess anemia prevalence among women and children in general, but there is no data available on the anemia status among pre-school children attending the new entrants' medical examination in UNRWA health centers.

Therefore, in order to have a base line data on the anemia level among new first grader children. The health department will conduct a study on the prevalence of anemia among new entrants school children in order to consider the feasibility of implementing appropriate targeted interventions, should additional resources become available to the agency. The main Objectives are:

- To assess and to establish a base-line data on anemia prevalence among new school entrants attending UNRWA health centres for the medical examination required for their acceptance at UNRWA schools.
- To assess the need for implementing and integrating appropriate curative and preventative interventions for 1st grade students attending UNRWA`s schools.

During 2016, health department has worked on digitalizing the Maternal and Child handbook to be a mobile application on smart phone (e-MCH), therefore, an update for the nutritional information for all the maternal and child stages from pre-conception, pregnancy, breastfeeding, and weaning have been conducted prior to the launching of e-MCH mobile application.

During 2016, health department has finalized the NCD booklet, an update on the healthy nutritional knowledge and practices and ways to update a healthy lifestyle for diabetic patients were included in the handbook. Prior to printing and distributing the NCD handbook, a comprehensive evaluation of the efficiency and effective of the NCD booklet for UNRWA NCD patients was conducted, in order to have a constructive feedback and input about the content, tables, diagrams and educational material on diabetes care,so that the content can be edited, modified, added or deleted.

Copies of the NCD booklet were distributed at two health centers (HCs) in each field for the family health teams in each HC, in order to have their written inputs on the booklet. Focus group discussion with 20 NCD patients in each HCs in each field were conducted, to have their inputs on the booklets based on their experience in using them for three months, using a unified check list. All input and feedback from the selected patient and staff were included and combined in the final version of the booklet.

Laboratory services

Comprehensive laboratory services were provided through 124 out of 143 health facilities. Out of the remaining 19 facilities, 10 facilities continued to provide basic laboratory support (blood glucose, blood haemoglobin and urine tests by dipstick) through competent nursing staff using basic laboratory equipment, and the remaining 9 facilities are in Syria Field and are not functioning.

Utilization trend

The Agency-wide number of tests performed in 2016 decreased by 4.8 % (from 4.59 to 4.37 million) compared to 2015 with variations from one Field to anther. While rates of decrease were observed in Gaza (5.1%), in Jordan (12.9%) and in West Bank (4.2%), rates of increase were observed in Syria (6.1%) and in Lebanon (9.1%). The increase in Syria is due to establishing a new health points that provided laboratory services, and in Lebanon due to providing laboratory services to Palestine refugees from Syria. The decrease of in Gaza, West Bank and Jordan was mainly due to stock rupture in laboratory supplies.

Periodic self-evaluation

The annual comparative study of workloads and efficiency of the laboratory services was carried out based on 2016 data as part of UNRWA's periodic self-evaluation of the programmes using the WHO approach for workload measurement. The productivity was 42.3 Workload Units (WLUs)/hour in Jordan, 41.7 in Lebanon, 52.2 in Gaza, 61.9 in the West Bank and 31.0 in Syria. The average Agency-wide productivity was 46.9 WLUs/hour.

Laboratory costs

The overall cost of laboratory services provided by UNRWA was US$ 7.43 million, out of which US$ 6.87 million (92.5%) were secured through Programme budget; US$ 0.10 million (1.3%) through in-kind donations, projects or emergency funds and the remaining US$ 0.46 million (6.2%) was due to equipment depreciation cost. The cost of laboratory services continued to be far below the rates of the host countries for equivalent services (estimated at US$ 17.9 million). This suggests that UNRWA's experience in integrating laboratory services into its primary health care activities remains very cost-efficient vis-a-vis referring patients to external services.

Table 17- Expenditure on laboratory services.

Cost	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
Programme Budget	1,446,471	905,928	615,588	2,392,929	1,512,830	6,873,747
Non-Programme Budget	0	4,160	0	83,078	14,003	101,241
Equipment Depreciation	80,962	95,672	66,748	84,441	130,586	458,409
Total	1,527,433	1,005,760	682,336	2,560,448	1,657,419	7,433,396

Table 18- Comparative analysis on annual cost of laboratory services performed at UNRWA facilities and cost of the same services if outsourced to host authorities (USD), 2016

Cost	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
Host authorities	2,851,743	1,485,447	808,777	8,104,248	4,682,977	17,933,192
UNRWA	1,527,433	1,005,760	682,336	2,560,448	1,657,419	7,433,396

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.
- Implementing an internal quality control system at all UNRWA laboratories and for all tests.
- Implementing an External Quality Assurance System (EQAS) at all UNRWA laboratories in all Fields.
- Conducting 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.
- Conducting annual assessment of the laboratory services according to standard checklist by Field Laboratory Services Officers.
- Conducting quarterly follow up checklist assessment on laboratory services by the Senior Medical Officer or Medical Officer in-charge.
- On-going check-up of the quality of laboratory supplies in coordination with relevant staff at the procurement division.
- Making arrangements with the public health laboratories of the host countries concerning the referral of patients or samples for surveillance of diseases of public health importance.

Health Communication

As a cross-cutting issue, health communication has several roles in supporting the Health Programme's efforts at Headquarters and Fields levels, and in supporting different programmes to implement their activities in a planned, organized and effective way. Efforts are exerted continuously to advocate for health activities and initiatives conducted at different levels, and to take into consideration UNRWA branding guidelines and the advocacy for donors and stakeholders support through these activities.

The Director of Health has participated in the 68th World Health Assembly, and for the third year has participated in the Lancet-WH-UNRWA side meeting. All preparations were made to make sure that advocacy for UNRWA Health Programme efforts, and for Palestine refugees' health needs are perceived very well by different audiences and stakeholders. Materials needed for this event, in addition to the Annual Report of the Department of Health, were prepared and produced for distribution during this event.

Several achievements were not possible without the cooperation between members of the NCD team at the Department of Health. The NCD booklet was prepared, revised, printed and piloted by health staff and NCD patients at two health centres in each field. A revised version will be printed for distribution to all NCD patients attending UNRWA health centres in all Fields. A launching ceremony for the UNRWA-MCI programme was conducted in the presence of representatives from WDF and MCI, and field visits were conducted for follow-up of the implementation process in Jordan, West Bank and Lebanon. Furthermore, a detailed project proposal was drafted to be submitted to potential donors on activities to support the NCD programme.

UNRWA Health Department, in cooperation with Japan International Cooperation Agency (JICA), conducted a launching ceremony for the digitalization of the mother and child health booklet, named MCH Application, which will be available for Palestine refugee mothers in April 2017.

The World Health Day (WHD), the World No Tobacco Day (WNTD) and the World Diabetes Day (WDD) for 2016 were observed through the preparation of a whole set of activities in cooperation with the fields.

The health webpages content on UNRWA's website (Arabic and English) was updated during 2016 with the latest data and information on health programme's services, activities and indicators.

11. http://www.thecommunityguide.org/healthcommunication/index.html
12. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448586/

Two videos were produced about the lives of two Palestine refugees. Materials for the healthy life-style campaign that UNRWA conducted in the Fields were produced and disseminated.

Training for mentors and mentees in West Bank Field was conducted on several relevant issues.

The new UNRWA Medicines Quality Assurance Policy 2016 was revised, branded and published on UNRWA's website.

To cooperate with different stakeholders on conducting research and health relevant activities, agreements with John Snow, Inc. (JSI), Queen Margret University (QMU) and the American University of Beirut (AUB), and the Korean International Cooperation Agency (KOICA) were negotiated, revised, approved and went into action during 2016.

By the end of 2016, an application was submitted to approval of Cisco networks to involve the Health Programme in the use of WebEx; a platform hosted by Cisco networks to facilitate the connection of health professionals from UNRWA and from anywhere in the world to conduct remote meetings, trainings, and consultations among other uses.

By the end of 2016, and at the opening of the 8th Health Department retreat, a ceremony was conducted under the auspices of UNRWA Commissioner General to celebrate the closing the full implementation of the FHT model in the four Fields, and the progressive implementation in Syria.

Health Research

Research is one of the fundamental activities of the Department of Health. Evidence-based practice and policy-making is essential, especially under circumstances with limited financial and human resources. With a history of 70 years supporting specifically the Palestine refugee population, UNRWA is a remarkable place to establish the scientific basis for practice that might be applicable not only to Palestine refugees, but to other plight situations experienced by refugees or displaced populations.

Overarching framework to conduct research systematically, however, had not been in place for the department. In 2016, the first Departmental Research Agenda was developed. The aim of this Agenda was to narrate all potential research activities, according to the WHO Health System Strengthening Framework, and to visualize priorities of the studies to be conducted. This WHO framework defines a set of pillars which represent the critical components of health systems. Together with the WHO framework, research priorities for the department were identified based on the current and estimated future trends in the burden of diseases; the ability to conduct research based on available human, financial and infrastructure capacity; the potential impact of the research on policy-making.

Our current focus areas include, but are not limited to: NCDs, MCH, nutrition, MHPSS, health financing for UHC, health workforce strategies, health system data quality, and outcomes of FHT approach. For those areas of study, we currently conduct four types of research: primary research, secondary data analysis, literature reviews and policy analysis. Primary research includes quantitative and qualitative field data collection and analysis, while secondary data analysis takes advantage of the e-Health system and its data.

The Department of Health continues to be committed to scientific research, and to integrate research findings into the decision-making process for patient care. Partnerships to promote evidence-based practice were further strengthened, and will continue to be strengthened, with memorandum of understanding (MoU) signed by UNRWA and world-leading academic institutions. We welcome researchers and consultants from those institutions who share interest in supporting the Palestine refugee population and their well-being.

We have researchers coming to the department regularly to conduct scientific studies together. In 2016, with their support, five research articles as well as one correspondence have been published and data analysis is on-going for more studies. We will continue to work to establish the scientific basis to provide more efficient and effective care for Palestine refugees.

Gender Mainstreaming

In accordance with the UNRWA Gender Policy adopted in 2007 and the Gender Mainstreaming Strategy (GMS) adopted in 2008, the Health Programme continued during 2016 to work on providing support to field offices in the implementation of their areas of priority focusing on reducing gender gaps among UNRWA health staff, addressing gender-based violence (GBV) in the health centers, improving men's participation in pre-conception care and family planning, and introducing breast cancer screenings.

Addressing the gender gap in the workforce

To address the gender balance among health staff, UNRWA Health Department encouraged the recruitment of female staff while remaining mindful of the need for a competitive and transparent selection process. The percentage of women recruited within all categories and in all Fields varied from 28.7% in Jordan to 37.3% in Gaza. However, the staffing structure in UNRWA health centres, similar to what can be observed in host countries reflects persistence in stereotypes regarding positions occupied by women and men and there is a continued need to follow-up on women's access to senior positions. Nurses are primarily females and Medical Officers are mostly males. To tackle these challenges, UNRWA is working to ensure that recruitment procedures are gender-bias free. Actions were 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 appointments are encouraged and women are encouraged to apply for senior positions.

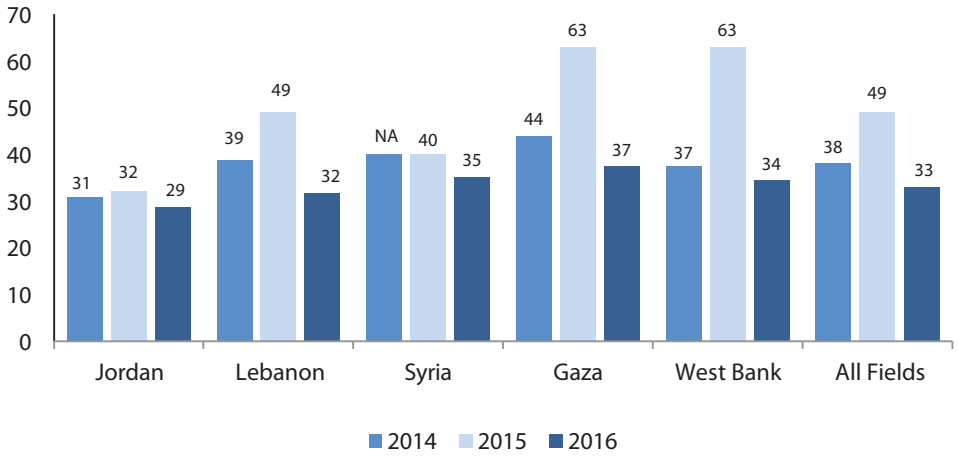


Figure 18- Percentage of female staff at UNRWA health centres

Gender Based Violence (GBV)

In line with Agency-wide efforts to address GBV since 2009, the health programme has sought to embed the identification and referral of GBV survivors to needed services. One of the major challenges reported related to the limited or lack of private spaces in health centres which does not allow for the safe and confidential identification and addressing on GBV in health centres continues to persist. This issue proved to be more salient in emergency contexts, such as in the Syria context, due to even less space for private consultations in the context of collective centres.

Identified priority areas in the Fields

Field offices continued to implement activities based on previously identified priorities in gender-action plans (GAP). Work has thus continued on issues such as the engagement of men in preconception care (PCC) and family planning (FP), screening for breast cancer, and coverage of clinical management of rape (CMR). The health programme has continued its efforts to ensure the inclusion of men in PCC and FP by working both at the community level, through awareness raising efforts, and also on the staff level through training. In Jordan, counselling sessions targeting 311 couples were provided on PCC and FP to provide knowledge and empower women in making decisions together with their husbands related to conception.

In Syria, as part of UNRWA's commitment towards improving coverage and quality of maternal and child health services, the engagement of men in PCC and FP continued to be regarded as a priority by the field. In the period between Jun. – Dec. 2016, 109 couples attended FP sessions. In West Bank, UNRWA conducted comprehensive training for UNRWA health staff on PCC with aim to scale up effort on this stream of work.

In Jordan, a national campaign for raising awareness on early detection of breast cancer, targeted women of reproductive age (15-49 years) and women older than 50 years who are at risk for breast cancer. In Gaza, the Health Programme has also continued with a project for breast cancer screening through which women were screened for breast cancer including women with strong family history for breast cancer.

In Lebanon, an important achievement in terms of access to healthcare coverage in the reporting period has been the introduction of coverage for clinical management of rape (CMR) services in the UNRWA Lebanon Hospitalization Policy. The revised policy includes the provision of CMR in five hospitals across the country, covering each area (Tyre, Saida, Central Lebanon Area, Beqaa and North Lebanon Area).

SECTION 3 – DATA

Part 1 - Agency wide trends for Selected Indicators

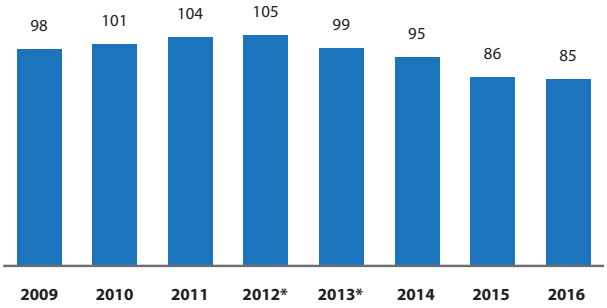


Figure 19- Average daily medical consultations per doctor

*Data from Syria is not included

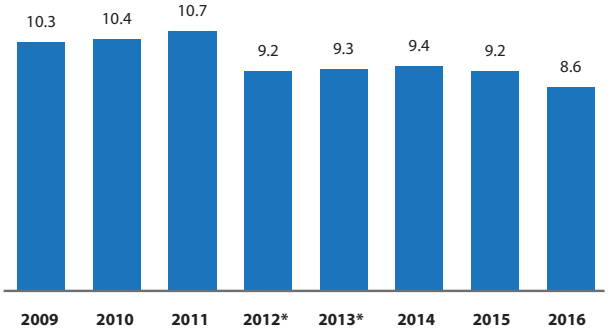


Figure 20- No. of outpatient consultations (million)

*Data from Syria is not included

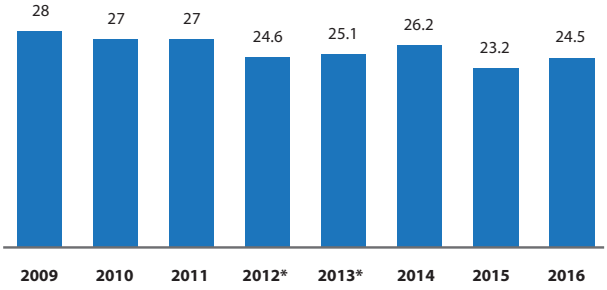


Figure 21- Antibiotics prescription rate

*Data from Syria is not included

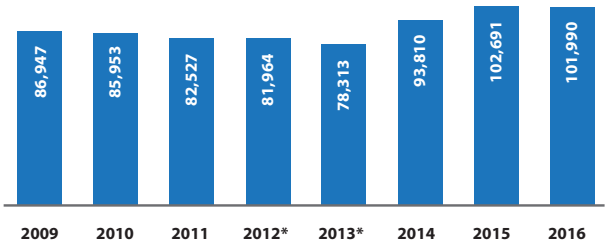


Figure 22- No. of hospitalizations (including Qalqilia hospital)

*Data from Syria is not included

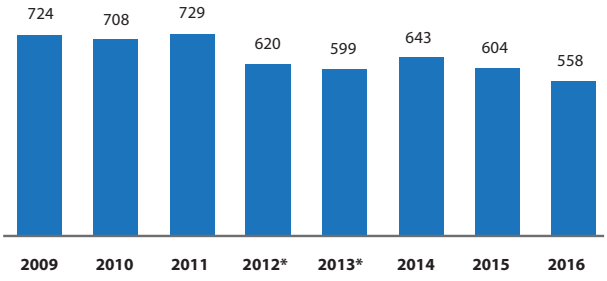


Figure 23- No. of dental consultations (thousand)

*Data from Syria is not included

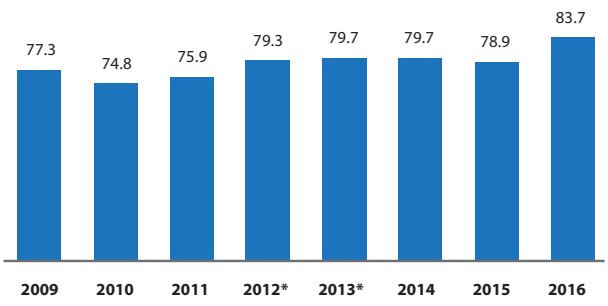


Figure 24- % of pregnant women registered during the 1st trimester

*Data from Syria is not included

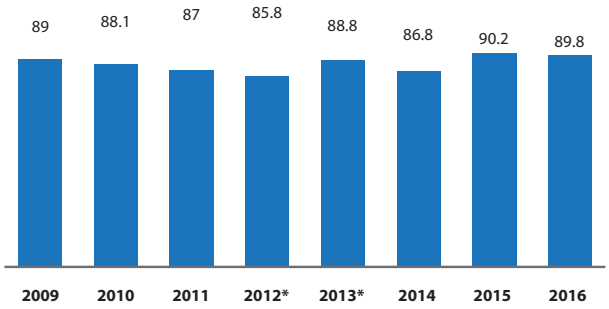


Figure 25- % of pregnant women attending at least 4 ANC visit

*Data from Syria is not included

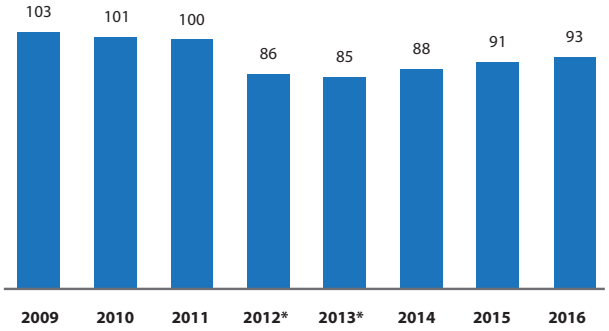
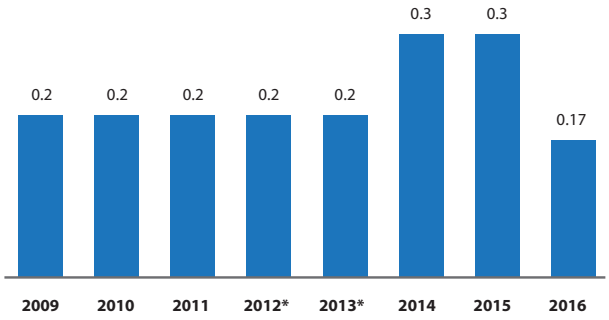


Figure 26- No. of newly registered pregnant women (thousand)

*Data from Syria is not included



igure 27- % of delivers with unknown outcome

*Data from Syria is not included

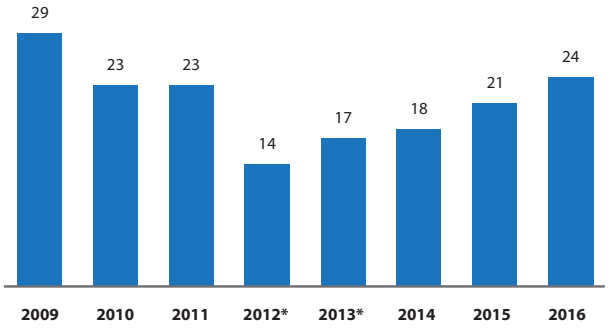


Figure 28- No. of maternal deaths

*Data from Syria is not included

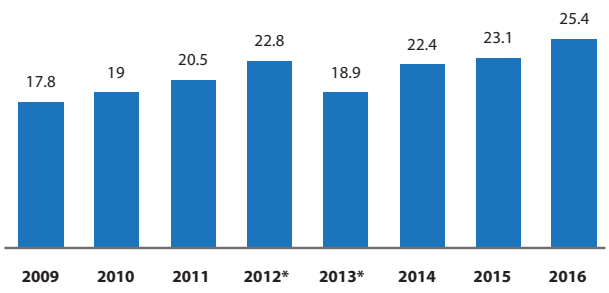


Figure 29- % of caesarean section deliveries

*Data from Syria is not included

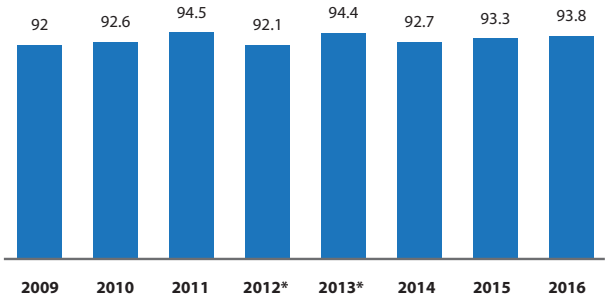


Figure 30- % of women attending PNC within 6 weeks of delivery

*Data from Syria is not included

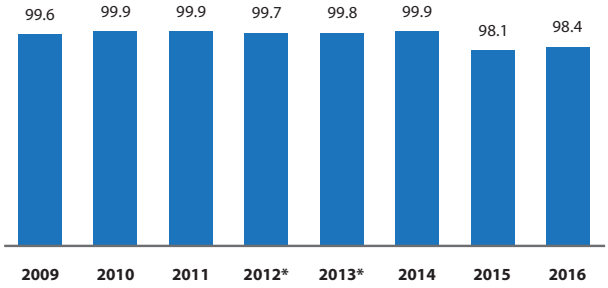


Figure 31- % of pregnant women protected against tetanus

*Data from Syria is not included

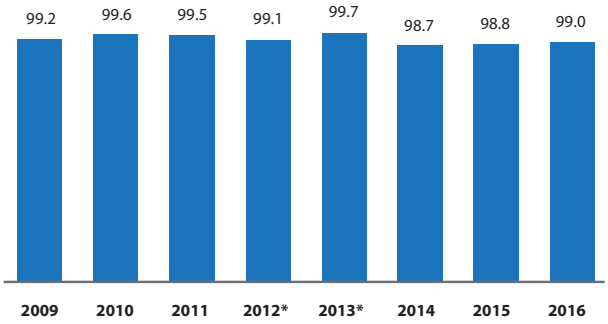


Figure 32- % of deliveries in health institutions

*Data from Syria is not included

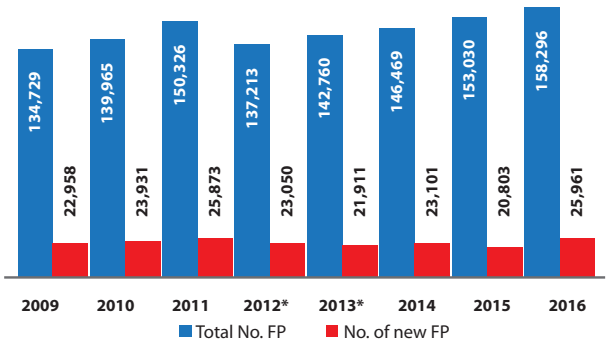


Figure 33- New & total no. of family planning acceptors

*Data from Syria is not included

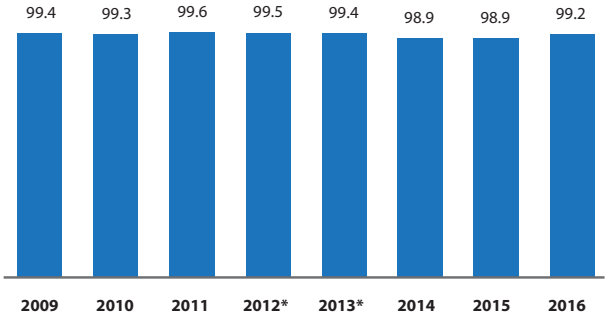


Figure 34- % of children 18 months old received all EPI booster

*Data from Syria is not included

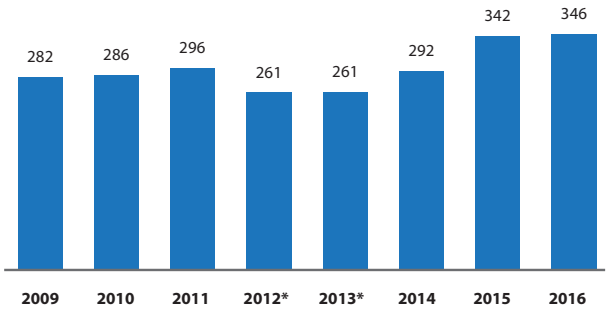


Figure 35-No. of children 0-5 years registered (thousand)

*Data from Syria is not included

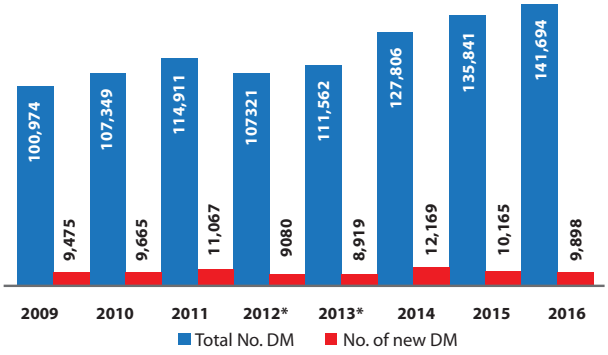


Figure 36- New & total no. of patients with diabetes

*Data from Syria is not included

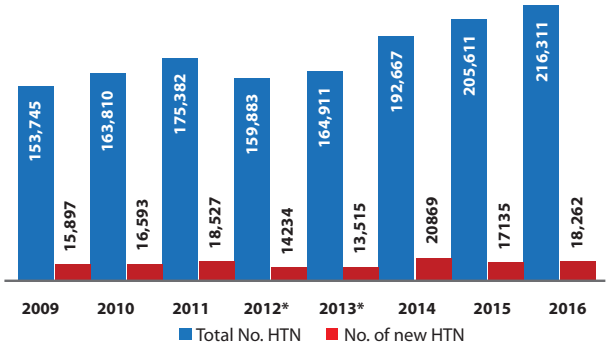


Figure 37- New & total no. of patients with hypertension

*Data from Syria is not included

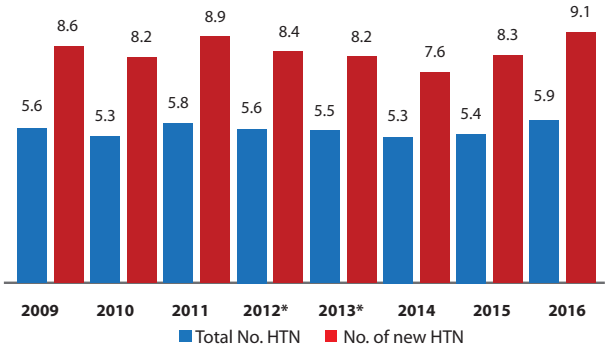


Figure 38- Prevalence of diabetes among population served >18 years

*Data from Syria is not included

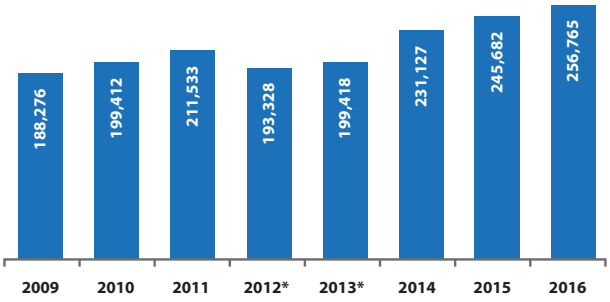


Figure 39- Total No. of all patients with diabetes and / or hypertension

*Data from Syria is not included

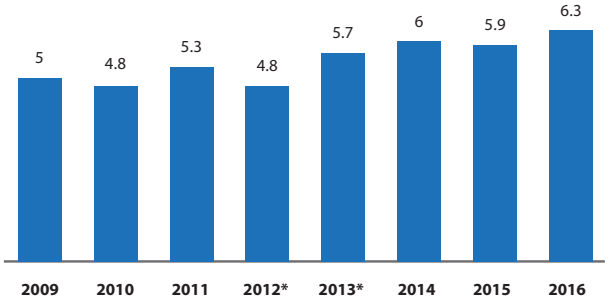


Figure 40- % of NCD patients defaulters

*Data from Syria is not included

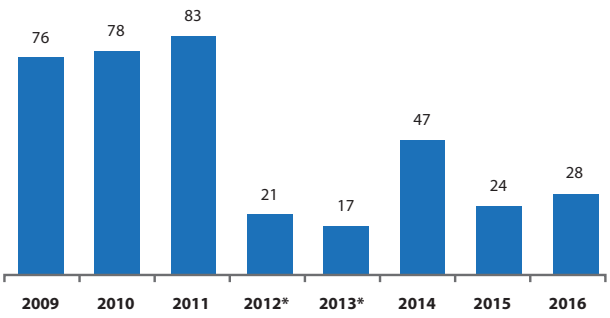


Figure 41- No. of new reported TB cases

*Data from Syria is not included

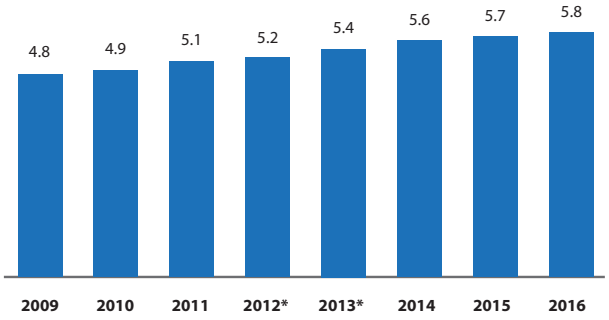


Figure 42- No. of registered populations (millions)

*Data from Syria is not included

Part 2- CMM (2016-2021) Indicators

Table 19-Selected CMM indicators 2016

So	Indicator	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
1	Prevalence of diabetes among population served, 18 years and above	5.9	4.9	5.6	5.4	7.9	5.9
2	Percentage of DM patients under control per defined criteria	48.8	51.4	33.0	42.3	46.5	44.7
3	Average daily medical consultation per doctor	81.75	100	82	82	78	85
4	Average consultation time per doctor	2.3	5.3	NC	2.59	2.9	2.77
5	Number of HCs fully implementing eHealth system	22	27	3	22	42	116
6	Percentage of NCD patients coming to HC regularly	80	75.8	NC	74.04	78.3	77.04
7	Percentage of NCD patients with late complications	8.1	7.4	12.7	11.9	12.2	10.8
8	Number of EPI vaccine preventable disease outbreaks	0	0	0	0	0	0
9	Percentage of women with live birth who received at least 4 ANC visits	85.5	94.2	64.3	95.2	91.5	89.8
10	Percentage of post natal women attending PNC within 6 weeks of delivery	88	96.9	86.4	98.2	92.4	93.8
11	Percentage Diphtheria + tetanus coverage among targeted students	98	98.5	99.3	100	99.9	99.9
12	Antibiotic prescription rate	21.7	21.9	35.4	24.6	21.8	24.5
13	Percentage of HCs with no stock out of 12 tracer medicines	74	100	89.4	100	93.6	91.4
14	Percentage of preventative dental consultations out of total dental consultations	35.5	39.4	37.4	42.2	30.1	39.0
15	Percentage of targeted population 40 years and above screened for diabetes mellitus (DM)	8.4	16.2	13.9	25.5	39.1	20.1
16	Number of new NCD patients (DM, HT, DM+HT)	7,059	1,933	5,027	6,990	3,214	24,223
17	Total number of NCD patients (DM, HT, DM+HT)	75,376	29,242	32,205	78,717	41,225	256,765
18	Percentage of children 18 months old that received all booster vaccines	98.2	99.2	98.8	99.8	100	99.2
19	Number of new tuberculosis (TB) cases detected	0	7	19	1	1	28
20	Percentage of 18 months old children that received 2 doses of Vitamin A	98.65	99.4	91.36	95	100	96.88
21	Number of active/continuing family planning users	37,512	14,452	10,551	72,225	23,556	158,296
22	Number of new enrolments in pre-conception care programme	3,831	1,785	460	20,454	2,550	29,080
23	Percentage of 4th gr. school children identified with vision impairment (disaggregated by sex)	16.7	11.3	5.2	7.5	15.1	10.4
24	Unit cost per capita (direct cost)	19.4	68.64	19.05	24.51	57.84	31.22
25	Percentage of UNRWA hospitalization accessed by SSNP	15.16	18.4	24.3	16.4	3.4	15.3
26	Hospitalization rate per 1000 served population	11.4	84.1	55.2	10.2	61.4	29.2
27	Hospitalization unit cost	90.8	488.4	90.8	174.2	258	220.44

Part 3 – 2016 Data Tables

Table 20 – Aggregated 2016 data tables

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
20.1 – DEMOGRAPHICS						
Population of host countries in 2016[13]	8,185,384	6,237,738	17,185,170	1,753,327	2,697,687	36,059,306
Registered refugees (no.)	2,286,643	513,795	618,128	1,435,616	997,173	5,851,355
Refugees in host countries (%)	27.9%	8.2%	3.6%	81.9%	37.0%	16.2%
Refugees accessing (served population) UNRWA health services (%/no.)	1,041,680 45.6%	338,413 65.9%	375,667 60.8%	1,287,291 89.7%	452,372 45.4%	3,495,423 59.7%
Growth rate of registered refugees (%)	1.7%	1.9%	2.2%	3.4%	2.7%	2.4%
Children below 18 years (%)	27.6%	23.3%	30.2%	40.7%	29.3%	31.0%
Women of reproductive age: 15-49 years (%)	28.2%	26.5%	27.6%	24.9%	27.8%	27.1%
Population 40 years and above (%)	34.5%	41.5%	33.6%	23.4%	33.8%	32.1%
Population living in camps (%)	17.4%	50.6%	30.2%	40.3%	24.3%	28.5%
Average family size	5.2	4.7	4.8	5.6	5.6	5.3
Aging index (%)	51.2%	69.9%	34.6%	19.8%	48.8%	39.8%
Fertility rate	3.2	2.7	2.7	3.6	3.6	3.2
Male/female ratio	1.0	1.0	1.0	1.0	1.0	1.0
Dependency ratio	50.3	48.2	52.2	72.8	52.2	56.1
20.2- HEALTH INFRASTRUCTURE						
Primary health care (PHC) facilities (no.):						
Inside official camps	12	14	12	11	20	69
Outside official camps	13	13	14	11	23	74
Total	25	27	26	22	43	143
Ratio of PHC facilities per 100,000 population	1.1	5.3	4.2	1.5	4.3	2.4
Services within PHC facilities (no.):						
Laboratories	25	17	17	22	43	124
Dental clinics:						
- Stationed units	29	18	17	18	24	106
- Mobile units	4	1	1	3	0	9
Radiology facilities	1	4	0	7	8	20
Physiotherapy clinics	1	0	0	10	6	17
Hospitals	0	0	0	0	1	1
Health facilities implementing E-health	22	27	3	22	42	116
20.3 - OUTPATIENT CARE						
(a).Outpatient consultations medical officer (no.)						
First visits						
Male	141,399	70,422	114,111	354,749	130,385	811,066
Female	222,605	104,713	144,899	507,404	187,887	1,167,508

13. Sources UNRWA Registration Statistical Bulletin of 2015, and CIA World Fact-book March 2016 population estimates (https://www.cia.gov/library/publications/the-world-factbook/ last accessed on 25/2/2017

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
20.3 - OUTPATIENT CARE						
(a).Outpatient consultations medical officer (no.)						
Repeat visits						
Male	419,717	351,691	269,877	1,154,267	319,728	2,515,280
Female	738,750	533,730	379,107	1,752,726	510,445	3,914,758
Sub-total (a)	1,522,471	1,060,556	907,994	3,769,146	1,148,445	8,408,612
Ratio repeat to first visits	3.2	5.1	2.5	3.4	2.6	3.2
(b) Outpatient consultations specialist (no.)						
Gyn.& Obst.	27,137	18,029	18,205	7,506	7,845	78,722
Cardiology	3,328	8,867	1,714	17,133	82	31,124
Others	0	17,253	0	17,006	801	35,060
Sub-total (a)	30,465	44,149	19,919	41,645	8,728	144,906
Grand total (a) + (b)	1,552,936	1,104,705	927,913	3,810,791	1,157,173	8,553,518
Average daily medical consultations / doctor[14]	81.7	100.0	82.0	82.0	78.0	85.0
20.4 - INPATIENT CARE						
Patients hospitalized -including Qalqilia (no.)	11,904	28,475	20,737	13,079	27,795	101,990
Average Length of stay (days)	1.5	2.4	NA	1.3	1.9	1.5
Age distribution of admissions (%):-						
0-4 yrs	0.1	16.3	10.4	4.5	16.1	11.6
5-14 yrs	1.7	8.3	16.9	5.4	45.3	19.0
15-44 yrs	94.8	33.2	46.9	68.5	27.1	46.0
≥ 45 yrs	3.4	42.3	25.8	21.6	11.5	23.3
Sex distribution of admissions (%):						
Male	4.1	45.8	42.0	28.1	31.2	33.9
Female	95.9	54.2	58.0	71.9	68.8	66.1
Ward distribution of admissions (%):						
Surgery	1.6	22.1	35.9	45.3	21.6	25.4
Internal Medicine	6.0	65.4	20.3	1.8	42.1	34.8
Ear, nose & throat	1.2	2.7	9.7	0.02	0.0	2.9
Ophthalmology	0.1	3.1	15.6	9.4	3.6	6.2
Obstetrics	91.1	6.8	18.4	43.5	32.8	30.8
20.5 - ORAL HEALTH SERVICES						
Dental curative consultation – Male (no.)	49,452	20,169	22,836	116,103	21,064	229,624
Dental curative consultation – Female (no.)	87,869	28,980	33,552	149,130	29,269	328,800
Total dental curative consultations (no.)	13,7321	49,149	56,388	265,233	50,333	558,424
Dental screening consultations – Male (no.)	24,551	12,285	13,284	63,094	7,206	120,420
Dental screening consultations – Females (no)	51,126	19,647	20,473	130,193	14,429	235,868
Total dental screening consultations (no.)	75,677	31,932	33,757	193,287	21,635	356,288
% preventive of total dental consultations	35.5	39.4	37.4	42.2	30.1	39.0
Productivity (workload units /hour)	46.3	38.7	49.2	99.2	34.4	58
Average daily dental consultations / dental surgeon	30.6	26.8	28.8	79.8	24.5	42.0

14. The working days in Jordan and Gaza are six days/week, and in Lebanon, Syria and West Bank Fields are five days/week
* PRS data is included.

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
20.6 - PHYSICAL REHABILITATION						
Trauma patients	-	-	-	4,494	508	5,002
Non-Trauma patients	372	-	-	8,936	2,641	11,949
Total	372	-	-	13,430	3,149	16,951
20.7 - FAMILY PLANNING SERVICES						
New family planning users (no.)	6,468	1,687	2,900	12,185	2,721	25,961
Continuing users at end year (no.)	37,512	14,452	10,551	72,225	23,556	158,296
Family planning discontinuation rate (%)	6	6	7.3	4.0	4.4	5.5
Family planning users according to method (%):						
IUD	42.4	45.8	23.7	52.5	64.3	49.3
Pills	32.1	22.5	39.8	21.8	17.9	24.9
Condoms	22.9	31.2	31.8	22.6	17.1	23.3
Spermicides	0.03	0.0	0.0	0.03	0.02	0.02
Injectables	2.5	0.6	4.7	3.1	0.6	2.5
20.8 - PRECONCEPTION CARE						
No. of women newly enrolled in preconception care programme	3,831	1,785	460	20,454	2,550	29,080
20.9 - ANTENATAL CARE						
Served refugees (no.)	1,041,680	338,413	375,667	1,287,291	452,372	3,495,423
Expected pregnancies (no.)[15]	29,167	6,768	10,519	47,501	14,250	108,205
Newly registered pregnancies (no.)	25,488	4,617	6,305	43,206	14,131	9,3747
Antenatal care coverage (%)	87.4	68.2	59.9	91.0	99.2	86.6
Trimester registered for antenatal care (%):						
1st trimester	82.3	92.3	60.7	89.1	74.8	83.7
2nd trimester	14.6	6.8	30.2	10.1	23.1	14.2
3rd trimester	3.1	1.0	9.0	0.8	2.1	2.1
Pregnant women with 4 antenatal visits or more (%)	85.5	94.2	64.3	95.2	91.5	89.8
Average no. of antenatal visits	5.1	6.2	4.3	6.7	5.1	5.9
20.10 - TETANUS IMMUNIZATION						
Average no. of antenatal visits	100	98.4	100	97.4	98.4	98.4
20.11 - RISK STATUS ASSESSMENT						
Pregnant women by risk status (%):						
High	18.0	11.7	10.6	14.8	13.2	16.4
Alert	28.0	40.3	33.6	23.1	24.1	30.2
Low	54.1	48	55.8	62.1	62.7	53.4
20.12 - DIABETES MELLUTES AND HYPERTENSTION DURING PREGNANCY						
Diabetes during pregnancy (%)	5.0	5.9	1.9	4	6.7	4.6
Hypertension during pregnancy (%)	6.5	5	4.9	8.3	4.9	6.9

15. Expected no. of pregnancies =population X CBR

20.13 - DELIVERY CARE	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Expected deliveries (no.)	23,995	4,483	5,625	42,572	12,897	89,572
a - Reported deliveries (no.)	22,074	4,136	5,278	39,673	12,238	83,399
b- Reported abortions (no.)	1,917	347	232	2,899	630	6,025
a+b - Known delivery outcome (no.)	23,991	4,483	5,510	42,572	12,868	89,424
Unknown delivery outcome (no. / %)	0.02	0.00	2.04	0.00	0.22	0.17
Place of delivery (%):						
Home	0.04%	0.0%	2.2%	0.0%	0.0%	0.1%
Hospital	99.96%	100%	98%	100%	100%	99.9%
Deliveries in health institutions (%)	100	100	97.8	99.4	100	99.0
Deliveries assisted by trained personnel (%)	99.99	100	99.8	100	100	99.9
20.14 - MATERNAL DEATHS	**Jordan**	**Lebanon**	**Syria**	**Gaza**	**West Bank**	**Agency**
Maternal deaths by cause (no.)						
haemorrhage	3	1	1	3		8
Pulmonary embolism	3		1	3		7
Septicemia	1			1		2
Acute Hepatic failure induced by pregnancy	2					2
Eclampsia	1					1
Nephrotic syndrome aggraveted by pregnancy	1					1
Valvular Heart Disease aggraveted by pregnancy				1		1
Brain tumor aggraveted by pregnancy					1	1
Mesenteric occlusion - bowel Gangrene					1	1
Total maternal deaths	11	1	2	8	2	24
Maternal mortality ratio per 100,000 live births	48.1	24.1	37.6	19.9	14.9	27.9
C-Section among reported deliveries (%)	25.1	47.1	55.0	18.9	26.4	25.4
20.15 - POSTNATAL CARE						
Post natal care coverage (%)	88.0	96.9	86.4	98.2	92.4	93.8
20.16 - CARE OF CHILDREN UNDER FIVE YEARS						
Served refugees (no.)	1,041,680	338,413	375,667	1,287,291	452,372	3,495,423
Estimated surviving infants (no.)[16]	28,514	6,667	10,222	46,437	13,455	105,294
Children < 1 year registered (no.)	24,329	4,699	6,103	40,476	10,023	85,630
Children < 1 year coverage of care (%)	**85.3**	**70.5**	**59.7**	**87.2**	**74.5**	**81.3**
Children 1- < 2 years registered (no.)	26,071	4,834	6,270	38,534	10,034	85,743
Children 2- < 5 years registered (no.)	25,421	4,802	6,443	118,961	19,376	175,003
Total children 0-5 years registered (no.)	75,821	14,335	18,816	197,971	39,433	346,376
20.17 - IMMUNIZATION COVERAGE						
Immunization coverage children 12 months old (%):						
BCG	99.1	99.7	98.9	100.0	100.0	99.7
IPV	99.8	NA	94.4	99.7	100.0	99.5
Poliomyelitis(OPV)	99.8	99.7	94.4	99.9	100.0	99.6
Triple (DPT)	99.8	99.7	98.9	99.8	100.0	99.8
Hepatitis B	99.6	99.7	94.4	99.9	100.0	99.5
Hib	99.6	99.7	94.4	99.8	NA	99.4
Measles	99.6	99.7	93.0	NA	NA	99.8
All vaccines	99.6	99.7	96	99.7	100.0	99.5

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

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Immunization coverage children 18 months old - boosters (%)						
Poliomyelitis(OPV)	98.6	99.4	94.7	99.8	100.0	99.2
Triple (DPT)	98.6	99.4	94.7	99.8	100.0	99.2
MMR	98.6	99.4	91.7	99.8	100.0	99.0
All vaccines	98.6	99.4	93.7	99.8	100.0	99.2
20.18- GROWTH MONITORING AND NUTRIONAL SURVEILLANCE						
Infants and Children with Growth Problems (0-5) years of age						
% of children aged <5 years underweight	2.63	2.62	4.02	4.1	0.95	3.19
% of children aged <5 years stunting	4.04	2.2	3.25	5.8	1.36	4.39
% of children aged <5 years wasting	1.48	1.26	1.60	3.2	0.36	2.14
% of children aged <5 years overweight/obesity	2.63	3.75	0.28	3.9	1.07	2.96
20.19 - SCHOOL HEALTH						
4th grade students screened for vision (No.):						
Boys	5,879	1,668	1,531	16,306	2,147	27,531
Girls	6,128	1,748	1,590	14,340	3,170	26,976
Total	12,007	3,416	3,121	30,646	5,317	54,507
4th grade students with vision impairment (%)						
Boys	15.8%	11.9%	4.8%	6.2%	14.4%	9.2%
Girls	17.6%	10.8%	5.6%	8.9%	15.6%	11.6%
Total	16.7%	11.3%	5.2%	7.5%	15.1%	13.3%
7th grade students screened for vision (No.):						
Boys	5,782	1,194	1,511	13,527	2,291	24,305
Girls	5,673	1,596	1,571	12,466	3,081	24,387
Total	11,455	2,790	3,082	25,993	5,372	48,692
7th grade students with vision impairment (%)						
Boys	16.7%	13.1%	5.9%	7.9%	13.3%	10.7%
Girls	19.5%	14.4%	5.9%	15.4%	17.9%	16.0%
Total	18.1%	13.9%	5.9%	11.5%	16.0%	16.0%
20.20 – NON COMMUNICABLE DISEASES (NCD) PATIENTS REGISTERED WITH UNRWA						
Diabetes mellitus type I (no/%)	1151 (1.5%)	309* (1.1%)	433 (1.3%)	1,230 (1.6%)	653 (1.6%)	3,776 (1.5%)
Diabetes mellitus type II (no/%)	11,289 (15%)	3,428* (11.7%)	3,387 (10.5%)	12,600 (16%)	3,977 (14.5%)	36,678 (14.3%)
Hypertension (no/%)	30,533 (40.5%)	14,935* (51.1%)	17,226 (53.5%)	36,788 (46.7%)	15,589 (37.8%)	115,071 (44.8%)
Diabetes mellitus & hypertension (no/%)	32,403 (43%)	10,573* (36.2%)	11,159 (34.6%)	28,099 (35.7%)	19,006 (46.1%)	101,240 (39.4%)
Total	75,376	29,242*	32,205	78,717	41,225	256,765
20.21 - PREVALENCE OF HYPERTENSION AND DIABETES						
Served population ≥ 40 years with diabetes mellitus (%)	11.5	8.6*	11.1	12.9	15.9	12.1
Served population ≥ 40 years with hypertension (%)	16.4	15.5*	21.6	20.1	21.9	18.6
20.22 – MANAGEMENT						
Hypertensive patients on lifestyle management only (%)	1.8	6.5*	0.9	4.7	1.5	3.2
Diabetes patients on insulin (%)	28.2%	24.4%*	21.8%	28.6%	29.6%	27.5%

* (PRS included)

20.23 - RISK SCORING	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Risk status - patients with diabetes mellitus type 1 (%):						
Low	71.4%	58.9%	71.1%	72.4%	64.6%	68.9%
Medium	26.1%	31.6%	22.9%	25.9%	28.1%	27.0%
High	2.5%	9.6%	6.0%	1.7%	7.3%	4.1%
Risk status - patients with diabetes mellitus type 2 (%):						
Low	31.6%	26.0%	26.6%	32.2%	38.7%	33.2%
Medium	52.7%	56.4%	53.3%	53.6%	47.3%	52.1%
High	15.7%	17.7%	20.1%	14.2%	14.0%	14.6%
Risk status - patients with hypertension (%):						
Low	22.6%	26.0%	29.3%	11.7%	30.6%	19.8%
Medium	54.5%	51.9%	52.8%	47.4%	53.4%	50.8%
High	22.9%	22.1%	17.9%	41.0%	16.0%	29.3%
Risk status - patients with diabetes & hypertension (%):						
Low	8.2%	17.4%	10.2%	27.5%	10.8%	18.7%
Medium	48.1%	50.9%	55.0%	55.9%	50.9%	52.8%
High	43.7%	31.7%	34.8%	16.6%	38.3%	28.6%
Risk factors among NCD patients (%):						
Smoking	17.5	40.6*	30.3	9.8	13.9	13.9
Physical inactivity	55.1	17.4*	23.1	45.6	30.9	44.9
Obesity	27.0	43.1*	46.9	37.1	42.1	35.4
Raised cholesterol	37.1	46.7*	51.3	42.6	47.7	42.0
20.24 - LATE COMPLICATIONS AMONG NCD PATIENTS (%)						
Diabetes mellitus type I	2.9	1.7	0.9	1.3	3.6	2.0
Diabetes mellitus type II	4.6	7.0	12.5	7.0	12.0	7.1
Hypertension	6.9	6.5	10.4	8.2	11.0	8.2
Diabetes mellitus & hypertension	10.6	9.9	17.7	19.3	13.6	15.7
All NCD patients	8.1	7.4	12.7	11.9	12.2	10.8
20.25 – DEFAULTERS						
NCD patients defaulting during 2016 (no.)	5,599	1,698*	2,264	3,663	2,191	15,415
NCD patients defaulting during 2016/total registered end 2015 (%)	7.6	5.9	8.1	4.9	5.5	6.3
20.26 - FATALITY						
Reported deaths among registered NCD patients (no/%)	1.3	1.6	1.4	1.5	1.8	1.5
Reported deaths among registered NCD patients by morbidity (no):						
Diabetes mellitus	89	25	30	119	87	350
Hypertension	291	184	177	378	197	1,227
Diabetes mellitus & hypertension	594	262	182	652	419	2,109
20.27 - COMMUNICABLE DISEASES						
Registered refugees (no.)	2,286,643	513,795	618,128	1,435,616	997,173	5,851,355
Refugee population served (no.)	1,041,680	338,413	375,667	1,287,291	452,372	3,495,423
Reported cases (no.):						
Acute flaccid paralysis[17]	0	0	2	0	1	3
Poliomyelitis	0	0	0	0	0	0
Cholera	0	0	0	0	0	0

17. Among children <15 years

* (PRS included)

20.27 - COMMUNICABLE DISEASES	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Diphtheria	0	0	0	0	0	0
Meningococcal meningitis	0	0	0	0	0	0
Meningitis – bacterial	0	5	7	4	2	18
Meningitis – viral	0	2	4	1	4	11
Tetanus neonatorum	0	0	0	0	0	0
Brucellosis	4	3	204	1	13	225
Watery diarrhoea (>5years)	6,548	11,391	5,411	8,816	5,885	38,051
Watery diarrhoea (0-5years)	6,623	9,486	6,306	20,190	7,862	50,467
Bloody diarrhoea	141	27	97	1,666	533	2,464
Viral Hepatitis	24	29	498	305	7	863
HIV/AIDS	0	0	0	0	0	0
Leishmania	0	0	17	0	1	18
Malaria*	0	0	0	0	0	0
Measles	0	0	3	0	0	3
Gonorrhoea	0	3	1	0	0	4
Mumps	3	307	15	251	364	940
Pertussis	0	0	0	0	1	1
Rubella	1	0	0	0	0	1
Tuberculosis, smear positive	0	4	6	0	0	10
Tuberculosis, smear negative	0	2	4	1	1	8
Tuberculosis, extra pulmonary	0	1	9	0	0	10
Typhoid fever	0	7	252	48	0	307

CROSSCUTTING SERVICES

20.28 - LABORATORY SERVICES						
Laboratory tests (no.)	937,988	365,910	378,350	1,773,097	912,673	4,368,018
Productivity (workload units / hour)	42.3	41.7	31.0	52.2	61.9	46.9
20.29 - RADIOLOGY SERVICES						
Plain x-rays inside UNRWA (no.)	1,189	22,003	-	44,915	22,500	90,607
Plain x-rays outside UNRWA (no.)	895	4,580	-	-	-	5,475
Other x-rays outside UNRWA (no.)	2	5,235	-	-	-	5,237

20.30- HUMAN RESOURCES	HQ	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Health staff as at end of December 2016 (no.)							
Medical care services :							
Doctors	2	103	53	75	170	96	499
Specialist	0	6	10	9	6	9	40
Pharmacists	1	2	34	1	3	3	44
Dental Surgeons	0	30	17	19	29	16	111
Nurses	0	266	118	115	321	297	1,117
Paramedical	6	131	31	91	189	223	671
Admin./Support Staff	5	102	56	69	103	91	426
Labour category	0	102	33	72	138	95	440
Sub-total	14	742	352	451	959	830	3,348
International Staff	6	0	0	0	0	0	6
Grand total	20	742	352	451	959	830	3,354

20.30- HUMAN RESOURCES	HQ	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Health personnel per 100,000 registered refugees:							
Doctors	-	4.5	10.3	12.1	11.8	9.6	8.5
Dental surgeons	-	1.3	3.3	3.1	2.0	1.6	1.9
Nurses	-	11.6	23.0	18.6	22.4	29.8	19.1

Part 4 - Selected Survey Indicators

Infant and child mortality survey, 2013

Table 21- Infant and child mortality survey, 2013

Indicators	Jordan	Lebanon	Gaza Strip	West Bank	Agency
Early neonatal (<= 7 days)	10.8	8.3	10.3	5.9	9.2
Late neonatal (8 - <=28 days)	2.5	2.8	10.0	1.8	4.6
Neonatal (<= 28 days)	13.3	11.1	20.3	7.8	13.7
Post neonatal (>28 days - 1 year)	6.7	3.9	2.1	4.1	4.3
Infant mortality (< one year)	20.0	15.0	22.4	11.9	18.0
Child mortality (> one year)	1.6	2.2	4.8	0.5	2.4
Infant and child mortality	21.6	17.2	27.2	12.3	20.4

DMFS Survey, 2015

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

Age group	Obs.	DS[18] Mean, Std Dev	FS[19] Mean, Std, Dev	DMFS Mean, Std Dev
Gaza	437	3.32, 4.04	0.35, 1.05	3.87, 4.66
Lebanon	390	3.35,4.09	0.42, 1.25	4.21, 4.77
Jordan	383	2.46, 3.17	0.55, 1.33	3.01, 3.57
Gaza	437	3.32, 4.04	0.35, 1.05	3.87, 4.66
Total	1550	3.29, 3.99	0.48, 1.34	3.99, 4,59

Current practices of contraceptive use among mothers of children 0-3 years survey, 2015

Table 23 - Selected reproductive health survey indicators

Indicators	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
Mean birth interval (months)	40.4	42.4	42.9	33.7	39.4	39.2
Percentage of women married by the age < 18 years	24.6	16.6	19.0	23.7	23.6	22.0
Percentage of women with birth intervals < 24 months	27.7	30.4	26.2	38.5	30.4	31.3
Prevalence of modern contraceptives among women of reproductive age utilizing UNRWA MCH services	64.0	67.2	59.6	52.8	55.6	59.3
Mean marital age (women)	20.3	21.4	20.9	19.9	19.9	20.4

18. Decayed Surface
19. Filling Surface

Table 24 - 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	2015
Jordan	4.6	3.6	3.3	3.5	3.2
Lebanon	3.8	2.5	2.3	3.2	2.7
Syria	3.5	2.6	2.4	2.5	2.7
Gaza Strip	5.3	4.4	4.6	4.3	3.6
West Bank	4.6	4.1	3.1	3.9	3.6
Agency	**4.7**	**3.5**	**3.2**	**3.5**	**3.2**

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

Table 25 - Selected anaemia survey indicators

Indicators	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

Part 5 - Health Department Research Activities and Published Papers

Table 26- List of publications

S.No	Title of publication	Journal published	Article type
1	Differences in tobacco smoking prevalence and frequency between adolescent Palestine refugee and non-refugee populations in Jordan, Lebanon, Syria, and the West Bank: cross-sectional analysis of the Global Youth Tobacco Survey.	Confl Health. 2016 Oct 5;10:20.	Full Article
2	Primary healthcare reform in the United Nations Relief and Works Agency for Palestine Refugees in the Near East.	East Mediterr Health J. 2016 Sep 25;22(6):417-421.	Full Article
3	Substance use among Palestinian youth in the West Bank, Palestine: a qualitative investigation.	BMC Public Health. 2016 Aug 17;16(1):800.	Full Article
4	Substance use among Palestinian youth in the West Bank, Palestine: a qualitative investigation.	East Mediterr Health J. 2016 Apr 19;22(1):47-51.	Full Article
5	Paediatric continuing medical education needs and preferences of UNRWA physicians in Jordan.	East Mediterr Health J. 2016 Apr 19;22(1):47-51.	Full Article
6	Double Burden of Undernutrition and Obesity in Palestinian Schoolchildren: A Cross-Sectional Study.	Food Nutr Bull. 2016 Jun;37(2):144-52.	Full Article
7	No health without peace: why SDG 16 is essential for health.	Lancet. 2016 Nov 12;388(10058):2352-2353.	Correspondence

Part 6 – Director of health and senior staff of department of health participated in the Meetings/ Conferences, 2016

Table 27- Director of health and senior staff of department of health participated in the Meeting/ Conferences, 2016

S.No	Post title	Meeting/ Conferences titles	Meeting/ Conferences titles	Period
1	Associate Public Health Specialist / Epidemiologist	10th International Conference on Maternal and Child Health Handbook	United Nations University and JICA Ichigaya, Tokyo-Japan	November 23-25, 2016
2	Health Nutrition Officer	Introduction to Clinical Research Training (ICRT) program from Harvard medical school	Dubai-UAE	May, 2016
3	E-Health Project Coordinator	Lancet Palestinian Health Alliance (LPHA) the 7th	Regency Hotel, Jordan-Amman	7-8 Mar 2016
4	E-Health Project Coordinator	MENA ICT Forum 2016	King Hussein Business Park, Jordan-Amman	9-10 Nov 2016
5	E-Health Project Coordinator	Annual International Data Corporation (IDC)'s IT Forum	Sheraton, Amman	24th of Nov 2016
6	Health Information Officer	Lancet Palestinian Health Alliance (LPHA) the 7th	Regency Hotel, Jordan-Amman	7-8 Mar 2016
7	Chief Disease Prevention and Control	12th European congress on Diabetes	Berlin, Germany	14-18 September 2016
8	Chief Disease Prevention and Control	7th UN NCD Task force meeting,	WHO,HQ,Geneva , Switzerland	25-27 October 2016
9	Chief Health Protection & Promotion	4th Global Conference on Women Deliver - 2016 Denemark	Presentation on "Empowerment of Palestine Refugees through MCH Handbook"	16 - 19 May 2016
10	Director of Health	Conference on Cooperation Among East Asian Countries for Palestinian Development in Japan	Tokyo, Japan	31 Jan. - 6 Feb. 2016
11	Director of Health	69th World health Assembly	Geneva, Switzerland	21 - 28 May 2016
12	Director of Health	31st Meeting of the Regional Director with EMRO/WHO Representatives & Regional Office Staff	Cairo, Egypt	7 - 9 June 2016
13	Director of Health	Regional Committee for the Eastern Mediterranean: sixty-third session	Cairo, Egypt	3 - 6 Oct. 2017
14	Health policy & Planning Officer	Mental Health in PHC workshop in Jordan organized by JUST university and US faculties,	Presentation of UNRWA MHPSS strategy and building collaboration with JUST university and University of California -San diego	6-7 April 2016
15	Health policy & Planning Officer	Syrian refugee crisis and addressing NCD -Chatham house London	Round table discussion at Chatham house (The Royal Institute of International Affairs. PP presentation	3-Jun-16

S.No	Post title	Meeting/ Conferences titles	Meeting/ Conferences titles	Period
16	Health policy & Planning Officer	Bridging programme for building capacity of general practitioners in Family Medicine in EMRO	organized by the WHO-EMRO	21-25 August
17	Health policy & Planning Officer	Symposiun on NCD care in humanitarian settings with MSF and LSHTM,	PP presentation, strengthen partnership with MSF, LSHTM and other partcipant, meet with CHIPAAR group	3-Sep-16

Part 7 – Donor support to UNRWA health programme during 2016

Table 28- Donor support to UNRWA health programme

Funding Portal	Donor	US$ Amount	Title
Programme Budget	Andalucía Government, Spain	1,133,787	Maternal and Child Health Care in Syria, Gaza and West Bank.
	Japan	4,117,000	Support to UNRWA Education and Healthcare for Palestine Refugees in Lebanon (Emergency Education\Staffing Salary)
	Japan	8,000,000	Enhancement of Human Security of the Palestine Refugees in Gaza (Education and Basic Health Care Services)
	Japan	4,000,000	Support to UNRWA's Operations in Syria 2016 (Staffing costs and Medical supplies)
	Japan	7,656,000	Enhancement of Human Security of the Palestine Refugees in the West Bank (Health, Mental Health & Education)
	Luxembourg	840,807	Healthy Life and Lifestyle for Youth in West Bank and Gaza
	Austria	1,647,940	A Long and Healthy Life: UNRWA Life Cycle Approach to Health.Health Programme for Palestine Refugees in Gaza and the West Bank
	Extremadura Government, Spain	55,741	Maternal and Child Health Care in Gaza _MCH
	Extremadura Government, Spain	53,079	Maternal and Child Health Care in Gaza _MCH
	Kuwait Patients Helping Fund	199,548	Provision of antidiabetic and antihypertensive drugs to Palestine refugees registered at UNRWA clinics in Lebanon

Funding Portal	Donor	US$ Amount	Title
Syria Appeal	Asturias Government, Spain	79,257	Health Equipment in Syria
	Germany (GIZ)	281,996	Health Equipment in Syria
	Italy	978,261	Support to UNRWA Education and Healthcare for Palestine Refugees Affected by the Syria Conflict in Jordan and Lebanon.
	UNRWA USA National Committee	5,000	Diabetes Prevention in Syria
	World Federation of KSIMC	59,950	Provision of humanitarian WASH assistance for conflict affected Palestine refugees in Syria.
	Queen Margaret University, Edinburgh, UK	58,393	Identifying Ways to Promote Health System resilience in Contexts of Protracted Displacement through Systems Analysis of UNRWA Provision to Palestine Refugees displaced by the Syria Crisis
Projects	Germany (KFW)	3,184,713	Support to UNRWA Education and Healthcare for Palestine Refugees Affected by the Syria Conflict in Lebanon.
	Italy	546,448	Support to Health Care of Palestine Refugees Most in Need Of Assistance
	Italy	652,174	Support to UNRWA Education and Healthcare for Palestine Refugees Affected by the Syria Conflict in Jordan and Lebanon.
	Japan	1,793,000	Support to UNRWA Education and Healthcare for Palestine Refugees in Lebanon (Health Services)
	Japan	2,344,000	Enhancement of Human Security of the Palestine Refugees in the West Bank (Construction of Aqbat Jaber Sewerage Network)
	Madrid Local Council, Spain	318,471	Urgent Health Services for Palestinian Refugees in Lebanon suffering grave chronic diseases
	Saudi Arabia (SFD)	7,500,000	Reconstruction, Furnishing and Equipping of Three Health Centers in West Bank.
	Saudi Arabia (SFD)	8,000,000	Maintenance, Repair and Expansion of the Education and Health Facilities in UNRWA-Jordan
	Saudi Arabia (SFD)	15,000,000	Reconstruction, Furnishing and Equipping of Two Schools, Three Health Centers and Furnishing and equipping of about 25 schools in the West Bank.

Funding Portal	Donor	US$ Amount	Title
Projects	Saudi Arabia (SFD)	7,000,000	Constructing, Furnishing and Equipping of Health Centers and School in The Hashemite Kingdom of Jordan
	World Diabetes Foundation	100,000	UNRWA-WDF conference on refugees and diabetes , MENA Region
	IDB	2,500,000	Providing Fuel to Operate the Water Wells, Sewage Treatment Plants and Hospitals in Gaza Strip
	UNICEF	65,000	Improved Family Health Practices focusing on Maternal and Neonatal Health
	WHO	1,070,000	Supporting Emergency Needs to sustain Health Care Delivery in Gaza Strip
	Probitas Foundation	162,859	Medical Hardship Fund (Hospitalization in Lebanon)
	Turkish Red Crescent	49,939	Medical Hardship Fund
	CESVI	336,957	Improving and hygiene conditions of the community of Shuf'at refugee camp in East Jerusalem
	Bassam Mashhour Haditheh Al Jazi	116,014	Procurement of Equipments to Qalqilia Hospital.
Emergency Appeal (oPt)	Andalucía Government, Spain	67,703	Psychosocial Support for Children in Gaza
	Avilés City Council, Spain	16,957	Mobile Clinics in West Bank
	Navarra Government, Spain	88,143	Mobile Clinics in West Bank
	Valladolid Regional Government, Spain	15,098	Mobile Clinics in West Bank
	UNRWA USA National Committee	122,262	Community Mental Health in Gaza
	UNRWA USA National Committee	119,306	Community Mental Health Programme counselor salaries in Gaza
	Human Appeal International (HAI)	230,375	Provision of fuel for operating Hospitals and Municipalities in the Gaza Strip

Annex 1 - Strategic Outcome 2: Common Monitoring Matrix (2016-2021) Refugees' health is protected and the disease burden is reduced

Table 29 - Common Monitoring Matrix 2016-2021 log frame

	Output 2.1 people-centered primary health care system using FHT model	Activities
2.0.a Prevalence of diabetes among population served 18 years and above (Health) **2.0.b** Percentage of DM patients under control per defined criteria (Health) **2.0.c** Maternal mortality ratio (per 100,000 live births) (Health) **2.0.d** Degree of alignment with UNRWA protection standards of health services (Health/Protection)	*outpatient* 2.1.a Average daily medical consultation per doctor (Health) 2.1.b Average consultation time per doctor (Health) 2.1.c Number of HCs fully implementing eHealth system (Health) 2.1.d Percentage of users satisfied with newly constructed health centers and new extensions that exceed 50% of the original Health Centers built up area (ICID) 2.1.e Percentage of HCs meeting UNRWA facilities protection design standards (ICID) 2.1.f Number of health centers integrating the MHPSS technical instructions into the Family Health Team approach (Health) 2.1.g Percentage of individuals identified with MHPSS needs provided with assistance (Health) *non-communicable diseases* 2.1.h Percentage of NCD patients coming to HC regularly (Health) 2.1.i Percentage of NCD patients with late complications (Health) *communicable diseases* 2.1.j Number of EPI vaccine preventable disease outbreaks (Health)	*outpatient* 2.1.1.a Percentage of Post Occupancy Evaluation conducted for newly constructed health centers and new extensions that exceed 50% of build-up area (ICID) 2.1.1.b Number of staff trained on comprehensive MHPSS response (Health) 2.1.1.c Number of individuals experiencing MHPSS needs identified by UNRWA in health centers (Health) *oral health* 2.1.1.d Percentage of preventative dental consultations out of total dental consultations (Health) *non-communicable diseases* 2.1.1.e Percentage of targeted population 40 years and above screened for diabetes mellitus (Health) 2.1.1.f Number of new NCD patients (DM, HT, DH+HT) (Health) 2.1.1.g Total number of NCD patients (DM, HT, DH+HT) (Health) *communicable diseases* 2.1.1.h Percentage of children 18 months old that received all booster vaccines (Health) 2.1.1.i Number of new TB cases detected (Health)

	Output 2.1 people-centered primary health care system using FHT model	Activities
	Maternal health and child services 2.1.k Percentage of women with live birth who received at least 4 ANC visits (Health) 2.1.l Percentage of post-natal women attending PNC within 6 weeks of delivery (Health) *school health services* 2.1.m Percentage Diphtheria + tetanus coverage among targeted students (Health) *pharmaceutical services* 2.1.n Antibiotic prescription rate (Health) 2.1.o Percentage of HCs with no stock out of 12 tracer medicines (Health) 2.1.p Percentage of individuals identified as experiencing a protection risk (general protection) provided with health assistance (Health/Protection) 2.1.q Percentage of individuals identified as experiencing a protection risk (GBV) provided with health assistance (Health/Protection)	*Maternal health and child services* 2.1.1.j Percentage of 18 months old children that received 2 doses of Vitamin A (Health) 2.1.1.k Number of active/continuing family planning users (Health) 2.1.1.l Number of new enrolments in pre-conception care programme (Health) *school health services* 2.1.1.m Percentage of 4th grade. school children identified with vision impairment (Health) 2.1.1.n Unit cost per capita (Health) 2.1.1.o Number of individuals experiencing a protection risk (general protection) identified by UNRWA in health centers (Health/Protection) 2.1.1.p Number of individuals experiencing a protection risk (GBV) identified by UNRWA in health centers (Health/Protection) 2.1.1.q Number of individuals experiencing a protection risk (child protection) identified by UNRWA in health centers (Health/Protection)

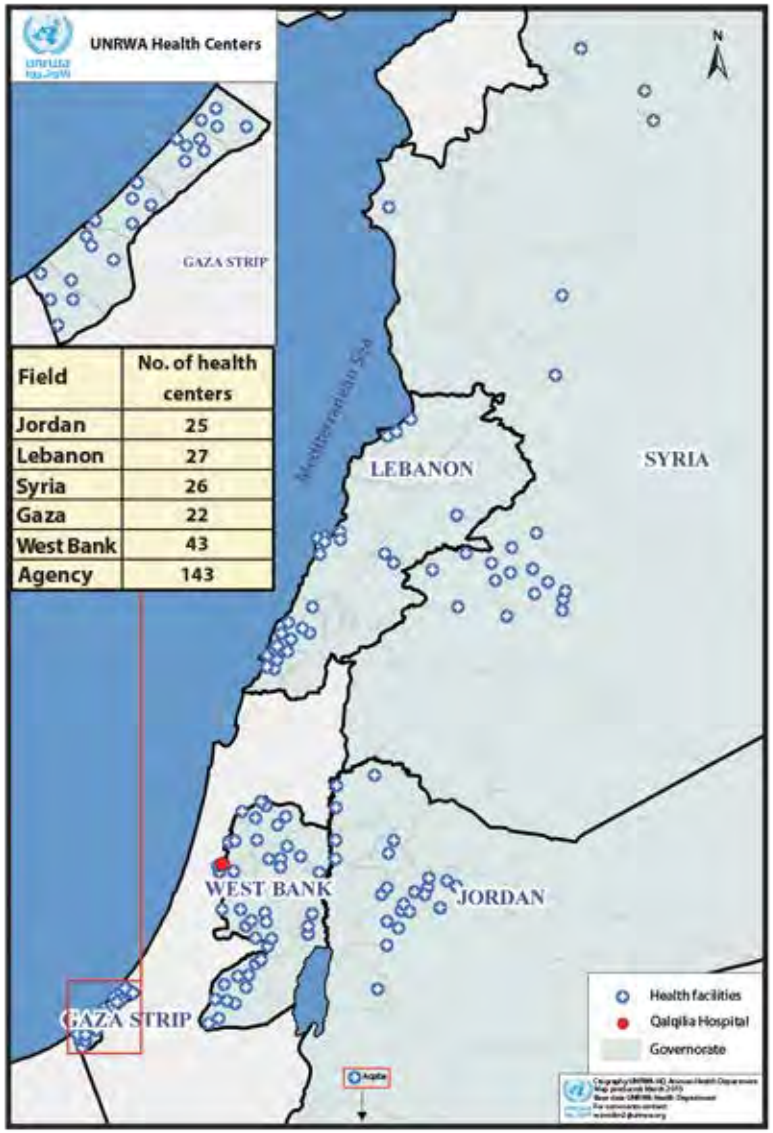
	Output 2.1 people-centered primary health care system using FHT model	Activities
	2.1.r Percentage of individuals identified as experiencing a protection risk (child protection) provided with health assistance (Health/Protection) 2.1.s Percentage of protection mainstreaming recommendations from internal protection audits implemented (Health/Protection)	
	Output 2.2 **efficient hospital support services**	**Activities**
	2.2.a Percentage of UNRWA hospitalization accessed by SSNP (Health) 2.2.b Hospitalization rate per 1,000 served (Health)	2.2.1.a Hospitalization unit cost (Health)

Table 30 - Agency-wide Common Indicators

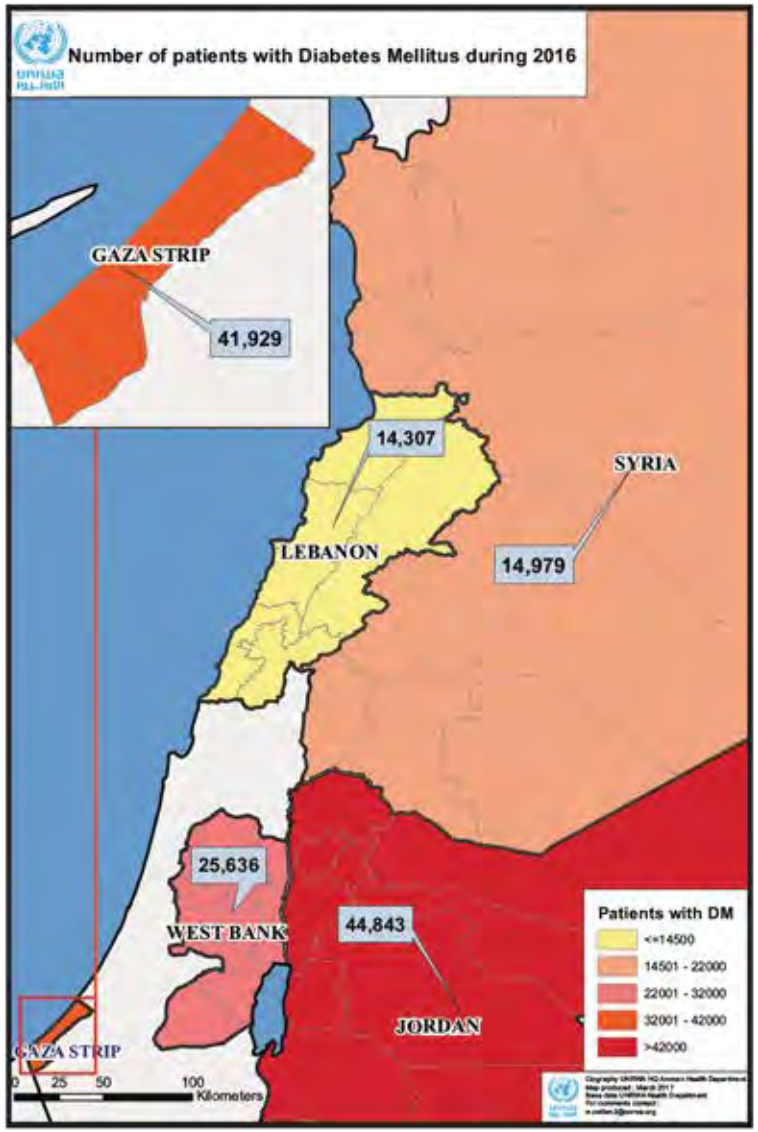
Indicator	Calculation
Average daily medical consultations per doctor	Total workload (All patients seen by all medical officers) No. of medical officers X working days
Antimicrobial prescription rate	No. of patients receiving antibiotics prescription x 100 All patients attending curative services (general outpatient clinic + sick babies + sick women + sick NCD)
% Preventive dental consultations of total dental consultations	No. of preventive dental consultations x 100 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 No. of 4th grade school children screened by UNRWA school health program
% Health centres implementing at least one Ehealth module	No. of HCs implementing at least one Ehealth module x 100 Total No. of HCs
% Health centres with no stock-outs of 15 tracer items	No. of HCs with no stock-outs of 15 tracer items x 100 Total no. of HCs
% Pregnant women attending at least 4 ANC visits	No. of pregnant women attending at least 4 ANC visits x 100 No. of women with live births
% 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 No. of registered children 1 - < 2 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 No. of women with live births
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 Total no. of HCs
Diphtheria and tetanus (dT) coverage among targeted students	No. of school children that received dT x 100 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 (Total no. of served population 40 years and above) – (total no. of all NCD 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 x 100 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)

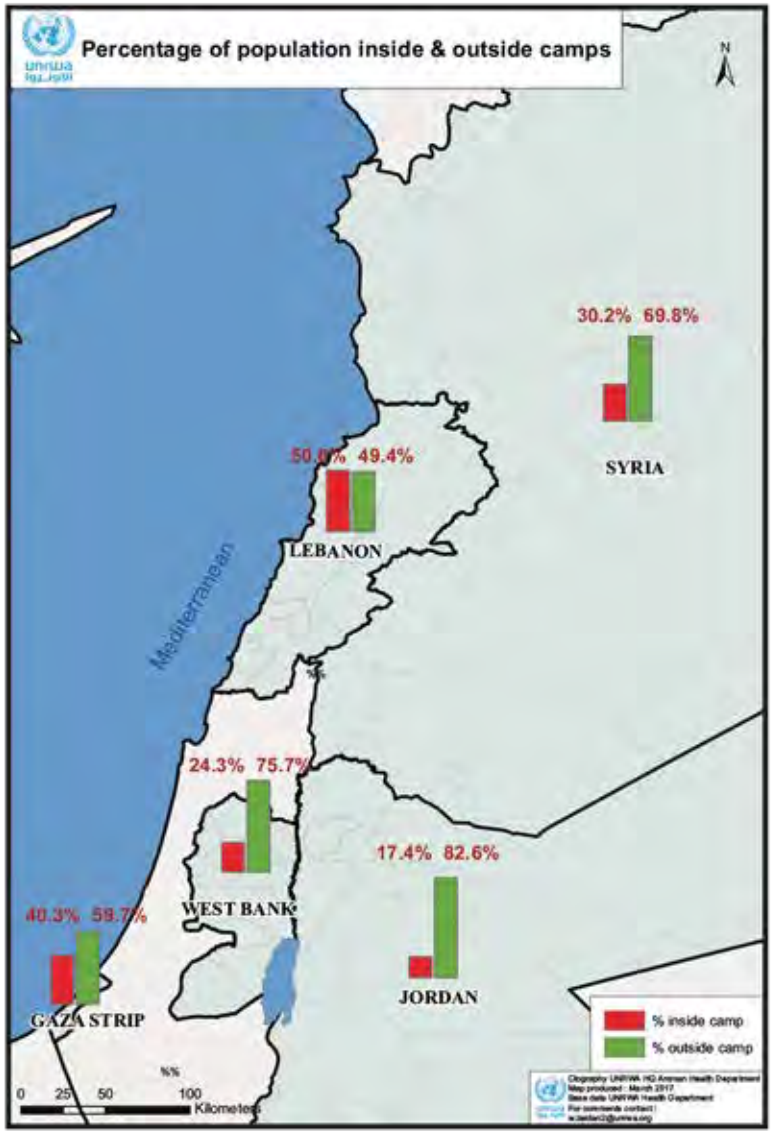
Indicator	Calculation
No. of EPI vaccine preventable diseases outbreaks	No. of EPI vaccine preventable diseases outbreaks
%18 month old children that have received all EPI vaccinations according to host country requirements	No. of children 18 months old that received all doses for all required vaccines x 100 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 - Health Maps, 2016



Annex 2 - Health Maps, 2016





Annex 3 - Contacts of Senior Staff of the UNRWA Health Programme

Technical staff in the Health Department, HQ,A

Post Title	Incumbent	Telephone	E-mail address
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Annex 4 - Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CARE	Catastrophic Ailment Relief Programme
CMHP	Community Mental Health Programme
CMM	Common Monitoring Matric
CMR	Clinical Management of Rape
COI	Cooperazione Odontoiatrica Internazionale
CYP	Couple-Years of Protection
DMFT	Decayed/Missing/Filled Teeth
DMFS	Decayed/Missing and Filled Surfaces
DT/Td	Tetanus-Diphtheria
EML	Essential Medicine List
EMRs	Electronic Medical Records
EPI	Expanded Programme on Immunisation
EQAS	External Quality Assurance System
ESRF	End-Stage Renal Failure
EPI	Expanded Programme on Immunisation
FHT	Family Health Team
Fos	Field Offices
FP	Family Planning
GBV	Gender-Based Violence
GFO	Gaza Field Office
GHQ	General Health Questionnaire
GMS	Gender Mainstreaming Strategy
HD	Health Department
Hib	Haemophilus influenza type B
HIV	Human Immunodeficiency Virus
HQ	Head-Quarter
IMR	Infant Mortality Rate
IMSD	Information Management Systems Division
IU	International Units
JHAS	Jordan Health Aid Society
LBW	Low Birth Weight
LTA	Long Term Agreement
MCH	Maternal and Child Health
MCI	Micro Clinic International
mhGAP	mental health Global Action Programme
MHPSS	Mental Health and Psychosocial Support
MoH	Ministry of Health
MoU	Memorandum of Understanding
MTS	Medium Term Strategy
NCDs	Non-Communicable Diseases
NGOs	Non-Governmental Organizations
OHSS	Occupational Health Salary Scales
OPV	Oral Polio Vaccine
PCC	Pre-Conception Care
PHC	Primary Health Care
PLD	Procurement and logistic division
PRL	Palestine Refugees from Lebanon
PRS)	Palestine Refugees from Syria
SMS	Short Message Service
SRA	Stringent Drug Regulatory Authorities
SSNP	Social Safety Net Programme
SSNs	Senior Staff Nurses
Td	Tetanus/Diphtheria
ToTs	Training of Trainers
TWCs	Two-Way Communication
UN	United Nations
UNFPA	United Nations Fund for Population Activities
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNRWA'	United Nations Relief & Works Agency for Palestine
WDF	World Diabetes Foundation
WHO	World Health Organizaion
WLUs	Workload Units

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