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acronyms and abbreviations

ANC	Antenatal Care
ANERA	American Near East Refugee Aid
BDS	Behavioural Development Scales
CMM	Common Monitoring Matrix
COI	Cooperazione Odontoiatrica Internazionale
CSSD	Central Support Services Division
DM	Diabetes Mellitus
DMFT	Decayed/Missing/Filled Teeth
DPA	Department of Palestinian Affairs
DS	Decayed Surface
DT/Td	Tetanus-Diphtheria
ECD	Early Childhood Development
ECHO	European Commission Humanitarian Aid
e-MCH	electronic - Mother and Child Handbook
EPI	Expanded Programme on Immunisation
ESRF	End-Stage Renal Failure
FHT	Family Health Team
FMDP	Family Medicine Diploma Programme
FOs	Field Offices
FP	Family Planning
FS	Filling Surface
GAPs	Gender-Action Plans
GBV	Gender-Based Violence
GES	Gender Equality Strategy
GMR	Great March of Return
HCs	Health Centres
HD	Health Department
Hib	Haemophilus Influenza Type B
HP	Health Programme
HQ	Headquarters
HSP	Hospitalization Support Program
HWG	Health Working Group
IMR	Infant Mortality Rate
IUD	Intrauterine Device
LBW	Low Birth Weight
LTA	Long Term Agreement
MCH	Maternal and Child Health
MCH App	Maternal and Child Health Application
mhGAP	mental health Global Action Programme
MHIS	Management Health Information System
MHPSS	Mental Health and Psychosocial Support
MMR	Maternal Mortality Rate
MoH	Ministry of Health
MTS	Medium Term Strategy
NCDs	Non-Communicable Diseases
NGOs	Non-Governmental Organizations
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OPV	Oral Polio Vaccine
PCC	Pre-Conception Care
PGDM	Postgraduate Diploma in Family Medicine
PHC	Primary Health Care
PN	Post-Natal Care
RSS	Relief & Social Services
SFD	Saudi Fund for Development
ToT	Training of Trainers
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children›s Fund
UNRWA	United Nations Relief & Works Agency for PalestineRefugees in the Near East
UNSYG	United Nations Secretary General
WDD	World Diabetes Day
WDF	World Diabetes Foundation
WHO	World Health Organization
WISN	Workload Indicators for Staffing Need
WLUs	Workload Units
WNTD	World No Tobacco Day

message from unrwa commissioner-general and of who regional director

The year 2018 was unprecedentedly challenging for the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) and its provision of services to 5.4 million registered Palestine refugees. The Agency faced its most severe financial crisis in the 70 years since its establishment in 1949, and mandate by the United Nations General Assembly (UNGA) Resolution 302 (IV), putting at risk its ability to provide essential services to Palestine refugees.

Throughout the year, Palestine refugees continued to face restrictions from the ongoing occupation of Palestinian territory, blockade of Gaza and loss of life resulting from the "Great March of Return," and the protracted conflict and final phase of destruction of Yarmouk in Syria.

Despite this, generous contributions from host and donor governments, and in particular its close partnership with the World Health Organization (WHO) as well as with other UN agencies, helped UNRWA ensure that its 144 health centres (HCs) continued to provide primary health care and facilitation of hospital services across the five fields of operation in Gaza, Jordan, Lebanon, Syria and West Bank. This result can largely be attributed to the remarkable commitment of health workers and the ongoing Health Reform Program.

The "Great March of Return," mass demonstrations that began in March 2018 along the Gaza-Israeli border, is the worst and most prolonged medical emergency in Gaza in decades. As of October 2018, 228 people have been killed and 24,362 injured, far exceeding the conflict that erupted in 2014. Family health doctors and nurses working across 22 UNRWA HCs in Gaza frequently treat injuries resulting from the conflict, an increased burden on already strained resources. In response, UNRWA HCs have continued to improve critical follow-up treatment to victims treated during the demonstrations, including long-term injury care, rehabilitation, physiotherapy and psychosocial support.

WHO is a longstanding partner of UNRWA. In 2018, it continued its collaboration and implementation of Mental Health and Psychosocial Support (MHPSS) services within UNRWA HCs. MHPSS was first rolled out in 2017, in HCs in Gaza under the guidance of WHO Mental Health Gap Action Programme. The services have now been implemented in most UNRWA HCs Agency-wide, complementing joint achievements including the delivery of maternal and child health services, family medicine and noncommunicable diseases (NCDs) prevention. With a focus on strengthening health systems in the Region, building resilience and enhancing capacity for universal health coverage, WHO continues to provide policy guidance and technical assistance to local governments and health authorities, ensuring that all populations in need, including Palestine refugees, are reached with essential quality health care services.

As UNRWA marks its seventieth year, the Agency's operations remain crucial in supporting Palestine refugees across the five fields. Pending a just and lasting solution in accordance with UN resolutions and international law, UNRWA remains committed, together with WHO, other UN agencies and authorities, to help Palestine refugees achieve their full human development potential and well-being, and ensure that everyone is treated with the dignity they deserve.

Pierre Krähenbühl
UNRWA Commissioner-General

Dr. Dr Ahmed Al-Mandhari
Regional Director, WHO/EMRO

foreword of the director of health

I am very pleased to present the Annual Report of UNRWA health services for 2018. This was a very difficult year for all UNRWA services, including health services, due to the existential financial crisis. However, we managed to continue our health services throughout the year thanks to the joint efforts at all levels of the Agency. None of our health centres (HCs) was closed, and none of our core primary health care services was interrupted in 2018. This was a tremendous achievement and shows the depth of our commitment to the health of the Palestine refugees we serve. I want to express my deepest appreciation and admiration for the extraordinarily hard work of the entire UNRWA health services staff in the five fields of operations, namely Jordan, Lebanon, Syria, Gaza and West Bank.

This report, including the health statistics detailed in Section 4, clearly indicate that the core health services that we offer for Palestine refugees continued as planned. 91,274 pregnant mothers and 88,591 newborn babies received care at our HCs in 2018. 271,096 people with diabetes and/or hypertension received treatment and care, including 24,826 patients newly diagnosed in 2018. Moreover, a total of 96,521 people received hospitalization care. All these 2018 data indicators remained static or improved compared to previous years. This signifies the resilience of UNRWA health services, and the evidence was published in a number of international peer-reviewed journals in 2018.

We actually went beyond preserving our ongoing services. Our innovations never ceased during the year; the health reform based on the Family Health Team (FHT) model and on our e-Health system continued and expanded in 2018. By the end of 2018, all our 144 HCs had implemented the FHT, and 129 HCs had introduced e-Health, which now boasts approximately 3.5 million records of registered Palestine refugees. This is a significant milestone for our evidence-based health services management.

Mental health services based on the global mhGAP strategy of the WHO were expanded. In 2018, mhGAP was integrated into 67 new HCs for a total of 88 HCs by the year's end. The smartphone application for maternal and child health (e-MCH App) was successfully implemented in Jordan: 20,127 mothers downloaded this app by the end of 2018. Encouraged by this progress, we are expanding the e-MCH app in 2019 to all other fields and developing a new smartphone App for NCD (or e-NCD App). Family medicine training continued in 2018 as a third cohort of 20 medical officers received postgraduate diplomas in family medicine.

We, of course, faced a series of challenges. The financial crisis threatened our core primary health care services. The medical emergency in Gaza resulting from the so-called "Great March of Return" demonstrations put increased pressure on the already overburdened health system; more than 4,000 injured people, most with gunshot wounds, visited our HCs. Ongoing conflicts in Syria affected the safe access to our health services in some areas. Procuring essential medicines was a challenge. In 2018, we could only purchase 12-month quantities of medicines rather than 15-month quantities or 12-month quantities with 3-month buffer stocks, as in previous years. The situation was dire, but we never succumbed to the pressure.

The year 2019 marks the seventieth year for UNRWA since its establishment. The Agency remains committed to continuing our health services and responding to the changing health needs of Palestine refugees. It will be, with no doubt, a challenging year for UNRWA, but given the achievements and commitments of 2018, I am confident we will continue our progress in 2019 to protect the right to health and the dignity of Palestine refugees.

Dr. Akihiro Seita
Director of the UNRWA Health Programme
WHO Special Representative

executive summary and report overview

During 2018, and despite the unprecedented challenges, UNRWA Health Programme (HP) continued to deliver comprehensive preventive and curative primary health care (PHC) services to Palestine refugees through its network of 144 HCs in Jordan, Lebanon, Syria, West Bank and Gaza. Additionally, the Agency also supported the patients' access to secondary and tertiary health care services. The total number of Palestine refugees has reached some 5.5 million, out of whom; about 65.0 per cent are served at our HCs.

The Department of Health Annual Report 2018 highlights the health services provided to Palestine refugees during during the period of 1 January and 31 December, 2018, as well as health indicators set out to achieve the Strategic Outcomes of the Agency's Medium Term Strategy (MTS) 2016-2021; namely, the second Strategic Outcome on Refugees' Health is Protected and the Disease Burden is Reduced.

The Annual Report also showcases achievements in the programmatic and resource mobilization targets set out in the MTS common monitoring matrix (CMM).

Section 1 – Introduction and health profile

This section gives an overview of UNRWA, the Department of Health, and the current health situation of the Palestine refugees served by the Agency. The health profile contains demographic information, disease trends, impact of the protracted and acute conflicts and the occupation, in addition to UNRWA's responses to these situations including the implementation of the mental health and psychosocial support (MHPSS), and the Family Health Team (FHT).

Section 2 – UNRWA response: Health reform

In response to the changing health needs of the Palestine refugee populations in the five fields of its operations, UNRWA has been reforming its health services by introducing new and optimal approaches. This section outlines the progress of the FHT approach and e-Health (Electronic Medical Records) system, Family Medicine Training (Postgraduate Diploma in Family Medicine), integration of MHPSS into the Primary Health Care (PHC) and the FHT Model, hospitalization, and health purchase strategies. Moreover, most peculiar innovations and initiatives from the fields are reported.

Section 3 – Strategic Outcome 2: Refugees' health is protected and the disease burden is reduced

This section highlights outcomes based on the MTS 2016-2021 set by UNRWA. The activities and achievements under all sub-programmes by the Department of Health are presented. These include outpatient care, 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 4 – Data

Major health indicators are presented in four parts followed by annexes. These include Agency-wide trends for selected indicators, CMM indicators 2016-2021, data tables from 2018, selected survey indicators, list of research activities and published papers, list of conferences attended by staff, and donor support to UNRWA health programmes.

section 1 – introduction and health profile

UNRWA

The primary mission of UNRWA is to assist Palestine refugees in Jordan, Lebanon, Syria, Gaza and West Bank 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 the Gaza, which coordinate the activities of the the five field offices (FOs).

The UNRWA health system has three tiers:

- The Department of Health (DH) at UNRWA HQ in Amman: handles policy and strategy development
- Five Departments of Health in Field offices: concerned with operational management
- 144 Health Centres: provide primary health care services directly to Palestine refugees

The DH employs over 3,156 staff throughout the three tiers, including around 447 medical doctors. Out of the some 5.5 million registered refugees, about 3.0 million Palestine refugees; the served population or beneficiaries, are registered at UNRWA HCs and receive health services free of charge. UNRWA does not operate its own hospitals (except for one, Qalqilia Hospital, in West Bank), but instead the Agency operates a reimbursement scheme for its beneficiaries.

Figure 1- Distribution of UNRWA registered populations in the five fields of operations

Health Profile

UNRWA has contributed to sizeable health gains for Palestine refugees since the beginning of its operations in 1950. UNRWA continues to provide quality health services to fulfil the health needs of Palestine refugees, and it strongly relies on partnerships with host countries and other stakeholders. Health needs of Palestine refugees have changed over the past decades and among the fields, in which the Agency has continued to evolve and improve its services. Today, it is estimated that 55.3 per cent of served Palestine refugees remain highly dependent on UNRWA services, suggesting more than half of the population still face great economic hardships, particularly those living in areas of conflict, high unemployment rates and worsening poverty levels. Agency wide, approximately 31.2 per cent of registered Palestine refugees live in and around 58 official UNRWA camps, with the majority of the population living side-by-side among host countries' communities.

The same as for most of the populations around the world, increasing life expectancy among Palestine refugees has resulted in an aging population, although high fertility rates have seen a marked increase in the youth population, with 30.8 per cent of registered Palestine refugees currently below the age of 18 years old. Maternal and child health care is a key focus of the Agency. Women of reproductive age have universal access to: contraceptive (fami-

ly planning) care, antenatal care, safer delivery care with referrals to and subsidies for hospital delivery, post-natal care and infant and child care (0-5 years old). In 2018, UNRWA provided family planning care for 170,173 women, 91,274 pregnancies and 424,814 infants and children (0-5 years old). Although still relatively high, over the past few decades a slight reduction in the overall fertility rate has been recorded and stabilized over time.

Though significantly decreased, MMR and IMR among Palestine refugees remain relatively high. Among Palestine refugees in Gaza, MMR has decreased from 19.5 per 100,000 live births in 2008 to 5.0 per 100,000 live births in 2018 (additional research is needed to better understand this decline in MMR in Gaza). IMR surveys conducted in Gaza revealed a decline from 127.0 per 1000 live births in 1960 to 20.2 (95 per cent, CI 15.3-25.1) per 1000 live births in 2008. In 2013, IMR was evaluated again in Gaza and revealed a rise to 22.4 (95 per cent, CI 16.4-28.3) per 1000 live births, and slightly increased to 22.7 (95% CI 17.5-27.9) per

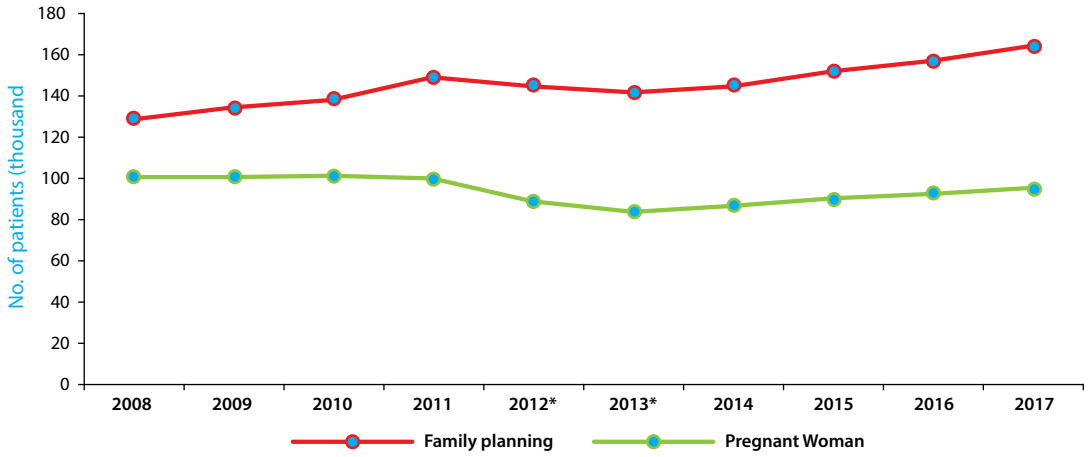

Figure 2- Total number of family planning and newly registered pregnant women (*data not available from Syria)

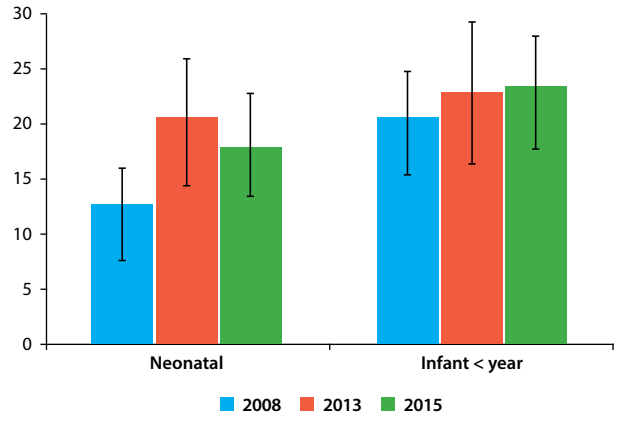

Figure 3- Infant and neonatal mortality among Palestine refugee in Gaza Field

1000 live births in 2015 as a result of a re-evaluation study conducted by WHO there.

The stagnation of IMR indicates that further efforts are needed to investigate causes for this stagnation and ways of addressing the potentially preventable causes among Palestine refugee children in Gaza. In addition, the socioeconomic situation has deteriorated dramatically in the past decade following the imposition of a blockade by the Israeli government in 2007. It affected the health sector in Gaza as hospitals continued to lack adequate physical infrastructure, drugs, supplies and infection prevention materials[1].

Cardiovascular diseases, chronic respiratory diseases, diabetes mellitus, hypertension and cancer are today's leading non-communicable diseases (NCDs) among Palestine refugees, representing the highest financial burdens on UNRWA health services.In 2018, 41,749 were treated for diabetes mellitus type I&II, 119,353 were treated for hypertension and 109,994 were treated for both diabetes and hypertension. The major risk factors for NCDs among the Palestine refugee population include: sedentary lifestyles, obesity, unhealthy diets and smoking.

To target NCDs, UNRWA applies a multidimensional strategy which focuses on three dimensions: disease surveillance consisting of collecting, analysing and interpreting health-related data on NCDs and their determinants, health promotion and prevention interventions to combat NCD major risk factors or determinants among Palestine refugees across their life cycle and the provision of cost-effective interventions for the management of established NCDs.

Multi-decade provision of health services to Palestine refugees has largely enabled the control of commu-

1. Maartje, M. et. al. (2018). Stalled decline in infant mortality among Palestine refugees in Gaza Strip since 2006. PLOS ONE, June 13, 2018.

nicable diseases, particularly through high vaccination coverage, and early detection and control of outbreaks. Communicable diseases related to personal hygiene and poor environmental sanitation are also almost entirely eradicated. Nevertheless, food insecurity and the burden of micronutrient deficiencies continue to remain prominent risk factors for diseases among Palestine refugees.

Ongoing protracted and acute conflicts, occupation, and the lack of a just and durable solution for the status of Palestine refugees, continue to affect the population's physical, social and mental health. Assessment, diagnosis and treatment of mental health and psychosocial-related disorders show that their prevalence is increasing throughout the fields of operations. As a result, UNRWA started the implementation of a MHPSS programme in all the five fields, aiming to identify and address mental illnesses, particularly in areas such as Gaza. MHPSS services are heavily integrated into UNRWA primary health care services and work towards ensuring that all Palestine refugees enjoy the highest attainable level of health.

The Syrian crisis has entered its ninth year, and has seen over 254,000 Palestine refugees residing in Syria internally displaced, and more than 120,000[2] Palestine refugees from Syria (PRS) fleeing to neighbouring countries, including Jordan and Lebanon. Being doubly displaced, PRS are therefore often identified as highly vulnerable and are more reliant on UNRWA services. Despite the ongoing conflict, UNRWA has restored and strengthened its operations in Syria, including rehabilitation of damaged health centres and reinstatement of the provision of health services in previously largely inaccessible areas. The protracted blockade and recurrent emergencies in Gaza and the occupation of West Bank, remain major obstacles to the ongoing provision of services and access to health care for Palestine refugees residing in these fields. Most recently, the Great March of Return (GMR), which started since March 2018, has resulted in more than 255 fatalities and 26,405 injuries, leading to an increased burden on already strained UNRWA health resources. In response, UNRWA has adapted its health services offered to Palestine refugees in these regions by, for example, the provision of rehabilitation services to those affected by past and current hostilities.

To continue to adapt to the changing needs of Palestine refugees and to improve the quality of healthcare, the Family Health Team (FHT) model has been rolled out in health centres Agency-wide. FHT focuses on improving the quality of medical consultations and care for NCDs, providing staff with training on family health approaches, providing MHPSS services, engaging the community 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, e-Health, and strengthen the FHT primary healthcare model, the new norm at all health centres in the four fields, and expanding it to new health centres in the fifth field, namely Syria.

2. https://www.unrwa.org/syria-crisis

section 2: unrwa response

UNRWA Response: Health Reform

Family Health Team (FHT) Approach and the E-Health (Electronic Health Records) System

In 2018, UNRWA continued to deliver comprehensive PHC services on the basis of the FHT approach, a person-centred model focusing on the provision of comprehensive care for the entire family. Implemented since 2011, FHT emphasizes long-term provider-patient/family relationships and is designed to improve the quality, efficiency and effectiveness of health services. By the end of 2017, all 144 HCs Agency-wide implement the FHT approach.

The e-Health system, introduced in 2009, has streamlined service provision and contributed to improved efficiency and enabled the collection of high-quality data. In 2018, e-Health was operational in all HCs in

Gaza (22 HCs), Jordan (26 HCs), Lebanon (27 HCs) and West Bank (43 HCs), and some HCs in Syria (11 HCs out of 26). E-Health implementation in Syria is challenged due to the ongoing conflict and the resultant connectivity issues in some areas. Further expansion of e-Health in Syria is expected in 2019 as per security, infrastructure and connectivity allow.

Table 1- Number of health centres fully implementing the e-Health system

Field	Baseline 2017	Target 2018	Actual 2018	Target 2021
Jordan	20	25	26	26
Lebanon	27	27	27	27
Syria	3	11	11	26
Gaza	22	22	22	22
West Bank	42	43	43	43
Agency	114	128	129	144

The e-Health system flaws and bugs detected throughout the reporting period were identified and amended, including improved data quality for some modules and offering training to health teams in the fields as needed. Trainings were provided to e-Health focal points at all fields. The main aim was to end up with specialised e-Health "super-users" in each field as part of a capacity building initiative to strengthen and streamline the operations at the service delivery level that are supported by e-health. Additional data quality improvements and trainings of super users are planned to take place during 2019 and onward, depending on the availability of resources. Currently, operational across 90 per cent of all UNRWA HCs, the full implementation of e-Health will continue to improve the quality of patient care in terms of swift access to medical records, an improved appointment system, better flow of patients, strengthened supervision of health services, and enhanced monitoring and reporting capabilities. Ultimately, by 2021, the system will reduce staff workloads and result in better patient care.

The Mother and Child Health mobile application 'e-MCH App' has been rolled out and launched in all fields, allowing Palestine refugee mothers to view their electronic health records and those of their children on their smart-phones. E-MCH App notifies mothers about their appointments and provides additional health advices according to their status. In addition, a new NCD mobile application 'e-NCD App' is under development for patients suffering from NCDs, enabling them to access their electronic health records too, as well as providing them with a self-assessment and monitoring tool for their own health. E-NCD App will also notify patients about their appointments and will provide health information and education according to their control status.

Family medicine training (Family Medicine Diploma Programme - FMDP)

UNRWA recognises the importance of providing on-going training to all staff working in UNRWA HCs, not only for professional development of staff, but also for maintaining and improving health care provision to Palestine refugees. Despite this, restrictions of movement within and between fields, and the general high burden of work in UNRWA HCs often prevents this from occurring. Therefore, the Rila Institute of Health Sciences in the United Kingdom in collaboration with UNRWA tailored a 12-month training course on Family Medicine for UNRWA medical physicians. This programme is called the Family Medicine Diploma Programme (FMDP). The programme provides clinicians with an in-service model of training they can undertake without disruption to their daily work. The model is designed to build on their existing knowledge, skills and experience, and to improve their mastery of patient clinical management and raised standards of clinical care. The training was based on the working circumstances of medical officers and needs of the Palestine refugee population. Candidates were selected based on a written test prepared by Rila institute. At the end of the programme, participants who fulfil the requirements are offered a Postgraduate Diploma in Family Medicine (PGDM).

In 2015, funded by the Al-Waleed Ben Talal Foundation, 15 UNRWA medical doctors from Gaza completed the FMDP as a pilot phase for its implementation. Funded by Japanese government in 2017, a second cohort of medical doctors completed FMDP training, totalling 40 medical officers; 15 in Jordan, 15 in Gaza and 10 doctors in West Bank. In June 2018, third cohort of20 medical doctors started their FMDP training via funds offered by the Japanese government too; including 8 doctors in Jordan and 12 doctors in Gaza. A fourth cohort is planned to start their training in July 2019, with Japanese funding that is expected to cover the costs of training a total of 50 doctors from the five fields.

The FMDP training courses blend several components of learning and includes face to face workshops, e-learning resources available online, regular tests to assess skills and competency of the learning material and interactive webinars to develop the skills of in depth knowledge, analysis, communication and inter-professional discourse. Hospital training is conducted in UNRWA contracted hospitals in each field, directly supervised by the assigned tutors. Local tutors with specialisation in family medicine facilitated the implementation of this programme.

Participants who already graduated with the PGDM provided positive feedback on the course. Key highlights include the positive impact of the training on the quality and the comprehensiveness of the health care services they provide. They became able to share knowledge and skills with other colleagues, and became more capable in making better focus on prevention of diseases in general, and on the recognition of psychosocial-physical related health problems. Post-graduates also reported that the diploma provided them with new skills, such as improved communication with patients, better management skills of their work, and provision of overall more efficient and effective primary health care services.

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

UNRWA aims to protect and promote the mental health of Palestine refugees through its MHPSS program that became implemented in most HCs Agency-wide during 2018. Recent studies have confirmed a high prevalence of mental health problems and psychological distress among Palestine refugees. Well-structured integrated services to address these problems were previously lacking in UNRWA HCs.

MHPSS programmes seek to address and enhance psychological well-being of individuals and their communities, empowering community and individual resilience. Implemented in coordination with the FHT approach, MHPSS programme implementation consisted of providing training for all URNWA health staff as the basis for next steps. MHPSS and WHO's mental health Global Action Programme (mhGAP) training is provided comprehensively to medical officers, senior staff nurses and midwives, and is also provided to all other health staff categories based on their roles at their HCs. MHPSS is being integrated based on a three-year plan into all UNRWA HCs that is supported with generous donation by the Japanese government. In 2018, MHPSS was integrated into 67 HCs, adding to 21 HCs integrated in 2017, which makes a total of 88 HCs Agency wide. A total of 1,825 health staff received MHPSS training, consisting of comprehensive two week training on MHPSS and mhGAP for medical officers, senior staff nurses or midwives, and one week MHPSS training for practical nurses and at least one day orientation training for other support and paramedical staff.

Moreover, in 2018, UNRWA piloted a management health information system (MHIS), a digital information management and assessment tool to facilitate the reporting of MHPSS indicators. The MHIS tool is designed to provide great support for quality assessment and research and is planned to be implemented in January 2019.

As the MHPSS/mhGAP in UNRWA HCs covers treatment within PHC, UNRWA medical officers are able to refer patients with more severe mental health issues to Psychosocial Counsellors available in some HCs/fields and/or to external specialists (psychiatrists) contracted by the Agency.

To continue to improve MHPSS services, the Health Department held the MHPSS follow-up meeting in February, 2019. The meeting comprised of all MHPSS focal persons per field who represented their achievements, challenges and innovations in the MHPSS integration. This meeting offered the opportunity to the fields to share experiences and learn from each other.

Table 2- No. of Health centres implementing and integrating MHPSS into FHT by the end of 2018

Field	Number
Jordan	10
Lebanon	12
Syria	10
Gaza	22
West Bank	34
Total	88

The outcomes of the meeting are hoped to improve in the delivery MHPSS services and to tailor the approach where necessary.

Hospitalization Policies

UNRWA Hospitalization Support Programme (HSP) is an important part of the health package provided to Palestine refugees in Jordan, Lebanon, Syria, Gaza and West Bank. HSP complements UNRWA's primary health care services as part of the efforts to provide universal health coverage by offering financial support for hospital care to those who would otherwise be unable to access these services or would face catastrophic health expenditures affecting badly their socioeconomic conditions and standards of living.

During 2018, UNRWA has continued to implement the revised hospitalization support reform designed with the objectives to ensure the optimal use of the

available resources, and to produce the highest positive impact on Palestine refugees health by focusing on the most vulnerable, including those who are socially and economically marginalized.

The Agency-¬wide hospitalization policy that streamlines the support and focus on Palestine refugee's vulnerability and clinical needs was refined and its strategic approaches were agreed on. This policy is based on the principles of equity, prioritizing the support to the most vulnerable and those without other alternatives, effectiveness and efficiency, contracting service providers that ensure quality care and accessibility and accountability, strengthening the decentralize decision-making process, standardizing claim processing procedures and increasing transparency in reporting with solid data set.

In Lebanon and West Bank, where hospitalization expenditures are the highest, field staff with HQ support monitored closely the provision of hospitalisation services in order to contain over-expenditures via strict implementation of the Field Specific Hospitalization Technical Instructions. At the same time, field and front office staff have been in constant contact and engagement with the community and local stakeholders, to ensure that the hospitalization services meet the needs of the Palestine refugee population.

A properly designed computerized database is an essential tool to manage the hospitalisation service provision; without proper collection of data, it is impossible to monitor policy implementation and hospital expenditures. Harmonizing data collection should allow also the analysis process across all fields. Key strategic progresses were realized in the decentralization of data insertion in Lebanon, along with strategic analysis of the data collected in both Lebanon and West Bank field, achieved in collaboration with the UNRWA Finance Department.

The commitment of the Agency staff in the implementation of the decentralization process, and in the close monitoring of cost containment measures and their effects were key for the success of the process. Thanks to the cost efficiency reform and the close monitoring, hospitalisation expenditure in Lebanon decreased from US$ 15.2 ML IN 2017 to US$ 13.2 in 2018 (- 13 per cent) and in West Bank from US$ 4.8 ML in 2017 to US$ 4.1 ML in 2018 (- 14.5 per cent).

The main tool used to accomplish the whole reform of the HSP was building strong and constructive working relationship among departments in the fields and with HD at HQA. The identification of new donors and/or new strategies to cover budget shortfalls and special needs have been also an important component of the strategy to ensure that HSP will continue to offer health protection to Palestine refugees.

Strengthening Procurement Process for medical Commodities

During 2018, UNRWA continued to procure medical commodities as per the established UNRWA Essential Medical Lists and existing Long Term Agreements (LTAs) with different suppliers. UNRWA followed recommendations from an earlier consultancy conducted by Empower School of Health in 2016. No new LTAs were signed during 2018, and all requirements were fulfilled through a mix of international and local procurements in order to ensure a continuous supply of medical commodities in UNRWA HCs.

Towards the end of 2018, UNRWA HD at HQ, Amman, together with the Central Support Services Division (CSSD), launched a call to international tendering towards a five-year LTA with selected vendors. The objective of this exercise was to secure better prices, attract vendors with high quality products, and ensure long-term agreements and sustained provision of pharmaceutical services. The UNRWA Pharmaceutical Quality Assurance policy was pivotal during the prequalification exercise, and a technical evaluation team of qualified UNRWA pharmacists from the five fields participated in the process. More than 70 international and national suppliers submitted offers totalling in excess of 1,060 dossiers which were systematically evaluated against pre-approved criteria. This exercise proved to be a good learning experience for all participants. Several new potential vendors were identified during the process. The outcome of this process will be finalised during the first quarter of 2019 after a detailed commercial evaluation by CSSD.

Field Innovations

Jordan

E-MCH mobile application

Through partnership with JICA, the e-MCH mobile application (تطبيق صحة الأم والطفل الإلكتروني) has been successfully launched in Jordan and Agency-wide. The e-MCH application is a digitalized version of the Mother and Child Health (MCH) handbook distributed at all UNRWA HCs, since 2009, to all expecting and new Palestine refugee mothers. The fully customized interactive mobile application has an Arabic interface making it usable by all mothers within the target population. This application enables mothers to enter their electronic health records and those of their children that are stored in UNRWA's e-Health system. The application receives notifications sent to the mother's smart phone, including appointment alerts. It also includes health education content for mothers on new-born and child healthcare, and it improves the communication between MOs and patients (mothers/children).

Preventative screening and early detection of hearing defects

UNRWA health services are newly able to provide hearing screen for Palestine refugees. The "Oto-acoustic emission" is available at some health centres, targeting preventative screening and early detection of hearing defects for two target groups, newly registered infants and school students. In 2018, newly registered infants were screened for the first time as well as UNRWA school students during school entry for the 2018/2019 scholastic year.

Health Corner at Jordan Field Office (JFO)

UNRWA Jordan field office staff are able to measure and track their own health status through the Health Corner located in JFO. The Health Corner allows staff to measure their own blood pressure, pulse rate, weight, height, BMI and waist circumference. Information on interpreting the readings is available, as well as health educational materials and information on the benefits of healthy lifestyle choices, and on reducing the risks of NCDs such as diabetes and hypertension. The Health Corner opens during working hours, and staff are advised to consult doctors should they have any concerns regarding their test results.

Lebanon

Despite Agency-wide austerity measures in 2018, the Lebanon field has witnessed an active year and its Health Programme has continued to provide uninterrupted provision of health care to Palestine refugees. The year 2018 witnessed four main innovations: the development of paperless hospitalization referral system, the development and rollout of the hospitalization database, the development of the MHPSS register and the enhancement of partnerships with stakeholders to bridge the gap in health service provision for Palestine refugees.

Referral system and data-base for hospitalisation

As a result of the collaboration between Health and ICT departments during 2018, Lebanon field is in the final stages of the development of paperless hospitalization referral system to be rolled out in all health centres. The referral system is designed to increase the efficiency and to reduce the time that health centre staff need to make a referral. This became possible through linking the referral system to the hospitalization database allowing extraction of hospitalization referrals. This was supported more by the development of an application that captures the information about beneficiaries within the Medical Hardship Fund, resulting in greater data collection of recipients and reporting to donors.

The Hospitalization database was developed and rolled-out in North and Central Lebanon areas, and efforts were dedicated to implement it in the remaining three areas in the field. The roll-out process included the training of concerned health staff on patient data entry using the data-base programme. The database enables the monitoring of data, while strengthening the decentralisation of health services provided down to health area management teams. In-depth data analysis provides greater understanding on the coverage and impact of hospitalization services not captured through previous data collection methods. Data is collected via both electronic sheets and manual techniques. Basically, it includes admission information, but it will be expanded to capture other beneficiary characteristics, utilization rates and expenses. Over time, the data is expected to enable evidence based decisions for updating and strengthening PHC and hospitalization service provided to Palestine refugees in Lebanon.

Health Working Group (HWG) initiative

During 2018, through reviving the Health Working Group (HWG) initiative, an overview of current projects, beneficiaries and implementing stakeholders, and identification of funding gaps in the Lebanon field was conducted. Partners who directly support hospitalization services in Lebanon include the Medical Aid for Palestinians (MAP) and OCHA. In addition, the United Nations Children›s Fund (UNICEF) and the American Near East Refugee Aid (ANERA) provided support for PHC through a series of in-kind donations supplying various essential medications.

Syria

UNRWA HC in Sbeineh camp restoring its services

Prior to 2011, UNRWA's operations in Syria were comprehensive and stable. The escalating violence after that year until the end of 2018 forced services in many

areas to be interrupted. Sbeineh camp, just outside Damascus was home to approximately 25,000 Palestine refugees (around 8,000 families) previous to 2011. Towards the end of 2012, conflict escalated and violent armed clashes took place, resulting in substantial damage to lives, homes and infrastructure. Residents were forced to vacate the camp in 2013, when fighting intensified and remained closed to civilians for almost four years. Residents were officially granted permission to re-access the camp on 30 August 2017.

10,831 Palestine refugees have since returned to Sbeineh camp, many of whom are considered as vulnerable, and facing a low socio-economic status due to the depletion of all their resources during the conflict. The destruction of infrastructure in the camp remains largely unchanged, access to employment is scarce and the population remains heavily dependent on UNRWA services. In the 2018, as part of the work plan of UNRWA's Syria field office, the health programme considered the provision of health services in Sbeineh camp as a top priority, and focused on providing health care especially to persons with disabilities, pregnant and nursing women, children, and those who lost their houses.

Since the return to Sbeineh camp, a temporary health point within a rehabilitated school building was opened at first, providing basic primary healthcare services as well as referrals for secondary and even tertiary care pending the rehabilitation of the Sbeineh health clinic. Sbeineh health clinic was rehabilitated in mid-2018, and full primary health care services have been restored.

Gaza

UNRWA response to the Great March of Return (GMR) injuries

Recent and protracted conflicts in the Gaza continue to impact the lives of Palestine refugees. The ongoing occupation in the region often restricts the approximate 1.4 million Palestinian refugee population's freedom of movement and access to essential health services, further burdening the already collapsing health sector. As reported by the Ministry of Health (MoH), 59.4 per cent of medicines used in Public Health Centres (PHCs) are out of stock and 15.3 per cent of medicines have less than 3 months of supplies. Moreover, 8,000 elective surgeries scheduled at MoH hospitals have been postponed, with the massive influxes of trauma casualties overstretching the limited available health resources. Therefore, to respond to the critical needs of Palestine refugees affected by the recent hostilities and ongoing occupation, UNRWA increased its response and provision of health services in Gaza.

Since 30 March 2018, when the mass demonstrations known as the Great March of Return (GMR) started, 255 people have been killed and more than 26,405 people were injured. Among these causalities, 18.7 per cent of the killed and 20 per cent of the injured were children. A total of 6,239 individuals have been treated for live ammunition injuries, 5,429 (87 per cent) of whom were presented limb gunshot wounds[3] . By the end of 2018, UNRWA HCs provided a total of 5,086 postoperative consultations at its 22 primary healthcare clinics. 2,519 Palestine refugees were treated for injuries presented during the conflict (GRM); 86 per cent of cases were treated for gunshot injuries, mainly treated for surgical wound dressing and/or medical treatment (53 per cent of which were moderate injuries, 35 per cent mild injuries and 12 per cent severe injuries), 95 per cent of whom were males.

3. http://healthclusteropt.org/admin/file_manager/uploads/files/shares/Documents/5c4459e645276.pdf

In addition, UNRWA health centres also provided psycho-social consultations to the 2,519 injured persons, in addition to other 858 patients who accessed individual psychosocial support sessions. Moreover, 29 injured patients had opened MHPSS files and 10 support groups for injured patients were established. Despite the lack of staff, UNRWA health centres conducted 31 home visits for injured patients, which included the provision of medical and psychosocial support.

Eleven physiotherapy units at UNRWA HCs in Gaza have provided a total of 3,380 physiotherapy sessions, with 80 per cent of cases sustaining lower limb injuries. The physiotherapy units have been vital for the rehabilitation of injured Palestine refugees, not

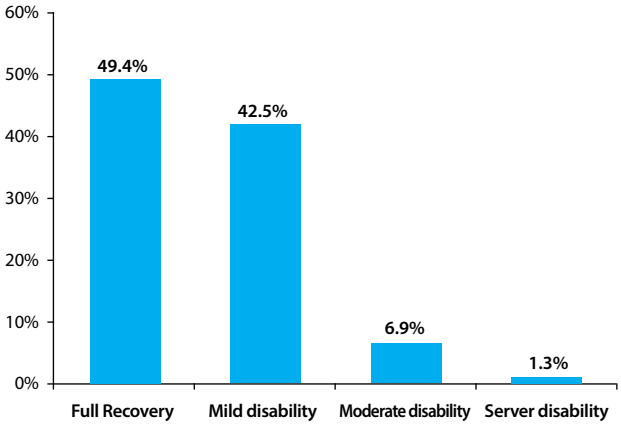

Figure 4- Percentage of GMR patients admitted to the physiotherapy unit by type of condition

only in the recovery from their injuries, yet helping them avoid further disabilities.

The UNRWA health programme has worked with great efforts to secure series of projects through the UNRWA HP Flash Appeal. The urgent funds raised during the appeal aided in providing access to necessary health services for Palestine refugees. Most recent the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) funding has ensured that UNRWA health centres are able to provide injured persons with needed assistive devices (i.e. wheel chairs, crutches and walkers), medical supplies and emergency drugs in health centres. Additionally, hospital sundries were procured and donated to MoH hospitals.

In addition, the European Commission Humanitarian Aid (ECHO) funding obtained through the HP Flash Appeal covered a variety of services assisting UNRWA hospitalisation services, aimed at managing and reducing the number of delayed surgeries in MoH hospitals and updating the provision of medical supplies in the contracted hospitals through partnership with WHO.

West Bank

The Early Childhood Development (ECD) Programme and Initiative

During 2018, and in partnership between UNRWA HP in West bank and national authorities including the Ministry of Health, Ministry of Social Development, Ministry of Education and Higher Education, supported by UNICEF, and in collaboration with the International Organization Education for All (EDUS) from Bosnia, the Early Childhood Development (ECD) Programme was implemented as an in West Bank field. This programme includes the development of a national ECD and intervention strategy for implementation.

The programme aims to develop policies and regulations to support introductions of innovative services for ECD and interventions; as well as supporting capacity building of service providers for families with children under the age of eight years old. It also aims to build a sustainable system for the provision of inter-sectoral services for families and children, with a special focus on the most vulnerable families and children with developmental delays and/or disabilities.

By the end of 2018, four health localities have piloted the ECD programme, namely Aqabet Jaber, Ein Sultan, Fawwar and Hebron HCs. The activities implemented included: the selection of health department focal points, specialized and comprehensive training of trainers (ToT) on ECD, training of HC staff on the special ten Behavioural Development Scales (BDS) used during child assessment exercises, theoretical and practical training for medical officers, senior staff nurses and psychosocial counsellors on best practices of child assessment and using BDS, provision of specialized tools and ECD kits to implement at these HCs, the development of a recording and reporting system at the HC level and the provision of basic interventions through parent education and child follow up for children in need for re-assessment. The progress of implementation and the outcomes ECD programme is under assessment, and the lessons learned will be used during the expansion phase in 2019.

section 3: strategic outcome 2:

refugee 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, mental health and psychosocial, physical rehabilitation & radiology services, disability care and pharmaceutical services.

Outpatient Care

Utilization

Currently, UNRWA provides comprehensive primary health care (PHC) through a network of 144 health centres, of which 69 (48.3 per cent) are located inside Palestine refugee camps. In addition, UNRWA operates six mobile health clinics in West Bank to facilitate access to health care in those areas affected by closures, checkpoints and the barrier. Utilization of outpatient services Agency-wide in 2018, increased by 2.0 per cent compared to 2017, totalling approximately 8.56 million medical consultations versus 8.37 million in 2017. Of these consultations, 115,305 were specialist consultations (including those offered by gynaecologists/ obstetricians and cardiologists). It is worth noting that the large increases in service utilization were predominantly recorded in Gaza and Syria.

Table 3- No. of medical consultations, Agency-wide in 2017 and 2018

	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
2017	1,570,044	1,037,962*	831,015	3,858,497	1,066,984	8,364,502
2018	1,587,015	1,019,967	856,024	4,051,604	1,041,481	8,556,091

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

The increase in outpatient consultations in Gaza and Syria may be attributed to multi reasons. The GMR and other hostilities in Gaza is increasing burden on both UNRWA and MoH services. MoH services in Gaza are overstrained, and in some areas collapsing. In addition, shortages of essential medicines are increasing and the numbers of government health employees are decreasing due to lack of funds. As a result, an increase of Palestine refugees utilising UNRWA outpatient services, instead of those of the government, has been recorded in this field. In Syria, despite the fact that some HCs remain closed due to the ongoing hostilities, the reopening of HCs in some areas and the limited recovery of government services resulted in a slight increase in outpatient service utilization at UNRWA HCs in Syria

Out-patient medical consultations in UNRWA health centres 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 slightly

increased from 3.0 in 2017 to 3.1 in 2018, with small variation, both among fields, and between health centres in the same field. The variation of this ratio within and between fields reflects that patients have 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 Gaza, Syria and Lebanon.

Table 4- No. total first and repeat visits, and ratio of repeat to first visits, Agency-wide in 2018

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Total first visits	439,785	221,002	188,915	901,850	302,112	2,053,664
Total repeat visits	1,116,725	761,265	653,050	3,122,147	733,935	6,387,122
Ratio repeat to first visits	2.5	3.4	3.5	3.5	2.4	3.1

Workload

Agency-wide, the average number of medical consultations per doctor per day increased from 78 in 2017 to 82 in 2018. Jordan provided the highest number of 86 medical consultations per doctor per day in 2018, compared to West bank, which had the lowest number of 76 medical consultations per doctor per day. Despite the increase in average medical consultations per year, the continued implementation of the FHT approach has helped reduce the overall workload on medical officers and PHC services, as compared to an Agency-wide average of 101 in 2010 before the introduction and implementation of the FHT model. This has been achieved mainly through the shifting of some preventive tasks from medical officers to nurses; such as nurses to approve monthly refills of medicines for controlled NCD patients. In addition, the introduction of the appointment system in HCs resulted in evenly distributed workload for all health staff at those HCs. Moreover, individualized care provided through the FHT approach has helped in the reduction of the overuse of medical consultations among patients.

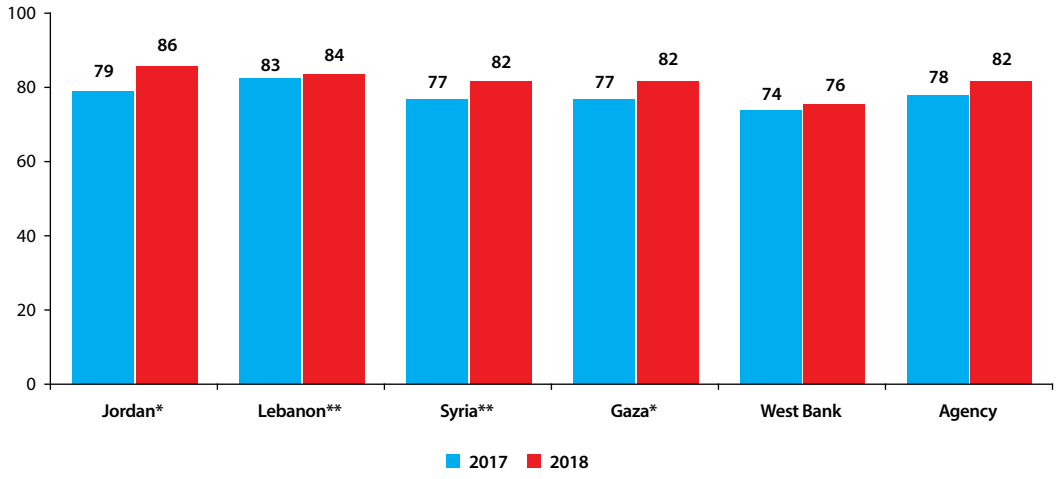

Figure 5- Average daily medical consultations per doctor, in 2017 and 2018 (*HCs open for six days/week, **HCs open for 5 days/week)

Non-Communicable Diseases (NCDs)

The burden of NCDs

The number of patients with NCDs registered at UNRWA HCs continued to increase during 2018. By the end of that year, a total of 271,096 Palestine refugee patients, including those from Syria (PRS), with diabetes mellitus and/or hypertension were registered at all HCs across the five fields of UNRWA operations. The Agency-wide prevalence rates of diabetes mellitus and hypertension were higher than in 2017; it was 14.9 per cent for diabetes (vs. 12.1 per cent in 2017) and 21.9 per cent for hypertension (vs. 18.5 per cent in 2017) among those above 40 years old. The prevalence of diabetes in patients 18 years and older was 7.3 per cent, higher than in 2017 (5.9 per cent). Age group disaggregation showed that patients 40 years of age and older represented 93.0 per cent of all patients under UNRWA NCD care in 2018. The percentage of males also remained the same at 39 per cent, which reflects the continued demand and attendance of males to UNRWA NCD clinics.

Table 5- Patients with diabetes mellitus and/or hypertension by field and by type of morbidity

Morbidity type	Jordan	Lebanon*	Syria	Gaza	West Bank	Agency
Type I diabetes mellitus	1,192	280	427	1,332	653	3,884
Type II diabetes mellitus	11,559	3,107	3,317	13,671	6,211	37,865
Hypertension	31,231	13,397	17,596	42,072	15,057	119,353
Diabetes mellitus hypertension	35,247	10,820	11,703	32,454	19,770	109,994
Total	79,229	27,604	33,043	89,529	41,691	271,096

** PRS included*

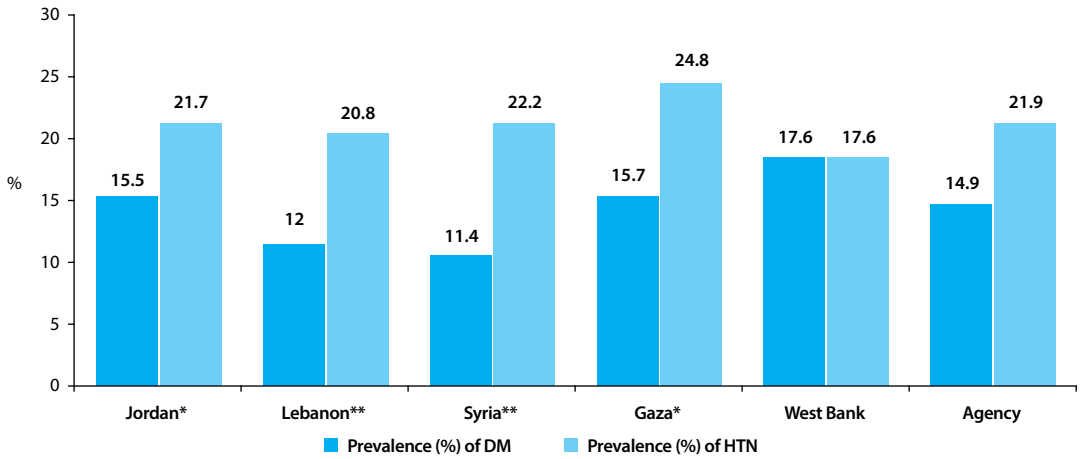

Figure 6- Prevalence (%) of patients diagnosed with type I and type II diabetes mellitus and hypertension among served population ≥40 years of age, 2018 (* PRS included)

Risk scoring

A risk assessment system that UNRWA HCs use is a tool to assess the risk status of NCD patients and to help staff on the management of the condition of every patient with NCDs. The system assesses the presence of modifiable risk factors such as smoking, hyperlipidemia, physical inactivity, blood pressure, blood sugar, in addition to non-modifiable risk factors such as age and family history concerning the disease. During 2018, all patients registered with the NCD programme at all UNRWA HCs were assessed using the risk scoring assessment system, and the data was recorded in their electronic health records in the e-Health system except for Syria field office. The risk scoring assessment revealed that on average, 30.2 per cent of all NCD patients were classified as high-risk which is higher than in 2017 (28.1 per cent). This includes 45.6 per cent of patients with hypertension, 21.0 per cent of patients with both type II diabetes mellitus and hypertension, and 18.4 per cent of patients with type II diabetes mellitus. The percentage of patients at moderate risk was 53.1 per cent and only 16.7 per cent were assessed with low risk.

Treatment

The analysis of the consumption of anti-hypertensive drugs shows tendency among medical officers to use the newly introduced drugs, namely losartan and amlodipine. Bisoprolol is currently included in the essential drug list and used to replace atenolol. Statin continued to be used in patients with both diabetes and hypertension who have blood cholesterol level of ≥ 200mg/dl.

The proportion of patients with type I or type II diabetes who were treated with insulin as part of the management of their condition also varied among fields, with an average of 30 per cent Agency-wide, which is at the same level as in 2017. As per field, this proportion ranged from 16.0 per cent in Lebanon to 27.0 per cent in Syria, followed by 29.0 per cent in Gaza, 33.0 per cent in Jordan and 34.0 per cent in West Bank. The low rate of insulin prescription in Lebanon compared to the other fields needs to be evaluated, and patients who are not controlled on maximum dose of oral hypoglycemic drugs must be enrolled in combination therapy or on full insulin treatment.

UNRWA managed to introduce HbA1c test across the five fields, and since 2017, it was considered as a reference for the control rate, although the test is performed only once per year for each diabetic patient. There are observed variation among the five fields concerning the control rates reported. This might be attributed to the differences in the methodologies and equipment used in each of them. The control rate Agency-wide was found to be 31.0 per cent, with the lowest observed in West Bank at 25.6 per cent and the highest in Lebanon at 56.8 per cent. The control rates reported for Jordan, Syria and Gaza were 29.0 per cent, 44.1 per cent and 30.0 per cent respectively.

Late complications

Late complications of NCDs include: cardiovascular diseases (myocardial infarction and/or congestive heart failure), cerebrovascular disease (stroke), end-stage renal failure (ESRF), above-ankle amputation and blindness. Random samples (10 per cent) of NCD files were used in HCs that do not implement e-Health yet, while HCs fully implementing the e-Health system used the data about all patients (a sample size of 100 per cent). The data was analysed for the presence of late complications. Agency-wide, late complications rate was reduced from 11.0 per cent in 2017 to 10.1 per cent in 2018, which requires careful interpretation as this may reflect both: improved management and low coverage of cases on the e-Health system.

As projected, patients with both diabetes mellitus and hypertension had the highest incidence of late complications (15.2 per cent), followed by patients with hypertension only (7.0 per cent), and patients with diabetes mellitus type 2 only (5.3 per cent). 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 advices and counselling by health staff, enforcement of the appointment system, use or not of proper case management, variations in treatment offered by different doctors, 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 the HC for NCD care 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. Despite these measures the Agency-wide rate of defaulter NCD patients increased from 6.3 per cent in 2017 to 7.5 per cent in 2018. The field-specific defaulter rate ranged from 5.3 per cent in Gaza to 9.5 per cent in Lebanon. Jordan's defaulter rate was 8.6 per cent, and was 7.2 per cent in West Bank. Defaulter rate in Syria increased to 9.2 per cent compared to 2017 (7.6 per cent), which is mostly related to accessibility issue and continued movement of refugees due to the prevailing conflict conditions.

Case fatality

Mortality rate among NCD patients registered at UNRWA's HCS decreased from 1.5 per cent in 2017 to 1.3 per cent in 2018. A total of 3,499 of UNRWA's NCD patients were reported to have died during 2018; however, deaths could be under-reported. Patients with co-morbidities (hypertension and diabetes mellitus) accounted for 60.0 per cent 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 refugees about diabetes mellitus and hypertension. UNRWA will focus in the future on the revision of its NCD technical guidelines and its essential list of NCD medications, mainly antihypertensive medicines, to meet the new guidelines recommended and adopted globally. UNRWA will work with WHO and other concerned organizations on revising these guidelines to meet the needs of both staff and refugees.

The use of an e-Health-based cohort monitoring system is helping in monitoring NCD care in UNRWA HCs. It enables comprehensive follow-up of NCD care, including incidence, prevalence, treatment compliance and control status of patients.

UNRWA will seek all possibilities to continue cooperation with NGOs and diabetes associations to fund projects and activities to help in scaling up the diabetes and hypertension care provided to Palestine refugees. In 2018, a new project supported by World Diabetes Foundation (WDF) started, aiming to introduce new interventions including NCD booklet, an e-NCD mobile application, in addition to capacity building of health staff on new guidelines on diabetes and hypertension.

Communicable Diseases

In 2018, no cases of polio or other emerging diseases were reported among Palestine refugees. Increased mumps cases were reported from West Bank (728) and Gaza (499), which are considered as endemic areas, while the other fields were within expected figures. Close supervision of cases and monitoring, preventive measures and raising awareness among staff and refugees were conducted.

UNRWA continued its cooperation with host authorities and with WHO, and participated in immunization campaigns 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, and supply of vaccines and exchange of information.

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

In each field, UNRWA's immunization services are linked to the host country›s Expanded Programme on Immunization (EPI). In all fields, immunization coverage, for both 12-month-old and 18-month-old children registered with UNRWA, continued to be above WHO target of 95.0 per cent. Factors contributing to UNRWA's success in immunization coverage include a consistent supply of vaccines, the enforcement of an appointment system for vaccination and continuous follow-up of defaulters by health centres' staff. UNRWA will also consider using e-Health in the coming years to assess the immunization coverage instead of rapid assessment method used for many years.

For 2018, there were no notified outbreaks of mumps or measles. the endemic trend of increased cases of mumps was reported for WB field, namely in Hebron area.

Other communicable diseases

Viral hepatitis

The Agency-wide incidence of suspected cases of viral hepatitis (mainly hepatitis A) increased due mainly to the reported cases from Gaza (586) and Syria (348) fields reaching the incidence of 32.48 per 100,000 populations Agency-wide. This could be still attributable to the poor quality of water and hygienic conditions, in addition to the very difficult environmental conditions caused by instability in both fields. In Lebanon field, the incidence was at 9.6 per 100,000 populations, 4.1 per 100,000 populations in Jordan and none in West Bank.

Typhoid fever

The Agency-wide incidence of suspected typhoid fever cases increased from 8.3 per 100,000 in 2017 to 9.5 per 100,000 populations in 2018. No cases were confirmed. The highest and main incidence was observed in Syria (65.6 per 100,000 populations) which is also attributable to poor quality of water and hygienic conditions, in addition to the very difficult environmental conditions caused by hard economic status and displacement of refugees. Both Jordan and West Bank fields reported no cases.

Tuberculosis

During 2018, a total of 27 cases of tuberculosis were reported Agency-wide, compared with 31 cases in 2017. Although reported cases from Syria field were higher in previous years, namely before the conflict started, in 2018, only 19 cases were reported which represent 70 per cent of all reported cases. Lebanon reported 3 cases, 4 cases reported from Gaza, one case from West Bank and no cases were reported in Jordan. Of the 27 reported cases, 11 cases were smear-positive, 2 were smear-negative and 14 were extra pulmonary. Patients diagnosed with tuberculosis are managed in close coordination with the national tuberculosis programmes in the fields. The figures above are mostly underreported; close follow-up with Ministries of Health is required.

Brucellosis

During 2018, out of 195 total cases Agency-wide, the majority (184) were reported from Syria.

Maternal Health Services

UNRWA maternal health services include family planning, preconception care, antenatal care, delivery care and postnatal care.

Family planning

UNRWA health centres provide universal access to family planning. Women are able to access counselling services and to get modern contraceptives. Family planning is implemented as part of the maternal health services and encourages male participation and engagement. In 2018, a total of 28,162 new family planning users were enrolled in the Family Planning Programme. Agency-wide, contraceptives use increased from 164,932 in 2017, to 170,173 in 2018 (an increase of 3.2 per cent).

The distribution of family planning users according to contraceptive method remained stable. In 2018, the intra-uterine device (IUD) continued to be the most common method (47.2 per cent of users) followed by condoms (25.9 per cent), oral contraceptives (24.3 per cent) and injections (2.7 per cent).

Table 6- Utilization of UNRWA family planning services, 2018

Indicator	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
New users (persons)	6,313	2,278	2714	12,470	2,263	26,038
Total continuing users at year end (persons)	36,867	15,789	10,827	85,540	21,150	170,173
Discontinuation rate (%)	6.1	5.5	4.6	5.6	4.7	5.3

Preconception care

Infant and maternal mortality rates over the past few decades of UNRWA services have been a main focus in the provision of health care. To further control infant and maternal mortality among Palestine refugees, in 2011 the Agency implemented the preconception care programme. Today, this programme is an essential element of maternal health care integrated within the primary health care system in UNRWA HCs. Preconception care is intended to prepare women of reproductive age for pregnancy with an optimal state of health. Women are assessed for risk factors, screened for hypertension, diabetes mellitus, anaemia and oral health diseases, and are prescribed folic acid supplements to help prevent congenital malformations (such as neural tube defects).

In 2018, a total of 41,093 women were enrolled in the

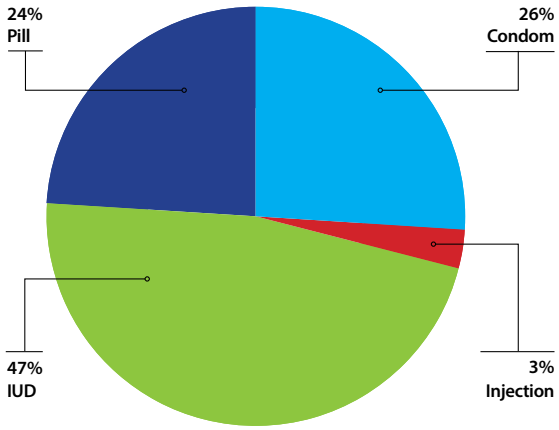

Figure 7- Contraceptive methods use, Agency-wide, 2018

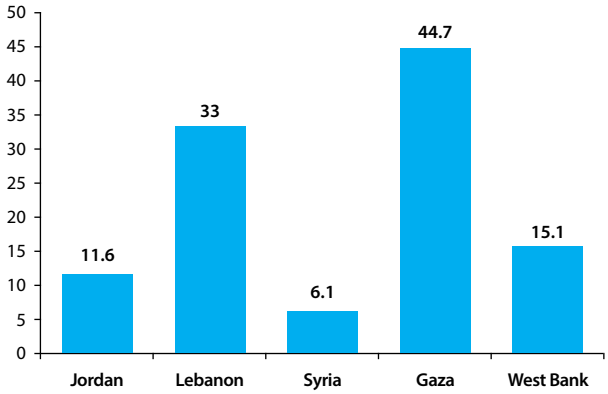

Figure 8- Percentage of newly registered pregnant women attended preconception care in 2018

HP's preconception care programme, a 10.3 per cent increase compared to 2017 (total 37,271 women). A series of health awareness sessions on preconception care targeting women who were attending our health centres for medical, dental and NCD consultations during the reporting year is to be the reason behind the increase in women enrolled in this programme.

Antenatal care

In order to promote early detection and management of risk factors and complications, UNWRA encourages pregnant women to access an initial antenatal assessment as early as possible and at least four additional prenatal care visits throughout their pregnancy. 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 then classified according to their status of pregnancy risk status for individualized management. In addition, all pregnant women are provided iron and folic acid supplementation. UNRWA uses selected indicators of coverage and quality to monitor the performance of antenatal care services including: antenatal care coverage, percentage of pregnant women registered for antenatal care in the 1st trimester, number of antenatal care visits during pregnancy, tetanus immunisation coverage, pregnancy risk status assessment and diabetes mellitus and hypertension in pregnancy. In 2018, UNRWA provided antenatal care for 91,274 pregnant women.

Table 7- UNRWA newly registered antenatal in the years 2017 & 2018

	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
2017	26,419	4,999	7,934	43,025	14,426	96,803
2018	25,357	4,619	7,415	39,709	14,174	91,274

Registration for antenatal care in the 1st trimester

Increasing the likelihood of positive outcomes for mothers and children is a key focus area for the provision of antenatal care for Palestine refugee women. UNRWA seeks to safeguard this through ensuring timely detection, and treatment of risk factors and complications that can be achieved through early registration for antenatal care in the first trimester of pregnancy. During 2018, the proportion of pregnant women who registered for antenatal care in UNRWA HCs during the 1st trimester of pregnancy was 81.9 per cent. This is significantly higher compared to 15.4 per cent for pregnant women registering during the 2nd trimester and 2.7 per cent registered during the 3rd trimester.

Number of antenatal care visits

The key objective of antenatal care provision is to ensure that pregnant women register for antenatal care as early as possible in their pregnancy to allow ample time for risk identification, follow-up and management per their needs, and attend at least four antenatal visits during the course of pregnancy[4]. In 2018, the average number of antenatal visits per client was six Agency-wide. The lowest was in Syria with an average of four antenatal visits, and the highest in Gaza with seven antenatal visits. In total, 91.4 per cent of pregnant women attended four or more antenatal visits, the lowest in Syria at 70.1 per cent and the highest in Gaza at 91.4 per cent. Provision of antenatal care services in Syria is still largely affected by the remained closure of a number of health centres and limited access to health services in these areas.

Table 8- Number of antenatal care visits during 2018

Indicator	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
% of pregnant women who paid ≥ 4 antenatal visits or more	85.2	94.1	70.1	98.2	92.7	91.4
Average number of antenatal visits per pregnant women	5	6	4	7	5	6

4. Based on UNRWA Health Department Technical Instructions on the "Provision of Maternal Health And Family Planning Services» 2009. This technical instruction is in-line with WHO recommended standards.

Tetanus Immunisation Coverage

Results of the annual rapid assessment survey of antenatal records for 2018 showed that 99.0 per cent of registered pregnant women were adequately immunized against tetanus. As a result of the optimal immunisation coverage, no cases of tetanus have been reported during the last two decades among mothers and newborns attending UNRWA antenatal care services.

Risk Status Assessment

The WHO model of antenatal care separates pregnant women into two groups: those likely to need only routine antenatal care (55 per cent of pregnancy cases), and those with specific health conditions or risk factors that necessitate special care (45 per cent of pregnancy cases). UNRWA classifies pregnant women into three categories based on risk: low, alert and high risk. During 2018, Agency-wide, 57.0 per cent were classified as low risk, 26.1 per cent were alert risk and 16.9 per cent of women were high risk. High and alert risk pregnancies receive more intensive follow-ups than low risk pregnancies, which includes referral to specialists as needed.

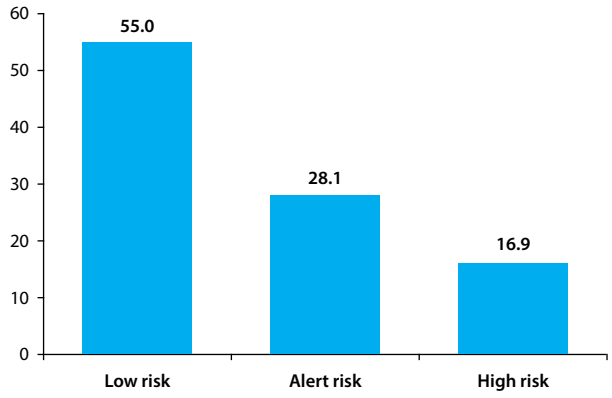

Figure 9- Percentage of newly registered pregnant women attended preconception care in 2018

Diabetes mellitus and hypertension during pregnancy

Pregnant women are regularly screened throughout their pregnancy for diabetes mellitus and hypertension. Agency-wide, in 2018, 4.4 per cent of pregnant women were diagnosed with diabetes mellitus (pre-existing and gestational); the lowest rate was 2.8 per cent in Syria and the highest rate was 6.9 per cent in West Bank. Globally, reported rates of gestational diabetes range between 2.0 per cent to 10.0 per cent of pregnancies (excluding pre-existing DM) depending on the population studied, and the diagnostic tests and criteria employed . Some UNRWA fields were on the lower end of the global rates, while some fields had a similarly higher rate. The prevalence of hypertension during pregnancy in 2018 was 7.2 per cent (including pre-existing and pregnancy-induced hypertension); the lowest was 4.6 per cent in West Bank and the highest was 8.3 per cent in Gaza and Lebanon.

Delivery Care

Place of delivery

UNRWA subsidizes hospital delivery for all pregnant women. In 2018, Agency-wide, 99.9 per cent of all reported deliveries took place in hospitals; while home deliveries only represented 0.1 per cent.

Caesarean sections

In 2018, the prevalence of caesarean deliveries among Palestine refugee pregnant women was 28.9 per cent, an increase compared to 26.8 per cent in 2017. Caesarean sections prevalence among fields varies greatly, with the lowest in Gaza (20.5 per cent) compared to the highest rate of 63.2 per cent. in Syria. The variation among fields is due to several reasons, but in particular client preference and prevailing medical practice and security constreains. Globally, despite a wide variation among regions and countries, the worldwide caesarean section rates are estimated at around 33.0 per cent.

Table 9- Caesarean section rates among UNRWA reported deliveries, 2018

Field	Total deliveries	Caesarean section rate (%)
Jordan	23,548	27.9
Lebanon	4,408	49.4
Syria	7,184	63.2
Gaza	39,283	20.5
West Bank	13,392	29.8
Agency	87,815	28.9

Monitoring the outcome of pregnancy

UNRWA closely monitors and registers births through a registration system implemented since 2002 (based on the expected date of delivery). The outcome of each pregnancy, including details of the new-borns, is recorded in each health facility. In 2018, the total number of pregnant women who were expected to deliver was 94,929. Among these women, Agency-wide, 87,749 infants were delivered (92.44 per cent) and 7,022 births resulted in miscarriages or abortions (7.4 per cent). The outcome of 158 pregnant women (0.17 per cent) was unknown.

The percentage of unknown outcomes of pregnancies dropped from 6.8 per cent in 2002 to 0.2 per cent in 2007, and had since that time remained constant.

The highest prevalence of unknown pregnancy outcomes was reported in Syria, and it was 1.58 per cent of pregnancy cases. This could be attributed to the ongoing conflict in the country, and difficulty to track and ascertain the outcomes of the pregnancies among registered women by health staff.

Monitoring maternal deaths

During 2018, a total of 14 maternal deaths were reported across the fields. This is equivalent to a maternal death ratio of 15.8 deaths per 100,000 live births among pregnant women registered with UNRWA antenatal services. Following a report of a maternal death, UNRWA health staff conduct a thorough inquest and assessment using a standardized verbal autopsy questionnaire. In 2018, four women died during pregnancy, 10 deaths occurred during the post-natal period. 12 women died in hospital during/after delivery, and two women died at home. Most maternal deaths were of multi-parity. Based on the causes of death, 28.6 per cent of death cases were due to pulmonary embolism (4 cases), 21.4 per cent were due to catastrophic bleeding (3 cases), 14.3 per cent were due to septicaemia (2 cases), 14.3 per cent were due to heart disease (2 cases), 7.1 per cent were due to severe anaemia (1 case), 7.1 per cent were due to bronchial asthma (1 case), and 7.1 per cent were due to epilepsy (1 case). Through extensive assessment of cases, the eight maternal deaths (57.1 per cent) were due to preventable causes including 3 cases of bleeding, 2 cases of septicaemia, one case severe anaemia, one case of bronchial asthma and one case of epilepsy.

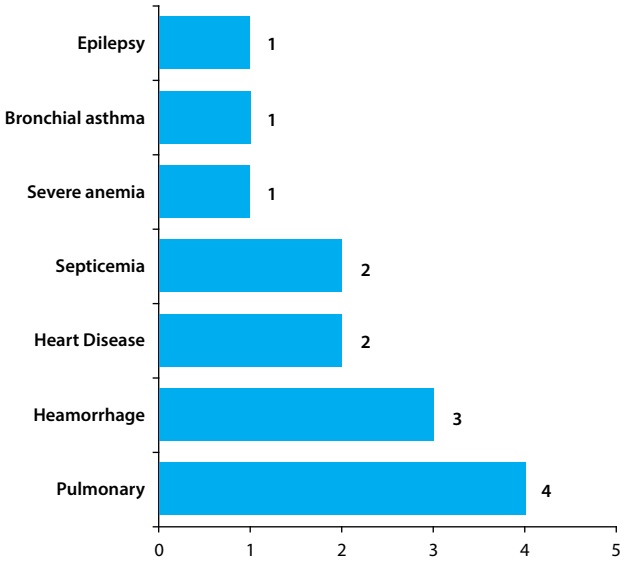

Figure 10- Underlying causes of maternal mortality cases, 2018

Postnatal care

UNRWA encourages all women to attend post-natal care as soon as possible after delivery. Postnatal care services include a thorough medical examination of the mother and the new-born; either at UNRWA health centres or during home visits, and includes counselling on family planning, breast feeding and new-born care. Of the 87,815 pregnant women who delivered live births during 2018, a total of 82,280 women received postnatal care within six weeks of delivery, representing a coverage rate of 93.6 per cent. The highest rate was 100.0 per cent in Gaza and lowest rate was 81.8 per cent in Syria.

Child Health Services

UNRWA provides health care for Palestine refugee children across the phases of their lifecycles, 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. Services include new-born assessment, periodic physical examinations, immunisation, growth monitoring and nutritional surveillance, micronutrient supplementation, preventive oral health, school health services, and referrals for specialist care as per need.

Prior to 2010, UNRWA registered only children up to the age of three years in the child health services registration system; however, for the past eight years, this registration has been extended to include children up to five years of age. The registration system enables children who miss milestone health services to be followed-up, including immunizations, growth monitoring and screening.

Child care coverage

During 2018, UNRWA primary health care facilities cared for 424,814 children up to five years of age, a coverage rate of 58.5 per cent of all expected number of children. Service coverage rates were estimated based on the number of infants below 12 months of age that have been registered 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.

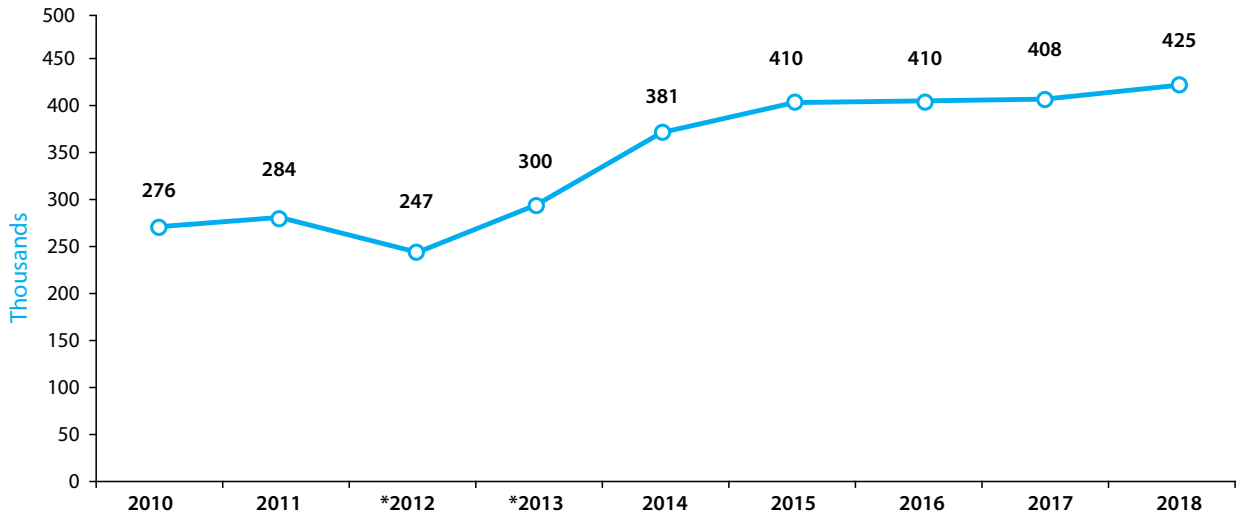

Figure 11- Children 0-5 years under supervision at UNRWA health centres, 2010 – 2018 (*Data not available for Syria)

Immunisation

UNRWA health services provide immunisation against the following diseases: tetanus, diphtheria, pertussis, tuberculosis, measles, rubella, mumps, polio, haemophilus influenza type B (Hib), in addition to hepatitis and rota viruses. The pneumococcal vaccine is only provided in West Bank, Gaza and Lebanon. During 2018, and Agency-wide, 99.8 per cent of children aged 12 months and 99.2 per cent of children aged 18 months were fully immunised against all diseases as per listed above. This near provision of universal immunisation coverage continues to largely prevent morbidity and mortality of most communicable diseases.

Growth monitoring and nutritional surveillance

Growth and nutritional status of children under-five years is monitored during regular intervals by UNRWA health services. HCs promote breast-feeding and provide mothers with proper counselling on infant and child nutrition, including the appropriate use of complementary feeding and micronutrient supplements. E-Health integrated a new electronic growth monitoring system based on the revised WHO growth monitoring standards. The electronic system documents the four main growth and nutrition related problems among under-five children: underweight, wasting, stunting and overweight/ obesity. At the end of 2018, 5.09 per cent of children under-five years were found to be under-weight, 8.1 per cent of children presented with stunting, 4.8 per cent of children had wasting, and 7.0 per cent of children were found to be overweight/ obese. No disparity was found between genders.

Surveillance of Infant and Child Mortality

Infant mortality

During 2018, a total of 521 cases of death among infants below one year were reported in all fields. The main causes of deaths were: Low Birth Weight (LBW)/ Prematurity (31.1 per cent), congenital malformations or metabolic disorders (29.2 per cent), respiratory infections and other respiratory conditions (19.8 per cent), congenital heart disease (8.5 per cent), Septicaemia (2.3 per cent), accidents (1.0 per cent) and gastroenteritis (0.4 per cent).

Child mortality

In 2018, a total of 221 cases of death among children 1-5 years were reported Agency-wide. The main causes of child death were: congenital malformations (38.0 per cent), respiratory tract infections and other respiratory conditions (18.1 per cent), congenital heart diseases (12.7 per cent) and Septicaemia (5.4 per cent). In terms of the distribution of deaths by gender, child mortality was higher among males (58.1 per cent) than females (41.9 per cent). However, no direct correlation between gender and cause of death could be identified. Most children died in hospitals (87.3 per cent) and only some children died at home and were not hospitalized (12.7 per cent).

School Health

UNRWA HD implements the School Health Programme (SHP) in coordination with the Education Department (ED). Health services provided for school children include: medical examinations for new school entrants, immunizations, hearing and vision screening, dental screening, de-worming and vitamin A supplementation. In addition, the SHP provides guidelines for the follow-up of children with special health needs, and procedures to conduct school environment and school canteen inspections. These health services are provided to UNRWA schools, via heath centres and school health teams (medical officers and nurses) who visit UNRWA schools scheduled throughout the scholastic year.

During the 2017/2018 school year, more than 500,000 Palestine refugee pupils were enrolled in UNRWA schools. The HD and the ED monitor the implementation of health services to students through planned meetings, school health committees, training of health

tutors and through the provision of screening materials and first aid supplies.

As a result of the SHP activities during 2018, a total of 5,773 students were referred to UNRWA health facilities for further care, and an additional 5,133 students were referred for specialist assessment. Agency-wide, during the school year 2017/2018 a total of 15,082 students were assisted with eyeglasses costs and 267 students were provided with assistance for hearing aids costs.

New school entrants medical examination

During the school year 2017/2018, UNRWA schools registered 58,257 new entrants at the 1st grade. These newly registered students are provided with screening medical examinations, immunization and specialist follow-ups as needed. Morbidity diseases detected among newly registered students included: dental caries (14.8 per cent), vision problems (7.3 per cent), heart disease (0.7 per cent), bronchial asthma (1.1 per cent) and epilepsy (0.2 per cent). A low proportion of students were found to have health diseases related to personal hygiene which includes pediculosis (1.8 per cent) and scabies (0.4 per cent). Newly registered students identified with disabilities and/or in need of assistive devices received assistance towards the provision of eyeglasses, hearing aids and other prosthetic devices according to their condition and available resources.

Screening

Health care screening during the school year 2017/2018 targeted pupils in the 4th and 7th grades in all fields, and involved vision and hearing impairment and oral health assessments.

For 4th grade, 55,864 students were screened (97.2 per cent coverage rate). The most prevalent morbidity conditions were vision diseases (12.3 per cent) and hearing impairments (0.5 per cent). Among students in the 7th grade, 51,837 students were screened (97.5 per cent coverage rate), with the main morbidities found to be vision diseases (14.2 per cent) and hearing impairments (0.2 per cent).

Oral health screening

In 2018, 91,765 students in 1st, 4th and 7th grade in all fields, and 3rd grade students in West Bank, received oral health screening. Oral health screening is coupled with other dental caries prevention methods such as pit and fissure sealant for 1st graders, erupted molar for students for 1st and 2nd graders, in addition to general fluoride mouth rinsing and teeth brushing campaigns. The coverage rate for pit and fissure sealant application was 39.4 per cent. Oral health screening for UNRWA students has been a large focus for oral disease prevention as a result of the reorientation of the Oral Health Programme towards prevention.

Children with special health needs

In the 2017/2018 scholastic year, a total of 2,954 students were identified with special health needs, including 291 students with heart disease, 428 students showed behavioural problems, 1,073 students had bronchial asthma, 153 students had type 1 diabetes mellitus and 230 were living with epilepsy. These children were closely monitored by both the HD and the ED staff, and they received constant monitoring from teaching staff and specialised medical care from the school health team. School registration records are monitored and maintained to ensure identification and follow-up of children with special needs is provided.

Immunization

The UNRWA Immunization programme for school students is streamlined and is in accordance with host country requirements. During the school year 2017/2018:

- New entrants in all fields received a booster dose of tetanus-diphtheria (DT/Td) immunisation, with a 99.1 per cent Agency-wide coverage rate.
- New entrants received the oral polio vaccine (OPV) with a 99.2 per cent coverage rate, as well as 9th graders receiving the Td vaccination with a 98.3 per cent coverage rate.

De-worming programme

In accordance with WHO recommendations, UNRWA maintains the de-worming programme for children enrolled in UNRWA schools across the five fields. The programme targets 1st grade to 6th grade students, and it consists of the application of a single dose of an effective wide-spectrum anti-helminthic medicine. During the 2017/2018 scholastic year, two rounds of the de-worming programme was conducted during September – November 2017, and March – April 2018. In addition, health awareness campaigns were carried out to emphasize the importance of personal hygiene in preventing transmission of these disease in all schools.

Oral Health

UNRWA provides oral health care to Palestine refugees Agency-wide, services are provided through 122 dental clinics integrated within the Agency's primary health care facilities, and 11 mobile dental clinics. The aim of the oral health services is to prevent, detect and manage dental and periodontal disorders among Palestine refugees with special attention to at risk groups. Analysis of the utilization of dental services in 2018, revealed a slight reduction of 1.9 per cent in curative dental consultations and a 3.2 per cent increase in screening activities as compared to 2017.

In 2018, health services continued to reinforce the necessary preventive component of oral health. Oral health education was delivered as part of routine mother and child health care, including dental screening for women during their first preconception care visit and for all pregnant women. Comprehensive oral health assessments were conducted for all children at the age of one to two years, in addition to the application of fissure sealants. A total of 65,766 assessments were conducted among pre-school children, as well as regular dental screening for new school-entrants and for 7th and 9th grade students. Oral hygiene education for school students is continued in all fields as a measure for prevention of oral health problems.

An assessment of workload of oral health care staff, their needs, the productivity and the efficiency is conducted in all five fields on annual basis. A workload unit method is a standardized via a 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 of the work load is based on a standardized protocol and is carried out as part of the periodic evaluation of system performance. It is also used to identify staffing requirements and the need for the re-organization of services.

Table 10- Utilization of dental services in 2018

Indicator	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
No. of curative interventions	142,666	46,202	58,531	267,359	39,379	554,137
% of curative services	64.2	58.8	57.8	57.1	56.9	59.0
No. of preventive interventions	79,404	32,377	42,815	200,896	29,865	385,357
% of preventive services	35.8	41.2	42.2	42.9	43.1	41.0
Average daily dental consultations (workload per dental surgeon) (target 25)	31.6	25.9	26.5	68.3	22.1	39.3

Statistical analysis of dental service utilization in 2018, across the five fields was conducted. The highest number of curative interventions provided was 267,359 in Gaza, and the lowest was 39,379 in West Bank. Among the fields, the highest utilisation was observed in West Bank, where 43.1 per cent of the Palestine refugee population accessed preventative services, while Jordan had the lowest utilisation (35.9 per cent). Overall Gaza had the highest workload of 68.3 dental consultations per dental surgeon per day, and West Bank had the lowest number of dental consultations per dental surgeon day (at 22.1). Agency-wide, the average workload per dental surgeon per was 39.3 consultations, significantly higher than the Agency target of 25 as recommended by WHO.

Physical Rehabilitation and Radiology Services

Physiotherapy services

In 2018, UNRWA facilitated physiotherapy services to 13,253 Palestine refugees, through a total of 163,491 physiotherapy sessions in 18 physiotherapy units by 46 physiotherapists in Gaza, West Bank and Jordan. In Gaza, 10,058 patients received 144,821 physiotherapy sessions through 11 physiotherapy units by 34 physiotherapists. In West Bank, 2,857 patients received 14,976 physiotherapy sessions through six physiotherapy units by 11 physiotherapists. In Jordan, 338 patients received 3,694 physiotherapy sessions through one physiotherapy unit and by one physiotherapist.

Physiotherapists provide a wide range of treatment and rehabilitation services including: manual treatment, heat therapy, electrotherapy, and gymnastic therapy. In addition, during the reporting period, UNRWA facilitated provided Palestine refugees with bout 52 outreach sessions with advanced physiotherapy equipment, which includes provision of therapeutic exercise, manipulation massage, functional training, hydrotherapy, electrotherapy and self-training.

In addition, Palestine refugees with permanent disabilities accessing these services, along with their family members were provided education and training on handling the physical aspect of their disability in their daily lives. These services aim to provide Palestine refugees with disabilities more independence and self-reliance.

Radiology services

UNRWA operates 20 radiology units across all HCs Agency-wide (seven units in Gaza, eight units in West Bank, four in Lebanon and one in Jordan). These units provide plain X-ray services to patients attending HCs. Other X-ray services and specific types of diagnostic radiology services, such as mammography, urography, ultrasounds, are provided upon referral by UNRWA HCs to contracted services via contractual agreements with hospitals and private radiology centres.

During 2018, 98,744 patients had 101,648 X-rays; of those, 74,640 patients had 86,405 plain x-rays in UNRWA HCs, and 15,104 patients had 15,243 X-rays and other radiology services in contracted health facilities.

Disability Care

Disability care is a crosscutting service, and is extremely relevant to all UNRWA Programmes. The Agency adopts the definition of disability presented in the UN Convention on the Rights of Persons with Disabilities (UNCRPD), 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."

In 2018, disability inclusion was addressed at different levels across UNRWA. The Disability Inclusion Guidelines have been implemented since 2017, and so far more than 200 staff have been trained on mainstreaming disability inclusion in the Agency's programmes and services. Currently, the HP initiatives relating to disability take a comprehensive approach, addressing physical, intellectual, psychosocial and social aspects. UNRWA adopts a "twin-track" approach to disability, where we work both on the social environment (ensuring non-discrimination and accessibility of services) and on strengthening targeted disability-specific services. In this sense, the HD has a strong focus on the prevention of disability, including the provision of quality family planning services, antenatal care, intra-natal care, postnatal care, growth monitoring, immunization, disease prevention and control, in addition to screening activities for the early detection and offering medical intervention for new born infants and children with disabilities.

Folic acid supplementation is prescribed to mothers as part of their preconception care. This helps in the prevention of certain birth/ congenital defects; such as neural tube defects. The HP also implements a number of specific interventions related to disability care. UNRWA HCs record data on children under the age of five years who have conditions that can lead to permanent physical or intellectual impairments, such as hypothyroidism and phenylketonuria, in order to facilitate appropriate medical follow-up.

In addition to prevention, the HD also provides other important services to persons with disabilities. Registered refugees whose permanent physical, visual and hearing impairments have been identified via screening in UNRWA health centres are eligible for financial support from the HD to cover the costs of assistive devices such as hearing aids, eye glasses, artificial

limbs, wheelchairs etc. For instance, in 2018, more than 15.082 URNWA students were assisted with the cost of eyeglasses and 247 students received assistance to cover the cost of hearing aids.

While physiotherapy centres (operating in Jordan, Gaza and West Bank) do not target specifically persons with permanent disabilities, it is recognized that a significant proportion of treated beneficiaries are likely to be considered 'persons with disabilities' under the definition of the UNRWA Disability Policy (2010) and UNCRPD. It is important to note, however, that data collection regarding physiotherapy services does not differentiate between beneficiaries with and without permanent disabilities.

Pharmaceutical Services

Total expenditure

In 2018, the total funds spent on medical supplies and equipment from all funds (General Fund and projects), was approximately US$ 16.7 million, of this amount, US$ 12.8 million (77.1%) was from the General Fund and US$ 3.8 million (22.9%) was from project funds. Among the fields, the highest expenditure on medical supplies and equipment was observed in Gaza (US$ 7.5 million) and the lowest was at Lebanon (US$ 1.4 million).

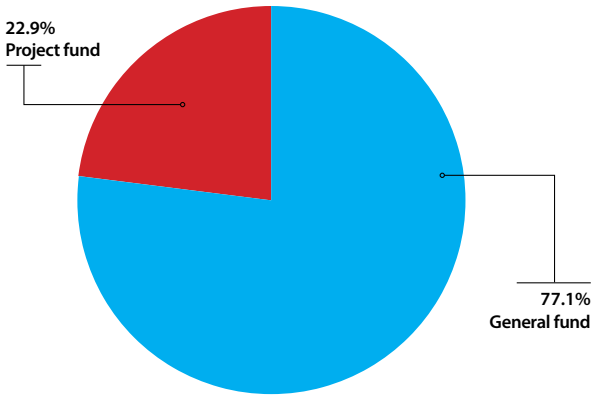

Figure 12- Total expenditure of medical supplies and equipment from the General Fund and project funds, 2018

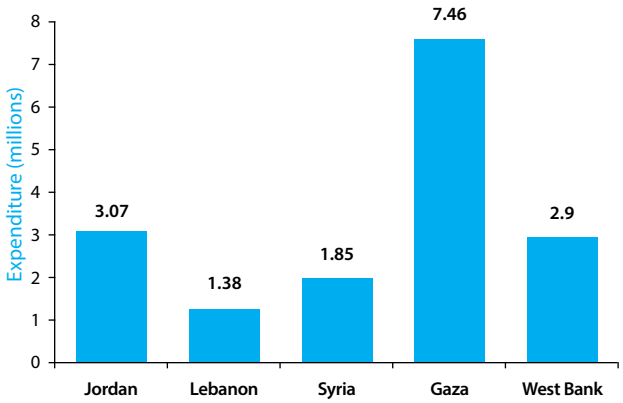

Figure 13- Expenditure on medical supplies, by field 2018 (US$ million)

Expenditure on medical supplies

In 2018, the average expenditure on medical supplies per outpatient medical consultation Agency-wide was US$ 1.9, a slight increase from 2017 of US$ 1.7. The average annual expenditure on medical supplies per served person Agency-wide was US$ 5.5, an increase compared with US$ 3.9 in 2017. The cost increment of annual expenditure on medical supplies per served person is attributed to the increase in cost per served person observed specifically in Gaza and West Bank (US$ 6.1 and 7.1 respectively).

Table 11- Average medical product expenditure (US$) of medical supplies per outpatient medical consultation and per served person, 2018

	Jordan	Lebanon	Syria	Gaza	West Bank	Agency-wide
Expenditure for medical supplies per medical consultations per served person (US$)	1.9	1.3	2.2	1.8	2.8	1.9
Expenditure for medical supplies per served person (US$)	3.8	5.8	5.0	6.1	7.1	5.5

Expenditure on medicines

The total expenditure on medicines in 2018 was US$ 12.1 million. Analysis of expenditure on different medicines revealed that 43.0 per cent of the funds were spent on medicines used for the treatment of NCDs, and that 14.7 per cent were spent on antimicrobial medicines. Further analysis on NCD drug expenditure shows that 44.2 per cent of funds were spent on hypoglycemic medications, 29.7 per cent o n antihypertensive medications, 5.0 per cent on cardiovascular medications, 3.1 per cent on diuretics, and 8.4 per cent on lipid lowering agents.

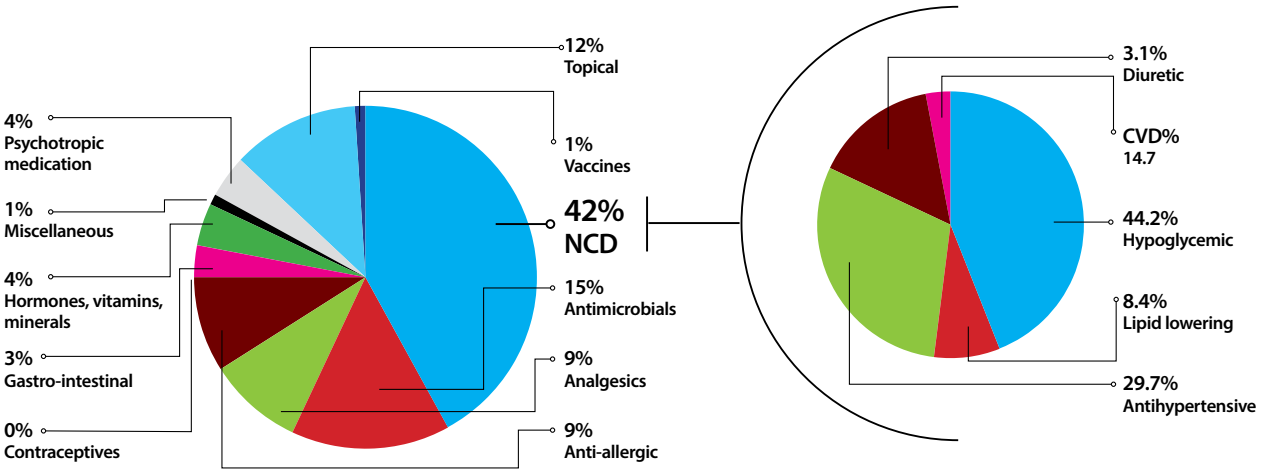

Figure14- Drug expenditure, 2018

During 2018, medical equipment and related supplies accounted for 8.1 per cent (US$ 1.4 million) of the total expenditure of medical commodities (US$ 16.7 million).

Donations of medical supplies

In 2018, UNRWA received several in-kind donations of medical supplies (medicines, medical equipment and others) from key partners and stakeholders including. The following medicines and consumables were received as donations during 2018:

- The Ministry of Health of the Palestinian Authority and UNFPA provided Gaza and West Bank fields with vaccines, iron drops and tablets, as well as disposable syringes, needles and modern contraceptives.
- The Ministry of Health in Jordan provided in-kind donations of vaccines and contraceptives.
- UNICEF and Health Care Society (HCS, an NGO) provided Lebanon with vaccines, medications, disposable syringes and needles.
- The Ministry of Health in Syria and UNICEF provided the Syria field with vaccines, tuberculosis medicines and other miscellaneous drugs.

Antibiotic prescription rate

In-line with WHO recommendations, the target antibiotic prescription rate in UNRWA HCs Agency-wide is to be less than 25.0 per cent. In 2018, antibiotic

prescription rate Agency-wide was 23.5 per cent, and ranged from 19.8 per cent in West Bank (lowest) to 31.1 per cent in Syria (highest). It is worth mentioning that antibiotic prescription rates in Lebanon and Syria fields decreased respectively in 2018 (24.8 per cent & 30.1 per cent) as compared to 2017 (30.2 per cent & 33.5 per cent). Antibiotic prescription is a key area of focus in UNRWA HCs, ensuring rationalize and control of antibiotics usage among the served Palestine refugee population.

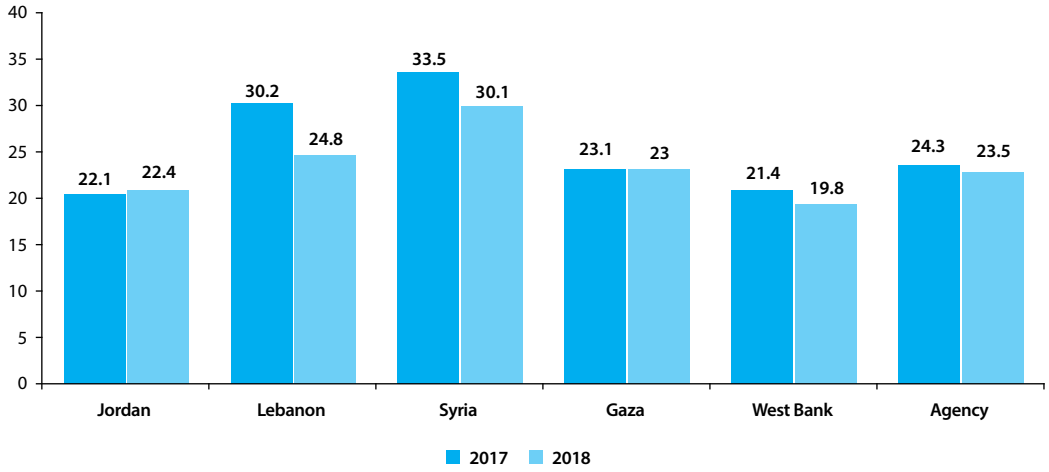

Figure 15- Antibiotic prescription rates (%) by field, 2017-2018


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Output 2.2: Efficient hospital support services

In-Patient Care

UNRWA continued to support Palestine refugees to fulfil their needs for essential hospital services either by contracting governmental, private and NGO hospitals or by partially reimbursing costs incurred by them for treatment.

Outsourced hospital services

During 2018, a total of 90,838 Palestine refugees benefited from UNRWA supported hospitalization services. The hospitalization support program (HSP) expenditure was US$ 23.0 million (second highest health-related expenditure after personnel), with an average length of in-patient stay of 1.9 days across the five fields of UNRWA operations. Of all hospitalization cases, approximately 67.2 per cent were women, 46.5 per cent were aged between 15 and 44 years old and 28.8 per cent were children below the age of 15 years.

Table 12- Patients who received assistance for outsourced hospital services during 2017 and 2018 in the five fields

Year	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
2017	10,000	29,887	23,489	11,885	22,193	97,454
2018	14,687	27,603	17,772	11,019	19,757*	90,838*

**Numbers exclude Qalqilia Hospital*

Utilization of hospitalization across each field varies, including the number of served population, unit cost, number and type of contracts, hospitalisation staff, hospital service targets and caseloads. Access to hospitalisation services for Palestine refugees is also dependent on the policies of the host government and the available local resources. In 2018, the development and piloting of a comprehensive hospitalisation database system in Lebanon, and a data collection system in West Bank, has provided an in-depth data and strategic analysis of patient diseases and expenditure trends in these fields.

During 2018, containing over-expenditure of the hospitalization budget was a major challenge for the HP, further impacted by the precarious financial condition of the Agency during that year. In 2018, a review of the institutionalized expenditure on hospitalization support was conducted in Lebanon and West Bank where the financial pressure is highest. Key areas of monitoring included: utilization of Palestine Red Crescent Society (PRCS) hospitals and strict audit revision of invoices in Lebanon, and the utilization of bulk payment (lump sum contract) and suspension of non-urgent cases in West Bank. As a result, in the reporting year a reduction in treated hospitalization cases, by 8 per cent in Lebanon and 6 per cent in West Bank, was achieved. In addition, a reduction of hospitalization expenditure by 14.0 per cent was reported in both Lebanon and West Bank fields. In Jordan, Syria and Gaza, patient numbers and expenditure have been in line with previous utilization patterns during previous years.

In 2018, the renewal of hospitalization contracts in Lebanon and West Bank was conducted, an exercise important for ensuring the best hospitalisation services provided to Palestine refugees and to contain expenditure increases. In Lebanon, the existing contracts with hospitals were mostly extended, and some hospitals accepted to further reduce their prices for some services provided. In West Bank, a new tender for the provision of hospitalization services was published, and technical and financial evaluations of the offers was conducted in support with Procurement and Logistics Division (PLD). As a result, some existing contracted hospitals offered limited increase in service prices, while new contracts with new hospitals were also established. New contracts with hospitals were created using the contract template developed in 2017. In both fields, hospitalization staff worked hard to avoid uncontained increase in prices of services provided to Palestine refugees, containing the expenditure of hospitalization and out of pocket expenditures.

In 2019, the close monitoring of hospitalization services among the five fields will continue although some increases in expenditure are anticipated. In addition, enhancement of the database in Lebanon and data collection in West Bank is planned to help inform future decision making processes and continue to improve hospitalisation services. Moreover, an in-depth analysis of hospitalization trends in Syria is planned, where an increase of hospitalization expenditure was seen from 2017 to 2018.

Qalqilya Hospital

In addition to subsidizing hospitalization services in contracted hospitals, UNRWA manages a 63-bed secondary care facility in Qalqilya, West Bank. Qalqilya Hospital, the only hospital operated by the Agency, accommodates 14 surgical, 12 medical, 20 paediatric, 15 obstetric/gynaecologic, and two intensive care beds, in addition to a five-bed emergency ward. The hospital serves both UNRWA refugees and non-refugees from the surrounding municipalities. In 2018, a total of 5,690 patients were admitted to Qalqilia Hospital, a slight increase compared to 5,527 patients in 2017. The average bed occupancy in Qalqilia Hospital was 49.4 per cent in 2018, lower compared to 54.7 per cent the previous year. The average length of stay in 2018 was 2 days a decrease from 2.3 days in 2017.

Table 13- In-patient care at the UNRWA hospital (Qalqilia, West Bank) in 2017 and 2018

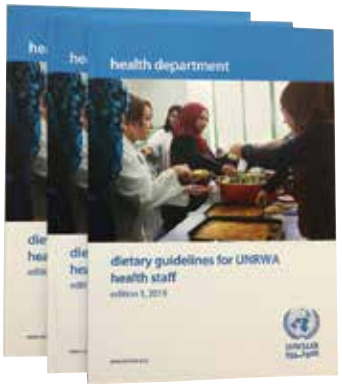
Indicators	2017	2018
Number of beds	63	63
Persons admitted	5,527	5,690
Bed days utilized	12,570	11,369
Bed occupancy rate (%)	54.7	49.4
Average stay in days	2.3	2.0

Crosscutting Services

Nutrition

During 2018, the health department finalized and distributed the NCD handbook for use by all registered NCD patients at health centres, Agency-wide. As well as the development of an e-NCD mobile application, an electronic version of the NCD booklet content was launched. To further support NCD patients attending UNRWA HCs, several pamphlets on healthy nutrition were developed, produced and sent to the five fields, providing patients with information on how to manage and control their conditions.

An article presenting the findings of a cross-sectional study assessing anaemia prevalence among new entrant children registering at UNRWA schools, conducted in all five fields in August 2017, was submitted and is currently under review for potential publication. In addition, the abstract for this study was accepted for online publication by The Lancet. The results found that children examined in all five fields had high levels of anaemia, which had a high association with the prevalence of wasting and stunting among the students. Based on the results of this study, the HP will include haemoglobin testing as part of the medical examination for children newly registering (new entrants) at 1st grade in all UNRWA schools. The results of this study will also provide a basis for further research to examine and investigate malnutrition UNRWA students, to be conducted in 2019.



Moreover, an abstract titled "Evaluation of the second diabetes campaign round for diabetic Palestine refugees at UNRWA health centres" has been presented at a conference organised by the American Diabetes Association and was published online by the Diabetes peer reviewed journal.

The full article is under review by the BMJ Open Diabetes Research & Care journal.

A reference guide for UNRWA health staff on basics of nutrition and healthy dieting practices has been finalised for distribution. This guide will aid health staff with counselling and communication skills in providing patients with information about healthy eating, living, and managing their nutrition status. The guide includes illustrations, proposed messages, sample scenarios and dialogue to guide health staff in identifying, addressing, and providing counselling and health education sessions for patients concerning healthy nutrition issues.

Laboratory Services

UNRWA provides comprehensive laboratory services through 128 of 144 health centres. Out of the remaining 16 facilities, 10 facilities continued to provide basic laboratory support (blood glucose, blood haemoglobin and urine tests by dipstick), and the remaining six facilities are located in Syria which, due to challenges such as accessibility, do not provide laboratory services.

Utilization trend

In 2018, UNRWA laboratory services provided 4.68 million Laboratory tests Agency-wide, a decrease of about 1.2 per cent as compared to 2017 (4.73 million laboratory tests). Per field, during the reporting period, laboratory services provided decreased by 2.1 per cent in Gaza, 1.3 per cent in West Bank, 4.6 per centin Lebanon and 0.1 per cent in Syria, but a slight increase by 1.8 per cent in Jordan. The increase of laboratory services in Jordan may be a reflection of the increase in demand of UNRWA health services in HCs in this field.

Periodic self-evaluation

The annual comparative study of workload and efficiency of laboratory services was carried out based on 2018 data, as part of the Agency's periodic self-evaluation of its programmes using the WHO approach for workload measurement. The WHO targeted productivity range is considered to be from 29.4 to 64.8 workload units (WLUs)/hour. The productivity of laboratory services for the reporting period was 47.2 WLUs/hour Agency wide; within the WHO target standards. The productivity of laboratory services was 44.1WLUs/hour in Jordan, 44.8 WLUs/hour in Lebanon, 64.8 WLUs/hour in Gaza, 52.6 WLUs/hour in West Bank and 29.4 in Syria.

Laboratory costs

Agency-wide, the overall cost of laboratory services provided across the five-fields was US$ 6,373,161, out of which US$ 6,364, 145 million (99.9 per cent) was secured through the Programme budget. This constitutes a lower expenditure compared to MoH laboratory service costs of all five host countries combined (estimated at US$ 16.1 million). This suggests that UNRWA provides cost-effective and efficient laboratory services through its HCs.

Table 14- Expenditure on laboratory services (US$) by field and Agency-wide, 2018

Cost	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Programme Budget	1,369,992	719,717	617,467	1,805,820	1,851,149	6,364,145
Non-Programme Budget	0	0	0	9,016	0	9,016
Total	1,369,992	719,717	617,467	1,814,836	1,851,149	6,373,161

Table 15- Comparative analysis on annual cost of laboratory services performed at UNRWA facilities and cost of the same services if outsourced to host authorities (US$), 2018

Cost	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Host authorities	3,607,682	1,434,525	692,333	5,557,209	4,819,895	16,111,644
UNRWA	1,369,992	719,717	617,467	1,814,836	1,851,149	6,373,16

Quality assurance

In order to ensure the quality of laboratory services, the following activities continued were:

- Training courses and in-service training for newly recruited laboratory technicians were conducted in all fields according to a standard training package.
- Implementation of an internal quality control system for all tests conducted in all UNRWA laboratories.
- Conducting annual assessments on utilization and productivity trends of laboratory services at the health centre level per field as part of self-internal assessment policy according to UNRWA standard assessment protocol.
- Conducting annual assessment on laboratory services provided according to a standard checklist by field laboratory services officers.
- Conducting quarterly follow-up checklist assessments on laboratory services by the senior medical officer or the medical officer in-charge.
- On-going check-ups of the quality of laboratory supplies in coordination with relevant staff in the procurement division.
- Making arrangements with public health laboratories of host countries concerning the referral of patients or samples for surveillance of diseases of public health importance.

Health Communication

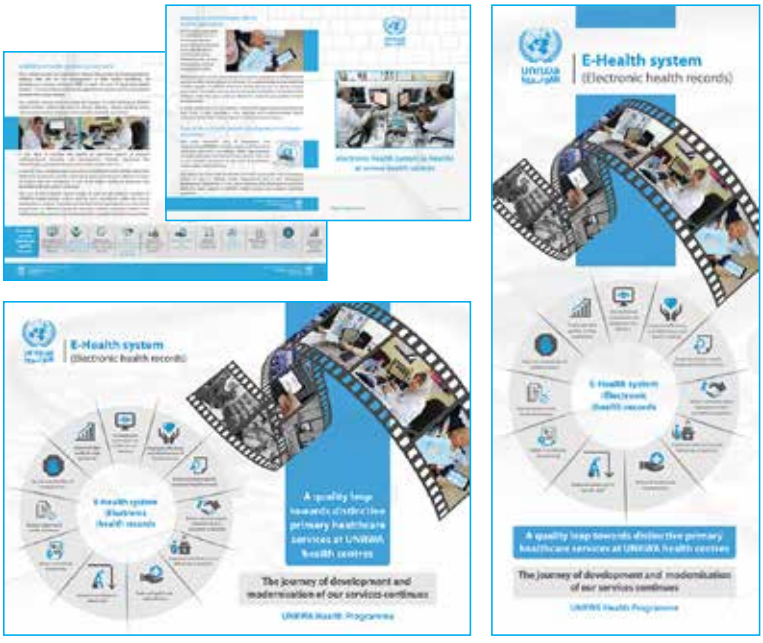
Health communication is globally recognised as a critical component of all efforts required for the proper provision of quality health services at all levels. Health communication is an essential part of the planning process for any strategic direction that health leaders consider for the improvement of health outcomes of the population they service. Without proper health communication activities, large gaps in the quality and efficiency of health services will appear. Health communication is considered as a core component of UNRWA health services.

During 2018, UNRWA launched its #DignityIsPriceless fund raising campaign which included the establishment of a task force to support the fund raising efforts. The HD at UNRWA nominated its Health Communication Officer to represent concerning issues relevant to the health of Palestine refugees, and act as a liaison for the HD, offering advice and support as needed. As a result of the collaboration with the task force, fact sheets and proposals for funding specific health activities were prepared and shared with potential donors for all fields.

To improve health services provided to Palestine refugees with diabetes and/or hypertension (supported the World Diabetes Federation), health communication was a key role in implementing activities associated with the first project milestone agreed on with the donor. Main activities included the completion and distribution of the NCD Booklet covering the five fields for all NCD patients registered in all UNRWA HCs. In addition, seven flyers in Arabic with different topics about diabetes care were prepared and produced to be available for all NCD patients. As a new innovation by the HD, late in 2018, the development of an e-NCD mobile application, which mirrors the paper NCD Booklet, was initiated. The upcoming application will include development and testing phases, for the launch of the pilot to be conducted in Jordan by mid-2019.

As a continuous activity, observation of the relevant World Days 2018, continued. In particular, the five fields were encouraged to observe with suitable activities the World Health Day (WHD), the World No Tobacco Day (WNTD), and the World Diabetes Day (WDD). Other key health communication activities for 2018 included the development and production of printed materials for the MHPSS programme and development for health advocacy materials for e-Health, to be ready for distribution in 2019.

Research, conducted by the HD and fields continues, aiming to measure and evaluate health indicators and impacts of the health programme on the improvement of health outcomes for Palestine refugees. Continued research provides data for informed strategic decisions, development and updating of policies, and to advocate for support. Finally, research serves as the basis to enable taking evidence-based decisions for the improvement of the quality of health services provided, therefore strengthening the overall health outcomes of Palestine refugees.



Health Research

Research remained one of the core activities of the Department of Health throughout 2018.

The Department of Health and field offices conduct research not only to supplement our knowledge but also to enhance the Agency's transparency, accountability and visibility. Since the first development in 2016, the department has been updating the research agenda to meet the Agency's latest research needs. The aim of the Research Agenda is to narrate all potential research activities according to the World Health Organization (WHO) Health System Strengthening Framework, in addition to visualizing the priorities of the studies to be conducted. This WHO framework defines a set of pillars that represent the critical components of health systems. In accordance with the WHO framework, the Agency's research priorities were identified in 2018 based on estimated current and future trends in disease burden; the Agency's available human, financial and infrastructure capacities; and the potential impact of the research on policy-making.

Our research currently focusses on areas including NCDs, MCH, nutrition, MHPSS, health financing, health workforce strategies and health system data quality. For these areas of study, the department conducts four types of research: primary research, medical records analysis, literature review and policy analysis.

We continue to be committed to scientific research and to integrate research findings into the decision-making process of patient health care and the Agency's policies. Partnerships to promote evidence-based practice were further strengthened in 2018 and will continue to be strengthened with a memorandum of understanding (MoU) signed by UNRWA and leading academic and research institutions. We welcome researchers from those institutions who share the common interest of supporting the well-being of the Palestine refugee population.

The department had the privilege of welcoming researchers and interns from Canada, Egypt, Germany, Japan, Jordan, and the United States to work with us on various studies in 2018.

In 2018, six articles and three abstracts were published by the department staff. Meanwhile, data analysis is ongoing for several studies. Moreover, three oral presentations and ten poster presentations were accepted from UNRWA for the tenth Lancet Palestine Health Alliance Conference.

In 2019, we continue to develop a better scientific foundation for efficient and effective health care for Palestine refugees and to advocate for support to the Agency by improving the number and the quality of publications.

Gender Mainstreaming

Gender Concerns and Gender Mainstreaming in the Health programme

In accordance with the UNRWA Gender Policy adopted in 2007 and the UNRWA Gender Equality Strategy (GES) 2016-2021, in 2018 the HP continued to work on integrating gender mainstreaming at HCs in all fields. The initiatives as per priority (field-specific) in the Gender Action Plans (GAP) included: 1) working towards gender parity among UNRWA health staff, 2) addressing gender-based violence (GBV) in UNRWA health centres, 3) improving men's participation in pre-conception care (PCC) and family planning (FP), and 4) increasing the number of breast cancer screenings.

Addressing the gender gap in the workforce

Gender parity has not been reached in all fields of UNRWA's operations. The percentage of female staff per field varies greatly from 33 per cent in Jordan to 61 per cent in West Bank. To address the gender gap among health staff, the HD encourages the recruitment of respective underrepresented gender positions, while remaining mindful of the need for a competitive and transparent selection process. However, the staffing structure in UNRWA health centres is similar to what can be observed in host countries, reflecting old stereotypes regarding positions occupied by women and men. Nurses are primarily women and medical officers are mostly men. To tackle these challenges, UNRWA is working to ensure that recruitment procedures are more gender sensitive and to enhance the capacity of interview panels to carry out gender sensitive interviews. In addition, advertised positions have been revised to adopt gender-neutral language.

Mainstreaming Gender-Based Violence (GBV) Concerns for the Health Programme

In line with Agency-wide efforts to address GBV since 2009, the HP has sought to embed the identification and referral of GBV survivors to services they may need as part of its programme.

In order to further strengthen the reproductive health and gender based violence services provided at UNRWA clinics, the HP developed the project 'Prioritizing Reproductive Healthcare for Youth and Gender Based Violence (GBV) in UNRWA Health Services' funded by USG/PRM. Mindful of increased need to strengthen staff capacity to ensure protection of the dignity and lives of refugee youth living in all fields, the overall objective of this project is to improve reproductive health of youth and GBV services provided by UNRWA in order to ensure better access to quality, comprehensive primary health care for Pales tine refugees, and

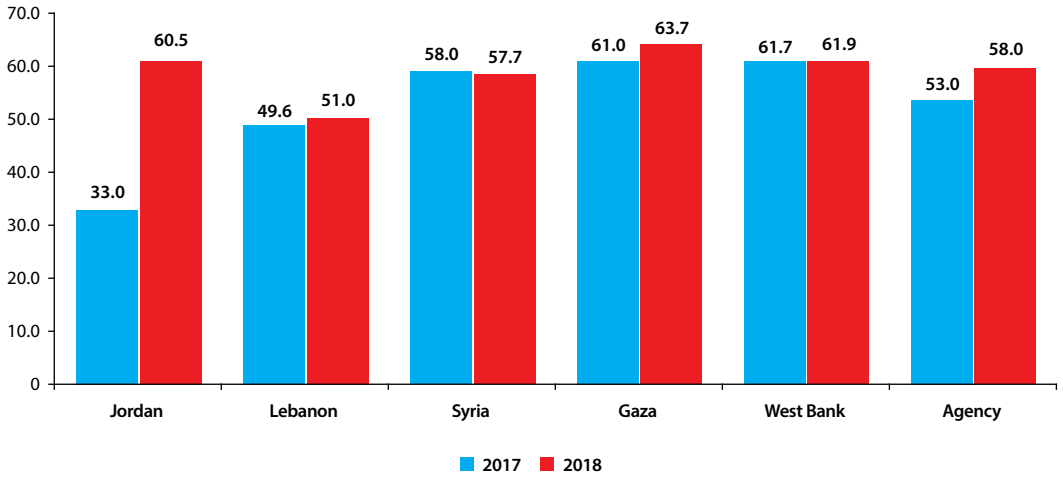


Figure 16- Percentage of female staff at UNRWA health centres, 2018

to provide education on reproductive health and GBV in UNRWA schools.

The major activities of this project include:

1. Equipping health centres with needed equipment including ultrasound devices, IUDs and stabilizers.
2. Revision of training modules and capacity building of health and education staff in order to ensure quality health services provision for reproductive health and GBV (training 3,000 UNRWA health staff and 702 education staff in Jordan, Lebanon, Syria, Gaza, and West Bank on relevant youth-friendly reproductive healthcare services).
3. Health education and promotion through outreach campaigns, and production and distribution of material focused on reproductive health and GBV in order to improve awareness.
4. Conducting operational research in order to identify key areas for further improvement.
5. Generate evidence for future planning.

The HP is working closely with the Gender Section to make sure the products and developed standards of the multi-year project to address GBV across the Agency ("Building Safety: Mainstreaming GBV Interventions into Emergency Preparedness, Prevention and Response") are reflected in the project activities. The Gender Section is part of the Technical Committee established by the health project that, with the consultancy group, will develop the various health related GBV products. These product outputs will be used to adapt the capacity building package from the Building Safety project that were provided to the consultants.

Including men in pre-conception care (PCC) and family planning (FP)

UNRWA is committed to improve gender-sensitive health services and to responding to varying needs of women, men, boys and girls. As part of its efforts to enhance the coverage and quality of maternal and child health services, a priority intervention is to include men in pre-conception care (PCC) and family planning at UNRWA HCs. This initiative works at the community level, through raising awareness, and at staff level through offering them with training. Engaging men in PCC and FP aims at improving maternal and child health by increasing men's understanding of the importance of FP and to empower women in making decisions related to conception together with their husbands. In Syria, the UNRWA HP continued working on men's involvement having 1,135 couples engaged in pre-conception care and 1,024 in FP. This was complemented by in-job awareness sessions during supervision visits to encourage staff to highlight the importance of including men to their clients. In Gaza, 24 mixed family planning awareness sessions were conducted for about 500 couples. In Jordan, the Relief and Social Services Programme, in collaboration with the HP, enhanced understanding of 455 Palestine refugees (380 females and 75 males) on reproductive health, family planning and better parenting through workshops conducted at the Women Programme Centres (WPCs). For the first time, husbands attended preconception care and family planning activities.

Breast cancer screenings and other reproductive health-related initiatives

In 2018, 98.2 per cent of pregnant women in Gaza attended at least four pre-conception care sessions, one major outcome of which is its contribution to the low number of maternal deaths during the re-

porting year. Further, 82 breast cancer awareness sessions were carried out in HCs, attended by 1,640 persons (1,240 female and 400 male) with the aim of delivering breast cancer awareness sessions to men to create a sense of commitment towards their wives in order to support them psychologically. Since 2012, the HP in Gaza has established breastfeeding rooms in 70 per cent of HCs, as well as starting a new initiative, in 2018, to equip breastfeeding/nursing rooms for staff in the compounds. Likewise, in collaboration with the WPCs, 749 women in Jordan attended sessions aimed to enhance their understanding of reproductive health and other health issues such as breast cancer, high blood pressure, diabetes, nutrition, as well as better parenting. Breast feeding rooms were established in 8 out of 26 health centres in Jordan, enabling mothers to breastfeed their infants comfortably while visiting the HC. In West Bank, several initiatives were implemented to bring together women's groups to empower them and improve their awareness on health related issues. Five groups with 53 participants were dedicated to newly-married women aiming to enhance couple's communication, wives' self-awareness, as well as education on sexual and reproductive health and rights. Other groups were established and were specifically tailored to meet pregnant women's needs. Sexual Education Groups were also implemented, taking a similar approach with emphasis on sexual development, birth control and sexually transmitted diseases. In West Bank, in 2018, the Child and Family Protection Programme held 27 sessions for three groups each with about 40 women in a joint effort between the health counsellors and health staff; specifically midwives who played the leading role in the implementation of the group activities. In Lebanon, 1,730 (1,525 female and 205 male) Palestine refugees (including 382 Palestine refugees from Syria) participated in GBV sensitization activities about child marriage and other topics in partnership with Women's Committees and Women Programme Associations.

Human Resources for Health Reform

The current UNRWA FHT approach has helped in reforming the Agency's health care provision in to be more efficient and effective service delivery model as it is today. Human resources form an important part of the FHT approach, therefore, working to provide an appropriate level of staffing in technical and non-technical cadre is crucial for ensuring and maintaining quality health services delivery.

With introduction of e-Health, the overburdening workload on clerks and other health centre staff is now reduced with a streamlined system that has improved service quality, enhanced patients' satisfaction, reduced waiting time and improved workflow. To further facilitate this change, the UNRWA HD conducted a detailed review of posting norms for health centre clerks and cleaners in 2018. The HD reviewed the distribution of clerks and cleaners working in HCs Agency-wide, filled necessary vacant posts and established norms for clerk and cleaner posts in HCs. As a result, operational standards (norms) were agreed for posting clerks based on the composition of the FHTs in terms of number of doctors per a team, and posting cleaners based on WHO Workload Indicators for Staffing Need (WISN) methodology. The standards for the number of clerks and cleaners have been communicated to field offices, and are currently being implemented at UNRWA HCs in all fields.

Finance Resources

The total Health Programme expenditure in 2018 was approximately US$ 115.9 million, corresponding to an estimated expenditure of US$ 20.9 per registered refugee, slightly higher than the 2017 total health expenditure of US$ 110.6 million or US$ 18.4 per registered refugee. The Health expenditure per capita in 2018 was US$ 38, and was calculated based on the estimated served population of UNRWA (approximately 3 million Palestine refugees) rather than the total number of registered Palestine refugees (5.5 million), higher than the 2017 per capita health expenditure of US$ 30.2 . The Agency-wide health expenditure is lower than the WHO recommendation of US$ 40-50 per capita expenditure for the provision of basic health services in the public sector.

In 2018, a large difference in health expenditure per registered refugee per field was identified, the highest was Lebanon (US$ 49.4) and the lowest in Jordan (US$ 9.4). This is in correlation to the difference in dependence of Palestine refugees on UNRWA services in each field. Palestine refugees in Lebanon do not have access to public health services and cannot afford the cost of treatment at private facilities. Conversely in Jordan, UNRWA Registered Palestine refugees have full access to Government social and health services, and therefore are less reliant on Agency health services.

UNRWA provides comprehensive primary health care delivered through 144 HCs Agency-wide. Tertiary care is provided via referrals and contracts with MoH and private hospitals across the five fields. In 2018, hospital services represented 22 per cent of the total Health Programme Budget. Although currently low, hospitalisation expenditure is expected to become a major challenge for the Agency, with rising Palestine refugee population, increasing prevalence of NCDs, worsening socio-economic status of the fields and high hospitalization costs, is expected to dramatically increase the overall hospitalization expenditure in the coming next few years.

Table 16- Health expenditure per registered Palestine refugee, 2018 regular budget (US$)

Year	Jordan	Lebanon	Syria	Gaza Strip	West Bank	Agency
2017	9.0	42.9	10.0	22.8	25.1	18.4
2018	9.4	49.4	14.5	24.6	32.8	20.9

UNRWA - Financial Crisis

In 2018, the Agency faced an acute funding shortage after the United States, its single largest contributor announced that its annual contribution to UNRWA would be US$ 60 million, a reduction by US$ 300 million. The resulting financial crisis has been unprecedented, and threatened general education provided for 525,000 students, essential primary health care for 3 million patients, and food assistance for 1.7 million refugees.

In response, UNRWA launched the #Dignity Is Priceless campaign aimed to mobilize donations from states and civil society worldwide to keep open UNRWA installations and maintain essential services provided to Palestinian refugees. By the end of April 2018, the UN Secretary-General's office reported that US$ 100 million had been committed to UNRWA by the states that attended the Rome Extraordinary Ministerial Conference, Preserving Dignity and Sharing Responsibility - Mobilizing Collective Action for UNRWA. In total, in 2018, more than 40 states, donors and institutions contributed or pledged an additional US$ 382 million, reducing the shortfall to US$ 64 million.

Yet a lot of work remains to fully close the critical shortfall. The Secretary-General encourages all Member States and the private sector to provide support to UNRWA in order to close the still critical funding shortfall. UNSYG reiterates that the services provided by UNRWA to Palestine refugees are essential and contribute to bring stability to the region.

Table 17- Breakdown of budget and expenditure by sub-programme

Sub Program	Sub Sub-Program description	Jordan		Lebanon		Syria		Gaza	
		Budget manage 2	Actual expenditure	Budget manage 2	Actual expenditure	Budget manage 2	Actual expenditure	Budget manage 2	Actual expenditure
Hospitalization Services	Qalqilia Hospital								
	Secondary Hospital Services	1,180,815	1,142,198	13,557,450	13,550,794	1,587,162	1,163,983	1,316,440	1,316,329
	Tertiary Health Care			300,000	185,838				
Total Hospitalization Services		**1,180,815**	**1,142,198**	**13,857,450**	**13,736,632**	**1,587,162**	**1,263,983**	**1,316,440**	**1,316,329**
Primary Health Care (FHT)	Communicable Diseases		38,618	2,091	104,024				(82)
	Disability Screening and Rehabilitation	85,686	75,778			12,018	12,003	945,828	945,782
	Family Health	13,399,736	14,509,733	6,219,256	6,646,809	4,694,590	5,000,625	23,339,046	24,746,311
	Laboratory Services	1,395,288	1,464,596	777,552	676,339	632,579	605,084	2,171,069	2,069,856
	Maternal Health & Child Health Services		6,240		25				291
	Mental Health				9,698				37,607
	Non-Communicable Diseases								171,926
	Oral Health	1,706,403	1,616,128	846,657	857,176	462,808	457,300	1,357,025	1,397,222
	Pharmaceutical Services	1,540,011	1,540,010	823,119	823,118	431,397	431,396	1,678,674	1,678,674
	Psychosocial Support Programme							1,524,166	1,524,079
	Radiology Services	21,074	21,074	99,833	99,832			118,092	118,092
	School Health Services	252,324	252,324					413,867	413,867
Total Primary Health Care (FHT)		**18,400,523**	**19,524,501**	**8,768,508**	**9,217,020**	**6,233,392**	**6,506,409**	**3,1547,767**	**31,547,767**
Programme Management		412,761	413,178	519,790	531,479	400,847	336,198	482,954	482,897
Total Programme Management		412,761	413,178	519,790	531,479	400,847	336,198	482,954	482,897
Grand Total		19,994,100	21,079,877	23,145,748	23,485,131	8,221,401	8,106,590	33,347,162	34,902,853

Table 17- Breakdown of budget and expenditure by sub-programme

Sub Program	Sub Sub-Program description	West Bank		HQ		Total	
		Budget manage 2	Actual expenditure	Budget manage 2	Actual expenditure	Budget manage 2	Actual expenditure
Hospitalization Services	Qalqilia Hospital	2,894,511	3,035,272			2,894,511	3,035,272
	Secondary Hospital Services	5,033,000	5,030,938			22,674,867	22,304,243
	Tertiary Health Care					300,000	185,838
Total Hospitalization Services		**7,927,511**	**8,066,210**			**25,869,378**	**25,525,352**
Primary Health Care (FHT)	Communicable Diseases		1,385			2,091	143,946
	Disability Screening and Rehabilitation	484,379	466,225			1,527,911	1,499,789
	Family Health	12,409,017	12,851,212			60,061,644	63,754,690
	Laboratory Services	2,303,024	2,048,747			7,279,513	6,864,622
	Maternal Health & Child Health Services					-	6,556
	Mental Health					-	47,305
	Non-Communicable Diseases					-	171,926
	Oral Health	976,968	929,544			5,349,860	5,257,371
	Pharmaceutical Services	1,697,191	1,697,191			6,170,393	6,170,389
	Psychosocial Support Programme	530,128	530,128			2,054,295	2,054,208
	Radiology Services	153,914	153,914			392,914	392,912
	School Health Services	77,001	77,001			743,192	743,192
Total Primary Health Care (FHT)		**18,631,621**	**18,755,347**			**83,581,812**	**87,106,903**
Programme Management		944,866	944,460	718,737	608,918	3,479,955	3,317,131
Total Programme Management		944,866	944,460	718,737	608,918	3,479,955	3,317,131
Grand Total		27,503,997	27,766,017	718,737	608,918	112,931,145	115,949,386

SECTION 4 – DATA

Part 1 - Agency wide trends for Selected Indicators

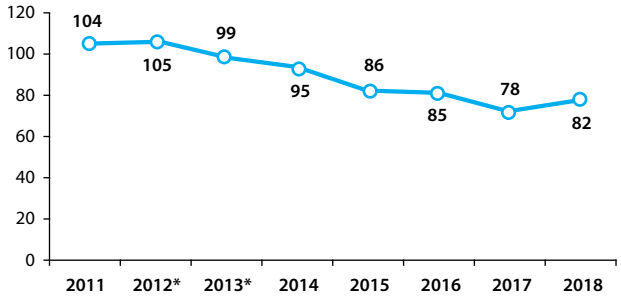


Figure 17- Average daily medical consultations per doctor

**Data from Syria is not included*

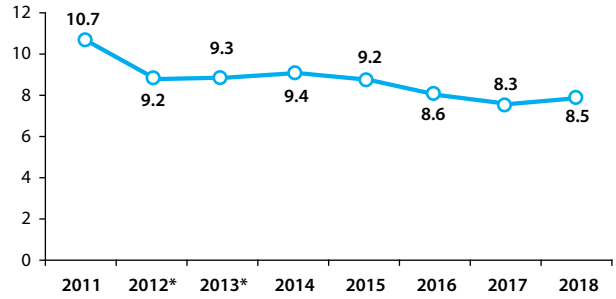


Figure 18- No. of outpatient consultations (million)

** Data from Syria is not included*

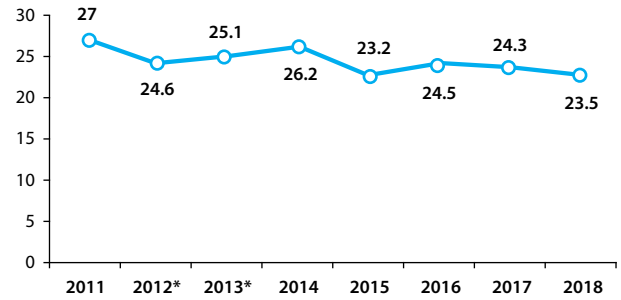


Figure 19- Antibiotics prescription rate

** Data from Syria is not included*

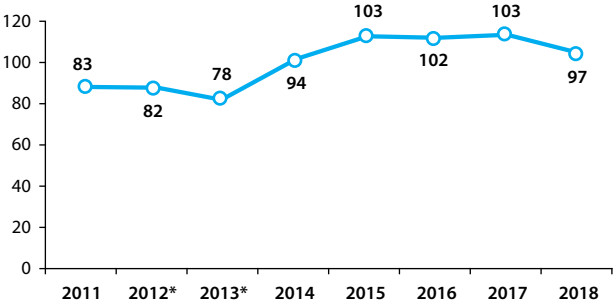


Figure 20- No. of hospitalizations, including Qalqilia hospital (in thousand)

** Data from Syria is not included*

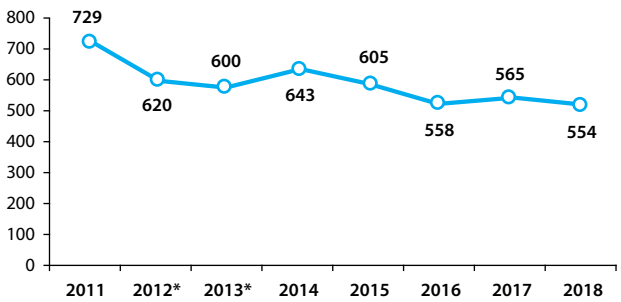


Figure 21- No. of dental consultations (thousand)

** Data from Syria is not included*

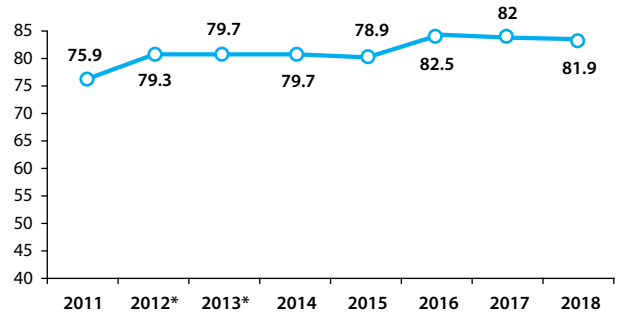


Figure 22- % of pregnant women registered during the 1st trimester

** Data from Syria is not included*

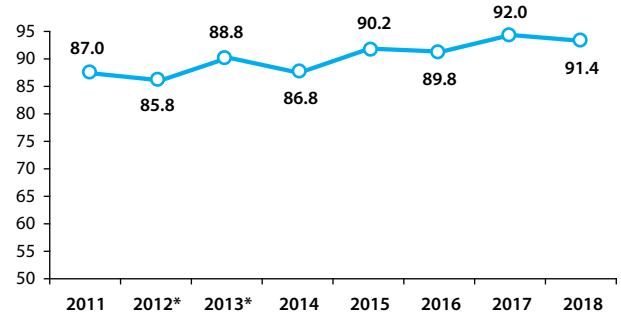


Figure 23- % of pregnant women attending at least 4 ANC visit

** Data from Syria is not included*

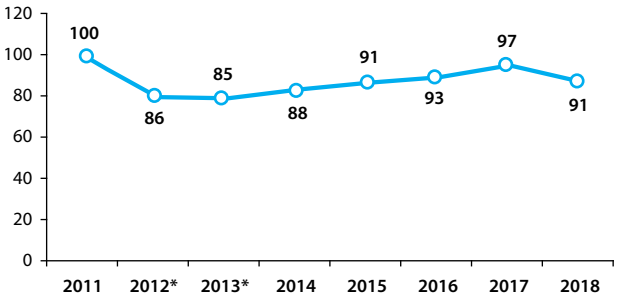


Figure 24- No. of newly registered pregnant women (thousand)

** Data from Syria is not included*

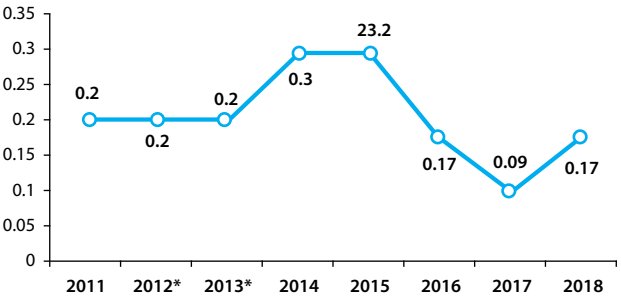


Figure 25- % of delivers with unknown outcome

** Data from Syria is not included*

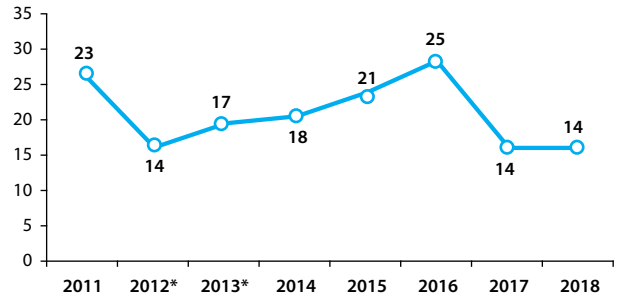


Figure 26- No. of maternal deaths

** Data from Syria is not included*

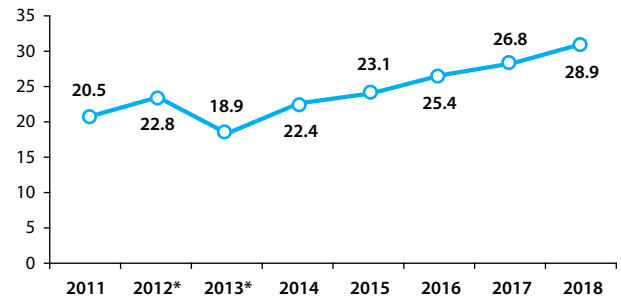


Figure 27- % of caesarean section deliveries

** Data from Syria is not included*

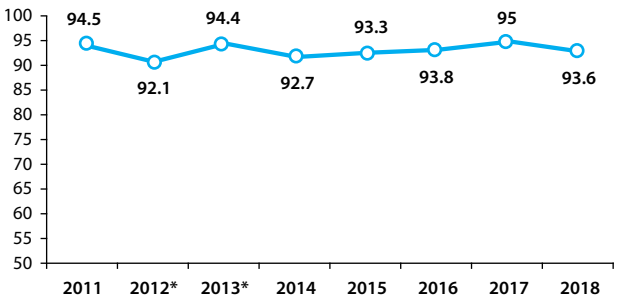


Figure 28- % of women attending PNC within 6 weeks of delivery

** Data from Syria is not included*

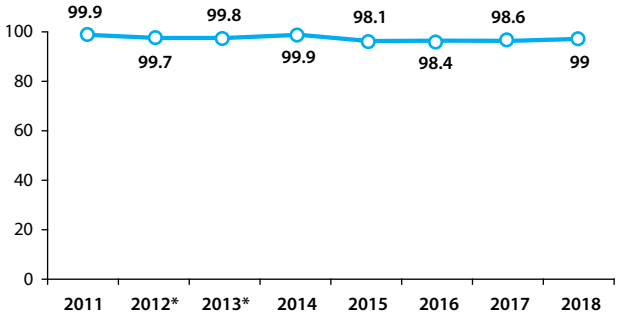


Figure 29- % of pregnant women protected against tetanus

** Data from Syria is not included*

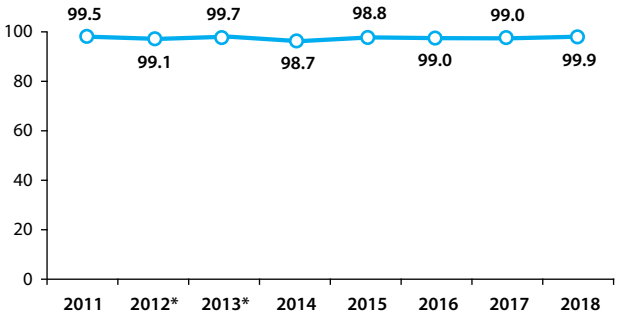


Figure 30- % of deliveries in health institutions

** Data from Syria is not included*

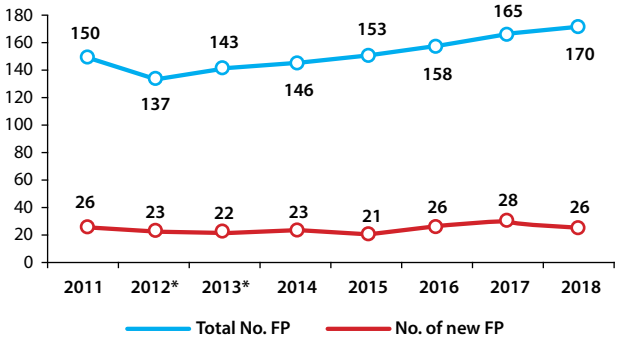


Figure 31- New & total no. of family planning acceptors (thousand)

** Data from Syria is not included*

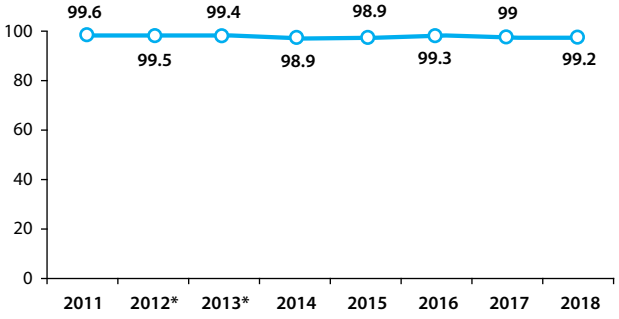


Figure 32- % of children 18 months old received all EPI booster

** Data from Syria is not included*

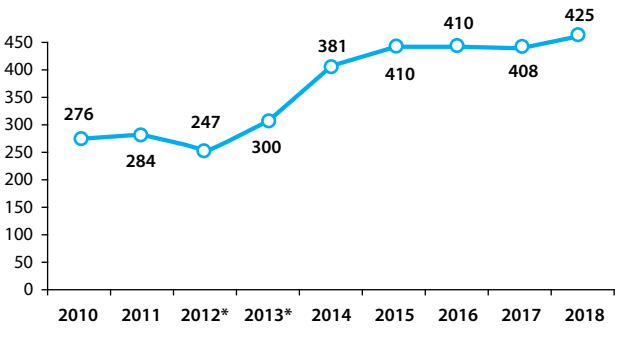


Figure 33-No. of children 0-5 years under supervision (thousand)

** Data from Syria is not included*

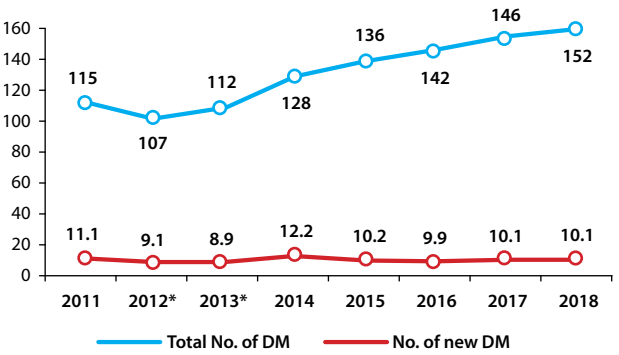


Figure 34- New & total no. of patients with diabetes (thousand)

** Data from Syria is not included*

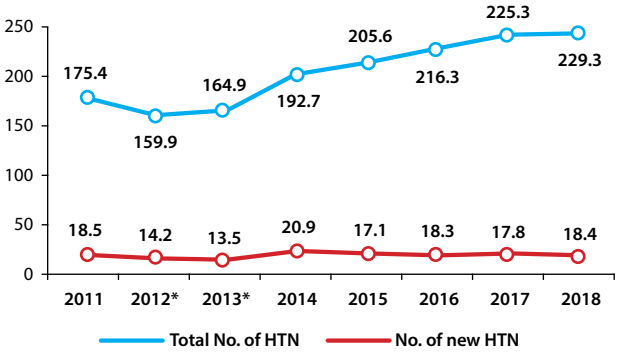


Figure 35- New & total no. of patients with hypertension (thousand)

** Data from Syria is not included*

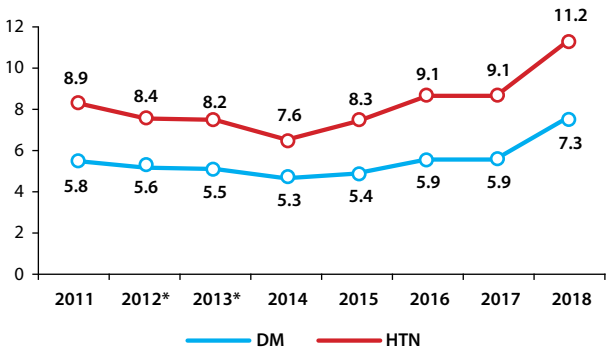


Figure 36- Prevalence of NCD among population served > 18 years

** Data from Syria is not included*

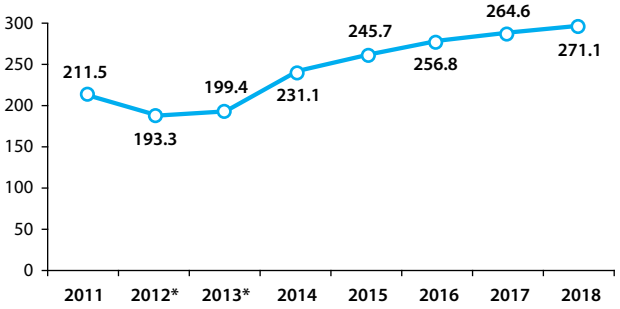


Figure 37- Total No. of all patients with diabetes and/ or hypertension

** Data from Syria is not included*

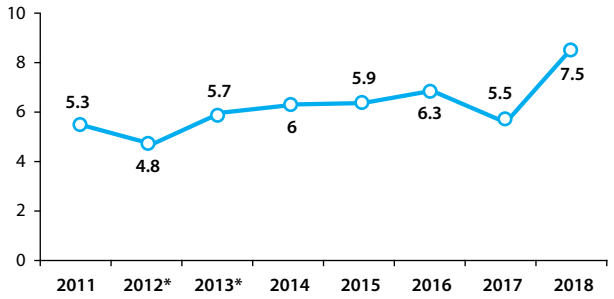


Figure 38- % of NCD patients defaulters

** Data from Syria is not included*

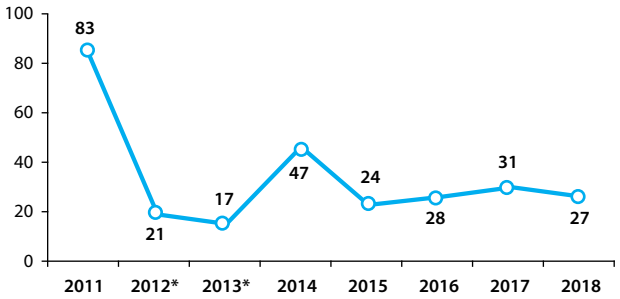


Figure 39- % of children 18 months old received all EPI booster

** Data from Syria is not included*

Part 2- CMM (2016-2021) Indicators

Table 18-Selected CMM indicators 2018

SO2	Indicator	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Refugees› health is protected and the disease burden is reduced	Prevalence of diabetes among population served, 18 years and above	8.0	7.0	5.9	6.7	8.9	7.3
	Percentage of DM patients under control per defined criteria	29.0	56.8	44.1	30.0	25.6	31.0
	Average daily medical consultation per doctor	86	84	82	82	76	82
	Average consultation time per doctor	2.2	2.7	NA	3.1	3.5	2.9
	Number of HCs fully implementing eHealth system	26	27	11	22	43	129
	Percentage of NCD patients coming to HC regularly	76.7	66.3	NA	81.7	72.1	74.2
	Percentage of NCD patients with late complications	9.4	6.4	10.0	11.5	10.0	10.1
	Number of EPI vaccine preventable disease outbreaks	0	0	0	0	0	0
	Percentage of women with live birth who received at least 4 ANC visits	85.2	94.1	70.1	98.2	92.7	91.4
	Percentage of post-natal women attending PNC within 6 weeks of delivery	86.5	97.9	81.8	100.	91.4	93.6
	Percentage Diphtheria + tetanus coverage among targeted students	96.5	99.2	98.2	100	100	99.1
	Antibiotic prescription rate	22.4	24.8	30.1	23.0	19.8	23.5
	Percentage of HCs with no stock out of 12 tracer medicines	98.2	100	78.1	602	82.3	83.7
	Percentage of preventative dental consultations out of total dental consultations	35.8	41.2	42.2	42.9	43.1	41.0
	Percentage of targeted population 40 years and above screened for diabetes mellitus (DM)	13.1	22.3	12.5	31.3	28.5	21.7
	Number of new NCD patients (DM, HT, DM+HT)	7907	1980	3258	8839	2842	24826
	Total number of NCD patients (DM, HT, DM+HT)	79,229	27,604	33,043	89,529	41,691	271,096
	Percentage of children 18 months old that received all booster vaccines	99.0	99.8	96.4	99.6	99.8	99.2
	Number of new tuberculosis (TB) cases detected	0	3	19	4	1	27
	Percentage of 18 months old children that received 2 doses of Vitamin A	98.3	99.4	97.6	99.6	98.9	98.3
	Number of active/continuing family planning users	36,867	15,789	10,827	85,540	21,150	170,173
	Number of new enrolments in pre-conception care programme	3,453	1,958	878	32,036	2,768	41,093
	Percentage of 4th gr. school children identified with vision impairment (disaggregated by sex)	16.5	12.8	4.9	10.9	16.3	12.3
	Percentage of UNRWA hospitalization accessed by SSNP	15.5	32.6	18.8	17.8	2.7	16.2
	Hospitalization rate per 1000 served population	18.2	115.5	48.4	9.0	61.1	31.7
	Hospitalization unit cost	86.9	418	153.6	133.1	208.0	145.4

Part 3 – 2018 Data tables

Table 19 – Aggregated 2018 data tables

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
18.1 – DEMOGRAPHICS						
Population of host countries in 2018[5]	9,702,535	6,082,357	18,269,868	4,684,777		38,739,537
Total number of registered refugees	2,242,579	475,075	560,139	1,421,282	846,465	5,545,540
Refugees in host countries (%)	23.1	7.8	3.1	48.4		13.6
Refugees accessing (served population) UNRWA health services (%/no.)	805,527 (36%)	239,044 (50%)	367,539 (66%)	1,219,742 (86%)	418,145 (49%)	3,049,996 (55%)
Growth rate of registered refugees (%)	1.6	1.2	1.5	2.5	2.2	1.9
Children below 18 years (%)	26.3	22.7	29.2	42.5	28.4	30.8
Women of reproductive age: 15-49 years (%)	28.4	26.0	27.4	24.4	28.0	27.0
Population 40 years and above (%)	36.1	42.9	34.8	22.9	34.4	32.9
Population living in camps (%)	18.4	57.0	34.7	41.8	30.3	31.2
Average family size[6]	5.2	4.7	4.8	5.6	5.6	5.3
Aging index (%)	55.6	74.0	37.7	17.7	47.2	39.8
Fertility rate	3.2	2.7	2.7	3.6	3.6	3.2
Male/female ratio	1.0	1.0	0.96	1.02	0.97	1.0
Dependency ratio	52.3	57.9	63.4	91.2	73.1	65.6
18.2- HEALTH INFRASTRUCTURE						
Primary health care (PHC) facilities (no.):						
Inside official camps	12	14	12	11	20	69
Outside official camps	14	13	14	11	23	75
Total	26	27	26	22	43	144
Ratio of PHC facilities per 100,000 population	1.2	5.7	4.6	1.5	5.1	2.6
Services within PHC facilities (no.):						
Laboratories	26	18	19	22	43	128
Dental clinics: - Stationed units	31	21	18	19	24	113
Dental clinics: - Mobile units	4	1	1	5	0	11
Radiology facilities	1	4	0	7	8	20
Physiotherapy clinics	1	0	0	11	6	18
Hospitals	-	-	-	-	1	1
Health facilities implementing E-health	26	27	11	22	43	129
STRATEGIC OBJECTIVE 1						
18.3 - OUTPATIENT CARE						
(a).Outpatient consultations medical officer (no.)						
First visits Male	164,041	92,903	81,409	405,778	115,586	859,717
Female	275,744	128,099	107,506	496,072	186,526	1,193,947

5. Sources UNRWA Registration Statistical Bulletin of 2018, and https://data.worldbank.org/indicator/sp.pop.totl, last accessed on 5/5/2019
6. Current contraceptive practices among mother of children 0-5 years survey conducted in 2015

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Total first visits	439,785	221,002	188,915	901,850	302,112	2,053,664
Repeat visits Male-	392,318	317,465	277,368	1,309,053	269,157	2,565,361
Female-	724,407	443,800	375,682	1,813,094	464,778	3,821,761
Total repeat visits	1,116,725	761,265	653,050	3,122,147	733,935	6,387,122
Sub-total (a)	1,556,510	982,267	841,965	4,023,997	1,036,047	8,440,786
Ratio repeat to first visits	2.5	3.4	3.5	3.5	2.4	3.1
(b) Outpatient consultations specialist (no.)						
Gyn.& Obst.	27,503	17,900	13,945	9,245	5,334	73,927
Cardiology	2,998	4,649	114	13,477	0	21,238
Others	4	15,151	0	4,885	100	20,140
Sub-total (b)	30,505	37,700	14,059	27,607	5,434	115,305
Grand total (a) + (b)	1,587,015	1,019,967	856,024	4,051,604	1,041,481	8,556,091
Average daily medical consultations / doctor[7]	86	84	82	82	76	82
18.4 - INPATIENT CARE						
Patients hospitalized -including Qalqilia (no.)	14,687	27,603	17,772	11,019	25,440	96,521
Average Length of stay (days)	1.6	2.3	1.7	1.5	1.9	1.9
Age distribution of admissions (%):-						
0-4 yrs	0.1	15.9	3.1	8.7	15.7	10.3
5-14 yrs	1.8	8.1	10.2	7.4	49.9	18.5
15-44 yrs	94.5	32.3	52.1	57.5	25.4	46.5
< 45 yrs	3.7	43.7	34.5	26.4	8.9	24.8
Sex distribution of admissions (%):						
Male	3.5	45.1	43.3	34.5	28.5	32.8
Female	96.5	54.9	56.7	65.5	71.5	67.2
Ward distribution of admissions (%):						
Surgery	1.1	24.1	53.2	47.6	18.1	27.1
Internal Medicine	6.1	58.4	14.4	3.3	39.3	31.0
Ear, nose & throat	1.3	3.3	3.7	0.1	0.0	1.8
Ophthalmology	0.2	3.8	15.2	11.6	4.5	6.4
Obstetrics	91.4	10.4	13.5	37.4	38.1	33.7
18.5 - ORAL HEALTH SERVICES						
Dental curative consultation – Male (no.)	52,571	20,299	22,780	115,126	16,439	227,215
Dental curative consultation – Female (no.)	90,095	25,903	35,751	152,233	22,940	326,922
(a) Total dental curative consultations (no.)	142,666	46,202	58,531	267,359	39,379	554,137
Dental screening consultations – Male (no.)	26,892	12,551	16,956	62,994	9,349	128,742
Dental screening consultations – Females (no)	52,512	19,826	25,859	137,902	20,516	256,615
(b) Total dental screening consultations (no.)	79,404	32,377	42,815	200,896	29,865	385,357

7. 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
Grand total of Dental consultations/screening (a) & (b)	222,070	78,579	101,346	468,255	69,244	939,494
% preventive of total dental consultations	35.8	41.2	42.2	42.9	43.1	41.0
Average daily dental consultations / dental surgeon	31.6	25.9	26.5	68.3	22.1	39.3
18.6 - PHYSICAL REHABILITATION						
Trauma patients	-	-	-	3,482	420	3,902
Non-Trauma patients	338	-	-	6,576	2,437	9,351
Total	338	-	-	10,058	2,857	13,253
STRATEGIC OBJECTIVE 2						
18.7 - FAMILY PLANNING SERVICES						
New family planning users (no.)	6,313	2,278	2,714	12,470	2,263	26,038
Continuing users at end year (no.)	36,867	15,789	10,827	85,540	21,150	170,173
Family planning discontinuation rate (%)	6.1	5.5	4.6	5.6	4.7	5.3
Family planning users according to method (%):						
IUD	40.3	38.7	25.4	50.4	63.7	47.2
Pills	31.8	23.5	38.4	20.4	20.0	24.3
Condoms	24.9	36.7	35.2	25.8	15.1	25.9
Spermicides	0.00	0.03	0.00	0.00	0.00	0.00
Injectables	3.0	1.1	1.0	3.3	1.2	2.7
18.8 - PRECONCEPTION CARE						
No. of women newly enrolled in preconception care programme	3,453	1,958	878	32,036	2,768	41,093
18.9 - ANTENATAL CARE						
Registered refugees (no.)	2,242,579	475,075	560,139	1,421,282	846,465	5,545,540
Expected pregnancies (no.)[8]	60,550	6,366	13,443	50,882	24,124	155,365
Newly registered pregnancies (no.)	25,357	4,619	7,415	39,709	14,174	91,274
Antenatal care coverage (%)	41.9	72.6	55.2	78.0	58.8	58.7
Trimester registered for antenatal care (%):						
1st trimester	79.5	91.8	53.5	90.0	75.0	81.9
2nd trimester	17.2	6.6	32.4	9.7	22.1	15.4
3rd trimester	3.3	1.6	14.1	0.3	2.9	2.7
Pregnant women with 4 antenatal visits or more (%)	85.2	94.1	70.1	98.2	92.7	91.4
Average no. of antenatal visits	5	6	4	7	5	6
18.10 - TETANUS IMMUNIZATION						
Pregnant women protected against tetanus (%)	97.4	96.1	98.9	100.0	99.7	99.0

8. Expected no. of pregnancies =population X CBR

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
18.11 - RISK STATUS ASSESSMENT						
Pregnant women by risk status (%):						
Low	50.5	52.1	46.6	57.3	61.6	55.0
Alert	28.9	35.4	38.5	26.0	24.8	28.1
High	20.7	12.4	14.9	16.7	13.6	16.9
18.12 - DIABETES MELLUTES AND HYPERTENSTION DURING PREGNANCY						
Diabetes during pregnancy (%)	4.9	5.8	2.8	3.4	6.9	4.4
Hypertension during pregnancy (%)	7.1	8.3	6.4	8.3	4.6	7.2
18.13 - DELIVERY CARE						
Expected deliveries (no.)	25,598	4,867	7,541	42,649	14,274	94,929
a - Reported deliveries (no.)	23,489	4,407	7,183	39,282	13,388	87,749
b- Reported abortions (no.)	2,103	460	239	3,367	853	7,022
a+b - Known delivery outcome (no.)	25,592	4,867	7,422	42,649	14,241	94,771
Unknown delivery outcome (no. / %)	6 (0.02%)	0	119 (1.58%)	0	33 (0.23%)	158 (0.17%)
Place of delivery (%):						
Home	0.1	0.0	1.2	0.0	0.0	0.1
Hospital	99.95	99.95	98.83	100	99.99	99.88
Deliveries in health institutions (%)	99.9	100	98.8	100	100	99.9
Deliveries assisted by trained personnel (%)	100	100	99.8	100	100	100
18.14 - MATERNAL DEATHS						
Maternal deaths by cause (no.)						
Pulmonary Embolism	3	-	1	-	-	4
Haemorrhage	1	-	-	1	1	3
Heart Disease	2	-	-	-	-	2
Septicaemia	1	-	1	-	-	2
Severe anaemia	-	-	1	-	-	1
Bronchial asthma	-	-	-	1	-	1
Epilepsy	-	-	-	-	1	1
Total maternal deaths	7	0	3	2	2	14
Maternal mortality ratio per 100,000 live births	29.5	0.0	41.6	5.0	14.8	15.8
C-Section among reported deliveries (%)	27.9	49.4	63.2	20.5	29.8	28.9
18.15 - POSTNATAL CARE						
Post-natal care coverage (%)	86.5	97.9	81.8	100.	91.4	93.6
18.16 - CARE OF CHILDREN UNDER FIVE YEARS						
Registered refugees (no.)	2,242,579	475,075	560,139	1,421,282	846,465	5,545,540
Estimated surviving infants (no.)[9]	59,339	6,271	13,064	49,742	23,838	152,253
Children < 1 year newly registered (no.)	25,330	4,869	7,121	40,441	11,330	89,091
Children < 1 year coverage of care (%)	42.7	77.6	54.5	81.3	47.5	58.5
Children 1- < 2 years newly registered (no.)	25,792	4,469	7,720	42,657	11,455	92,093
Children 2- < 5 years newly registered (no.)	25,498	8,829	14,747	123,262	22,505	194,841

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

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Total children 0-5 years under supervision (no.)	121,485	22,349	30,115	200,250	50,615	424,814
18.17 - IMMUNIZATION COVERAGE						
Immunization coverage children 12 months old (%):						
BCG	100.0	99.8	99.8	99.9	100.0	99.9
IPV	99.8	NA	98.5	99.9	99.8	99.8
Poliomyelitis(OPV)	99.8	100.0	98.5	99.9	100.0	99.8
Triple (DPT)	99.8	100.0	98.5	99.6	100.0	99.7
Hepatitis B	99.8	100.0	98.5	99.9	100.0	99.8
Hib	99.8	100.0	98.5	NA	NA	99.6
Measles	99.8	100.0	98.3	NA	NA	99.6
All vaccines	99.8	100.0	99	99.9	100.0	99.8
Immunization coverage children 18 months old - boosters (%)						
Poliomyelitis(OPV)	99.0	100.0	96.4	99.6	99.9	99.3
Triple (DPT)	99.0	100.0	96.4	99.5	99.5	99.2
MMR	99.0	99.4	96.4	99.6	99.9	99.2
All vaccines	99.0	99.8	96.4	99.6	99.8	99.2
18.18- GROWTH MONITORING AND NUTRIONAL SURVEILLANCE						
Prevalence of underweight among children aged <5 years	4.38	4.86	5.67	6.8	3.78	5.56
Prevalence of stunting among children aged <5 years	8.66	8.1	6.23	10.6	6.93	9.17
Prevalence of wasting among children aged <5 years	3.36	7.31	2.36	7.6	3.57	5.56
Prevalence of overweight/obesity among children aged <5 years	7.47	11.30	1.06	7.8	7.21	7.36
18.19 - SCHOOL HEALTH						
4th grade students screened for vision (No.) :						
Boys	6,066	1,845	1,963	15,581	2,247	27,702
Girls	6,141	1,945	2,125	14,822	3,129	28,162
Total	12,207	3,790	4,088	30,403	5,376	55,864
4th grade students with vision impairment (%)						
Boys	14.6%	12.7%	4.5%	10.2%	16.9%	11.5%
Girls	18.3%	13.0%	5.2%	11.6%	15.8%	13.2%
Total	16.5%	12.8%	4.9%	10.9%	16.3%	12.3%
7th grade students screened for vision (No.) :						
Boys	5,808	1,617	1,730	14,355	2,254	25,764
Girls	5,642	1,680	1,802	13,834	3,115	26,073
Total	11,450	3,297	3,532	28,189	5,369	51,837
7th *grade* students with vision impairment (%)						
Boys	13.8%	12.6%	4.5%	11.1%	14.2%	11.6%
Girls	17.6%	18.0%	5.6%	17.6%	17.3%	16.8%
Total	15.7%	15.3%	5.0%	14.3%	16.0%	14.2%

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
18.20 – NON COMMUNICABLE DISEASES (NCD) PATIENTS REGISTERED WITH UNRWA						
Diabetes mellitus type I (no/%)	1,192 (1.5%)	280 (1.0%)	427 (1.3%)	1,332 (1.5%)	653 (1.6%)	3,884 (1.4%)
Diabetes mellitus type II (no/%)	11,559 (14.6%)	3,107 (11.3%)	3,317 (10.0%)	13,671 (15.3%)	6,211 (14.9%)	37,865 (14.0%)
Hypertension (no/%)	31,231 (39.4%)	13,397 (48.5%)	17,596 (53.3%)	42,072 (47.0%)	15,057 (36.1%)	119,353 (44.0%)
Diabetes mellitus & hypertension (no/%)	35,247 (44.5%)	10,820 (39.2%)	11,703 (35.4%)	32,454 (36.2%)	19,770 (47.4%)	109,994 (40.6%)
Total (no. / %)	79,229 (100%)	27,604 (100%)	33,043 (100%)	89,529 (100%)	41,691 (100%)	271,096 (100%)
18.21 – PREVALENCE OF HYPERTENSION AND DIABETES						
Served population ≥ 40 years with diabetes mellitus (%)	15.5%	12.0%	11.4%	15.7%	17.6%	14.9%
Served population ≥ 40 years with hypertension (%)	21.7%	20.8%	22.2%	24.8%	17.6%	21.9%
18.22 – MANAGEMENT						
Hypertensive patients on lifestyle management only (%)	0.9%	5.9%	0.9%	3.0%	0.2%	2.1%
Diabetes I &II patients on insulin only (%)	18.0%	10.7%	18.1%	14.1%	27.2%	17.5%
18.23 – RISK SCORING						
Risk status - patients with diabetes mellitus type 1 (%):						
Low	55.3%	62.2%	68.3%	66.0%	66.4%	62.5%
Medium	41.7%	34.0%	26.8%	32.9%	30.7%	35.3%
High	3.0%	3.7%	4.9%	1.1%	2.9%	2.2%
Risk status - patients with diabetes mellitus type 2 (%):						
Low	16.6%	25.7%	25.5%	25.1%	28.9%	22.7%
Medium	60.3%	53.1%	59.8%	59.1%	58.1%	58.9%
High	23.1%	21.2%	14.6%	15.8%	13.0%	18.4%
Risk status - patients with hypertension (%):						
Low	6.2%	6.4%	15.8%	5.8%	22.5%	7.4%
Medium	44.0%	48.2%	54.1%	47.0%	60.1%	47.1%
High	49.8%	45.5%	30.1%	47.2%	17.4%	45.6%
Risk status - patients with diabetes & hypertension (%):						
Low	18.1%	22.7%	23.6%	25.4%	7.5%	21.9%
Medium	55.6%	55.1%	50.0%	60.1%	50.3%	57.1%
High	26.2%	22.2%	26.5%	14.5%	42.2%	21.0%
Risk factors among NCD patients (%):						
Smoking	14.7%	25.2%	28.1%	8.7%	10.8%	13.0%
Physical inactivity	66.2%	31.8%	18.3%	51.9%	36.7%	50.5%
Obesity	43.3%	51.3%	44.8%	56.8%	60.2%	52.5%
Raised cholesterol	42.9%	32.0%	37.3%	48.6%	45.6%	43.5%
18.24 – LATE COMPLICATIONS AMONG NCD PATIENTS (%)						
Diabetes mellitus type I	1.0	1.1	1.7	1.0	2.2	1.3
Diabetes mellitus type II	4.0	3.7	7.2	6.3	5.3	5.3
Hypertension	5.5	4.9	8.9	8.2	7.1	7.0
Diabetes mellitus & hypertension	14.4	9.0	14.0	18.4	13.7	15.2

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
All NCD patients	9.4	6.4	10.0	11.5	10.0	10.1
18.25 – DEFAULTERS						
NCD patients defaulting during (no.)	6,694	2,846	3,131	4,428	2,985	20,084
NCD patients defaulting during 2018/total registered end 2017 (%)	8.6%	9.5%	9.2%	5.3%	7.2%	7.5%
18.26 - FATALITY						
Reported deaths among registered NCD patients (%)	779 (1.0%)	576 (1.9%)	360 (1.1%)	1,153 (1.4%)	631 (1.5%)	3,499 (1.3%)
Reported deaths among registered NCD patients by morbidity (no):						
Diabetes mellitus	66	31	32	122	57	308
Hypertension	177	213	150	383	181	1,104
Diabetes mellitus & hypertension	536	332	178	648	393	2,087
Total	779	576	360	1,153	631	3,499
18.27 - COMMUNICABLE DISEASES						
Registered refugee (no.)	2,242,579	475,075	560,139	1,421,282	846,465	5,545,540
Population served (no.)	805,527	239,044	367,539	1,219,742	418,145	3,049,996
Reported cases (no.):						
Acute flaccid paralysis[10]	0	0	0	0	0	0
Poliomyelitis	0	0	0	0	0	0
Cholera	0	0	0	0	0	0
Diphtheria	0	0	0	0	0	0
Meningococcal meningitis	0	0	0	1	0	1
Meningitis – bacterial	0	3	4	5	0	12
Meningitis – viral	0	2	4	4	23	33
Tetanus neonatorum	0	0	0	0	0	0
Brucellosis	2	5	184	2	2	195
Watery diarrhoea (>5years)	5,273	7,326	3,682	4,007	4,566	24,854
Watery diarrhoea (0-5years)	5,286	5,915	4,446	1,4321	5,962	35,930
Bloody diarrhoea	40	38	53	509	232	872
Viral Hepatitis	33	23	348	586	0	990
HIV/AIDS	0	0	0	0	0	0
Leishmania	8	0	19	0	0	27
Malaria	0	0	0	0	0	0
Measles	3	13	5	4	0	25
Gonorrhoea	0	1	0	0	0	1
Mumps	1	50	28	499	728	1,306
Pertussis	0	0	12	0	1	13
Rubella	1	1	1	0	0	3
Tuberculosis, smear positive	0	0	10	0	1	11
Tuberculosis, smear negative	0	2	0	0	0	2
Tuberculosis, extra pulmonary	0	1	9	4	0	14

10. Among children <15 years

Field	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Typhoid fever	0	2	241	46	0	289
CROSSCUTTING SERVICES						
18.28 - LABORATORY SERVICES						
Laboratory tests (no.)	980,749	355,939	422,384	2,206,012	714,785	4,679,870
Productivity (workload units / hour)	44.1	44.8	29.4	64.8	52.6	47.2
18.29 - RADIOLOGY SERVICES						
Plain x-rays inside UNRWA (no.)	11	28,715	-	35,155	22,524	86,405
Plain x-rays outside UNRWA (no.)	899	3,581	4,513	-	-	8,993
Other x-rays outside UNRWA (no.)	3	6,247	-	-	-	6,250

18.30- HUMAN RESOURCES	HQ	Jordan	Lebanon	Syria	Gaza	West Bank	Agency
Health staff as at end of December 2018 (no.)							
Medical care services :							
Doctors	3	102	36	58	156	92	447
Specialist	0	7	6	5	5	23	46
Pharmacists	1	2	23	10	3	3	42
Dental Surgeons	0	30	14	20	90	18	172
Nurses	0	263	87	114	315	278	1,057
Paramedical	7	130	46	81	157	188	609
Admin./Support Staff	4	71	70	64	89	83	381
Labour category	0	92	28	64	124	90	398
Sub-total	15	697	310	416	939	775	3,152
International Staff	4	0	0	0	0	0	4
Grand total	19	697	310	416	939	775	3,156
Health personnel per 100,000 registered refugees:							
Doctors	-	4.5	7.6	10.4	11.0	10.9	8.1
Dental surgeons	-	1.3	2.9	3.6	6.3	2.1	3.1
Nurses	-	11.7	18.3	20.4	22.2	32.8	19.1

Part 4 - Selected survey indicators

Infant and child mortality survey, 2013

Table 20- Infant and child mortality survey, 2013

Indicators	Jordan	Lebanon	Gaza	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

Decade, Missed and Filled Teeth (DMFS) Survey, 2010

Table 21- Descriptive: total DS, FS and DMFS sorted by age group

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

Table 22 - DMFS, DS and FS sorted by age group and gender

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

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

Table 23 - DMFS, DS and FS sorted by field

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

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

Table 24 - Selected reproductive health survey indicators

Indicators	Jordan	Lebanon	Syria	Gaza	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

Table 25 - 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	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

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

Table 26 - Selected reproductive health 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						
• 1st grade	14.4	22.3	9.1	36.4	14.6	19.5
• 2nd grade	11.6	16.9	6.0	11.4	14.9	12

Annex1 - Health department research activities and published papers

Table 27- List of publications

S. No	Month of publication	UNRWA author(s)	Title	Citation	Type of publication	Language	Web site (if applicable)
1	February	Saadeh Rawan	Antibiotics use among Palestine refugees attending UNRWA primary health care centers in Jordan - A cross-sectional study	Travel Medicine and Infectious Disease Volume 22, 2018 March – April, Page 25-29	Journal Article	English	http://dx.doi.org/10.1016/j.tmaid.2018.02.004
2	February	Majed Hababeh, Ali Khader, Akihiro Seita	The effect of continuity of care on antibiotics prescription for Palestinian refugees in UNRWA health centres: a cross-sectional study	The Lancet, Volume 391, Special Issue 1, S19	Conference Abstract	English	https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)30344-1/fulltext
3	February	Ali Khader, Majed Hababeh, Loai Farajallah,Ishtaiwi Abu-Zayed, Mohammad Ashraf, Ghada Ballout, Akihiro Seita,	The effect of a family health-team approach on the quality of health care for Palestinian infants in Jordan: a mixed methods study	The Lancet, Volume 391, Special Issue 1, S28	Conference Abstract	English	https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)30353-2/fulltext
4	February	Saleh Fahd	Non-communicable disease risk factors in Palestine refugees in Lebanon: a descriptive study	The Lancet, Volume 391, Special Issue 1, S33	Conference Abstract	English	https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)30358-1/fulltext
5	June	Ghada Ballout, Najeeb Nada Abu-Kishk, Yassir Turki, Wafaa Zeidan, Akihiro Seita	UNRWA's innovative e-Health for 5 million Palestine refugees in the Near East	BMJ Innovations, Volume 4, Issue 3	Journal Article	English	https://innovations.bmj.com/content/4/3/128
6	June	Ali Khader, Majed Hababeh, Wafa'a Zeidan, Mariam Abd El-Kader, Ghada al-Jadba, Akihiro Seita	Stalled decline in infant mortality among Palestine refugees in the Gaza Strip since 2006	PLoS ONE 13(6): e0197314.	Journal Article	English	https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0197314
7	August	Mohammed Khalili	Metabolic Syndrome among Refugee Women from the West Bank, Palestine: A Cross-Sectional Study	Nutrients 2018, 10(8) 1118.	Journal Article	English	https://doi.org/10.3390/nu10081118
8	September	Yousef M. Shahin, Nada Abu Kishk, Yassir Turki, Suha Saleh, Akihiro Seita	Evaluation of the Microclinic Social Network Model for Palestine Refugees with Diabetes at UNRWA Health Centers	Journal of Diabetes Mellitus Vol.08 No.04(2018), Article ID:87261	Journal Article	English	http://file.scirp.org/Html/1-4300481_87261.htm
9	December	Akiko Kitamura, Julia McCahey, Gloria Paolucci, Sayed Shah, Majed Hababeh, Yousef Shahin, Akihiro Seita	Health and dignity of Palestine refugees at stake: a need for international response to sustain crucial life services at UNRWA	The Lancet, Volume 392, Issue 10165, Page 2736-2744	Journal Article	English	https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(18)32621-7.pdf

Annex 2 - Director of health and senior staff of department of health participated in the meeting/ conferences, 2018

Table 28- Director of health and senior staff of department of health participated in the Meeting/ Conferences, 2018

S. No	Month	Name of participant(s)	Conference / training	Title of Conference/Training	Title of presentation (if applicable)	Organized by	City and country of venue
1	February	Yousef Shahin	UN task force meeting on NCD	UN task force meeting on NCD	UNRWA NCD programe and initiatives	WHO, HQ	Vienna Austria
2	April	Yousef Shahin	Hepatitis Congress	Hepatitis C elimination	Hepatitis status in UNRWA,	International Liver diseases association	Paris, France
3	October	Yousef Shahin	Childhood Obesity	Childhood Obesity , Time for action	Obesity among Palestine refugees children	Juzoor and MoH , Palestine	Ramallah, Palestine
4	November	Yousef Shahin	UN task force meeting on NCD	UN task force meeting on NCD	MHPSS integration into FHT in UNRWA	WHO, HQ	Geneva, Switzerland
5	January	Majed Hababeh		International Development Research Centre / Canadian (IDRC) supported cohort of implementation research projects	Reproductive Health Needs of Palestinian Refugee Camp Girl Adolescents in West Bank and Jordan	AUB	Bierut , Lebanon
6	March	Majed Hababeh		Regional consultative meeting on early childhood development with a focus on nurturing care in the early years,		WHO, HQ	Amman, Jordan
7	March	Majed Hababeh		The Lancet Palestinian Health Alliance (LPHA) Ninth Annual Conference	Follow-up survey of oral health status of children enrolled in UNRWA schools: a cross-sectional study	LANCET	Bierut , Lebanon
8	March	Majed Hababeh		Sixth EMPHNET Regional Conference Materials	Current practices of contraceptive use among Palestine Refugee mothers of young children attending UNRWA clinics, a follow up study	EMPHNET	Amman, Jordan
9	January	Yassir Turki	Meeting	First dissemination and consultation meeting on a joint research study	NA	UNRWA HQ in cooperation with Queen Margret University & AUB, Beirut, Lebanon	Amman, Jordan

Annex 3 -Donor support to UNRWA health programm during 2018

Table 29- Donor support to UNRWA health programme during 2018

Funding Portal	Donor	US$ Amount	Title
Programme Budget	Austria	1,176,555	A Long and Healthy Life: UNRWA Life Cycle Approach to Health. Health Programme for Palestine Refugees in Gaza and West Bank
	Germany	17,065,313	Support to UNRWA for Education and Primary HealthCare of Palestine refugees in Jordan and Lebanon
	Italy	2,272,727	Supporting the provision of primary health care at UNRWA health centres in Gaza
	Japan	3,180,000	Enhancement of Human Security of the Palestine Refugees in West Bank
	Japan	2,158,928	Support to UNRWA Education, Healthcare and Emergency Assistance to Palestine Refugees in Lebanon
	Japan	7,497,780	Support to Palestine Refugees in Syria through providing essential health and education services in Syria
	Japan	2,000,000	The provision of quality health and environmental health services to Palestine refugees in Jordan
	Korea	1,000,000	Supporting the provision of primary health care at UNRWA health centres, Gaza
	Luxembourg	1,156,069	Protecting the health of Youth in Gaza
	Andalucía Government, Spain	1,249,017	Health services in Syria
	Asturias Government, Spain	71,123	Maternal healthcare in Gaza
	Barcelona City Council, Spain	85,324	Maternal and Child Healthcare program in Gaza.
	Catalonia Government, Spain	175,644	Promotion of sexual and reproductive rights of Palestinian refugee women in Gaza through access to maternal and infant health services
	Extremadura Government, Spain	233,918	Maternal Healthcare program in Gaza
	Navarra Government, Spain	210,466	Maternal and Child Health Care in Gaza
Syria Appeal	Japan	5,000,000	Support the URNWA 2018 Syria regional crisis response emergency appeal (ea) - Lebanon
	Japan	3,000,000	Support to Palestine refugees in Syria through providing essential services including quality healthcare, protection, emergency cash assistance and emergency collective shelters
	OCHA	1,944,309	Emergency Response to Palestine Refugees in Yarmouk and YBB, Syria
	OCHA	335,821	Provision of Health Services to most vulnerable Palestine refugees in South-West and Central Syria
	UNHCR	125,000	Health Assistance for Palestinian persons arriving from Syria in Egypt
Projects	France	428,395	Support to Medical Hardship fund in Lebanon
	Germany	98,098	Strengthen psychosocial Peer Support Structures for UNRWA Staff in Syria.
	Germany	182,724	Strengthening psychosocial support for Palestine refugees from Syria and Lebanon in Lebanon.
	Germany	348,584	Implementation of UNRWA Jordan Field Office's Solid Waste Management Strategy
	Germany	22,744	Development of Psychosocial Support within UNRWA Jordan Field Office
	Italy	1,704,545	Supporting core hospitalization services for Palestine refugee children in Lebanon

Funding Portal	Donor	US$ Amount	Title
	Japan	1,820,000	Expansion and improvement of UNRWA health services: access to quality, comprehensive primary health care for Palestine refugees (oPt)
	Japan	1,000,000	Expansion and improvement of UNRWA health services: access to quality, comprehensive primary health care for Palestine refugees (Syria)
	Japan	180,000	Expansion and improvement of UNRWA health services: access to quality, comprehensive primary health care for Palestine refugees (Lebanon)
	Japan	41,072	Support to UNRWA Education, Healthcare and Emergency Assistance to Palestine Refugees in Lebanon (The Monitoring, Evaluation and Reporting cost)
	Japan	2,220	Support to Palestine Refugees in Syria through providing essential health and education services in Syria (visibility)
	Japan	1,000,000	Wavel Camp improvement works, Lebanon
	Japan	4,368,546	Instalment of Photovoltaic Solar System for Primary Health Centres in Palestine Refugee Camps in Gaza
	Monaco	60,386	SUPPORT TO HEALTH CARE 0F PALESTINE REFUGEES MOST IN NEED 0F ASSISTANCE
	Basque government, Spain	458,745	SUPPORT TO MEDICAL HARDSHIP FUND IN LEBANON
	Navarra Government, Spain	94,710	Mobile Clinics projects, West Bank
	Saudi Arabia	6,500,000	Rehabilitation and maintenance of health, education & administrative facilities
	Saudi Arabia	12,891,896	Reconstruction, Furnishing and Equipping of School, Health Centres and Rehabilitation of Housing Units in West Bank in Palestine
	Saudi Arabia	8,000,000	Reconstructing, Furnishes and Equipping of Health Centres and Schools in the Hashemite Kingdom of Jordan
	Saudi Arabia	6,000,000	Construction, and equipping of school and health centre, Gaza
	Saudi Arabia	2,000,000	Comprehensive Maintenance for Jerusalem UNRWA Premises, One Health Centre and Three Schools, (2,000,000) (HC and 3 schools)
	Saudi Arabia	3,800,000	Reconstruction, Furnishing and Equipping for Nurshams Health Centre and Camp Services Office, (US$ 3,800,000),
	Saudi Arabia	4,200,000	Comprehensive Maintenance for UNRWA Schools and Health Centres, (4,200,000)
	Saudi Arabia	2,500,000	Construction, Furnishing and Equipping of One Health Centre, (2,500,000),
	Saudi Arabia	2,500,000	Comprehensive Maintenance for UNRWA Schools and Health Centres, (2,500,000)
	Saudi Arabia	1,000,000	Supplying of Fuel, (1,000,000)
	Saudi Arabia	8,000,000	Comprehensive Maintenance for UNRWA Schools and Health Centres, (US$ 8,000,000).
	UK	55,618	Hospitalization reform support and management
	IDB	1,000,000	Providing Fuel to Operate the Water Wells, Sewage Treatment Plants and Hospitals in Gaza
	UNICEF	49,975	WASH Programme in Syria
	ANERA	27,000	Reinforcing preventative and curative oral health for children, Lebanon

Funding Portal	Donor	US$ Amount	Title
	Novo Nordisk	37,088	Financial support for the diabetes research in Lebanon
	UNRWA USA National Committee	10,000	CARE Programme in Lebanon
	World Diabetes Foundation	275,632	Innovations and support in diabetes care for Palestine refugees
	Switzerland	23,750	Water testing kit
Emergency Appeal (oPt)	EU	2,170,255	Creating a Supportive Learning Environment in Gaza
	Germany	341,366	Provision of Psychosocial and Mental Support to Palestine Refugees in Gaza
	Qatar	499,779	To Sustain Health Care Services Delivery in Gaza, Procurement of Fuel
	Basque government, Spain	304,750	Strategic Framework V, Gaza
	Castellón City Council, Spain	46,839	Mobile Clinics in West Bank
	Valencia City Council, Spain	34,091	Psychosocial Activities in Gaza
	Zaragoza Regional Government, Spain	31,246	Promoting the right to have access to health services for the Palestine refugees in isolated localities in West Bank through one mobile clinic
	UAE	2,000,000	Generating Electricity through Provision of fuel to the Main Health and WASH Facilities in Gaza
	OCHA	899,973	Multi Sectorial Emergency Response to Vulnerable Communities, West Bank
	OCHA	1,012,980	Providing Fuel to support the health primary and WASH services in Gaza
	The International Arab Charity	20,904	Providing Psychosocial Support to Gaza's Children- Community Mental Health Programme
	UNRWA USA National Committee	447,035	Community Mental Health in Gaza
	UNRWA USA National Committee	106,560	Community Mental Health in Gaza
	UNRWA USA National Committee	65,686	Community Mental Health
	UNRWA USA National Committee	100,000	Lifeline for Gaza
	Deutsche Bank	21,226	Providing psychical support to Gaza's children - Community Mental Health Programme, Gaza
	ECHO	13,695,912	Integrated emergency healthcare support to vulnerable Palestine refugees in Gaza
	OCHA	390,550	Supporting vulnerable Palestine refugees' immediate health needs in Gaza
	The Big Heart Foundation	100,000	Providing Emergency Healthcare in Gaza
	UNRWA USA National Committee	20,000	Lifeline for Gaza

Annex 4 - Strategic Outcome 2: Refugees' health is protected and the disease burden is reduced

Table 30- Agency-wide Common Monitoring Matrix 2016-2021 log frame

Strategic Outcome 2	Output 2.1	Activities
	people-centred primary health care system using FHT model	
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 centres and new extensions that exceed 50% of the original Health Centres built up area (ICID) 2.1.e Percentage of HCs meeting UNRWA facilities protection design standards (ICID) 2.1.f Number of health centres 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) *Maternal health and child services* 2.1.k Percentage of women with live birth who received at least 4 ANC visits (Health)	*Outpatient* 2.1.1.a Percentage of Post Occupancy Evaluation conducted for newly constructed health centres 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 centres (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) *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 gr. school children identified with vision impairment (Health)

Strategic Outcome 2	Output 2.1	Activities
	people-centred primary health care system using FHT model	
	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, GBV, child protection) provided with health assistance (Health/Protection) 2.1.q Percentage of individuals identified as experiencing a protection risk (general protection) provided with health assistance (Health/Protection) 2.1.r Percentage of individuals identified as experiencing a protection risk (GBV) provided with health assistance (Health/Protection) 2.1.s Percentage of individuals identified as experiencing a protection risk (child protection) provided with health assistance (Health/Protection) 2.1.t Percentage of protection mainstreaming recommendations from internal protection audits implemented (Health/Protection)	2.1.1.n Unit cost per capita (Health) 2.1.1.o Number of individuals experiencing a protection risk (general protection, GBV, child protection) identified by UNRWA in health centres (Health/Protection) 2.1.1.p Number of individuals experiencing a protection risk (general protection) identified by UNRWA in health centres (Health/Protection) 2.1.1.q Number of individuals experiencing a protection risk (GBV) identified by UNRWA in health centres (Health/Protection) 2.1.1.r Number of individuals experiencing a protection risk (child protection) identified by UNRWA in health centres (Health/Protection)
	Output 2.2	**Activities**
	efficient hospital support services	
	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 31 - 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 infants + 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 e-Health module	No. of HCs implementing at least one e-Health module x 100 Total No. of HCs
% Health centres with no stock-outs of 12 tracer items	No. of HCs with no stock-outs of 12 tracer items x 100 Total no. of HCs
% Health centres with emergency preparedness plans in place	No. of HCs with emergency preparedness plan in place x 100 Total no. of targeted HCs
% Pregnant women attending at least 4 ANC visits	No. of pregnant women attending at least 4 ANC visits x 100 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
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 live births
No. of continuing family planning acceptors	No. of continuing family planning acceptors

Indicator	Calculation
% 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 diabetes patients currently registered in NCD program)
% Patients with diabetes under control according to defined criteria	No. of DM patients defined as controlled according to HbA1C or postprandial glucose criteria x 100 Total no. of DM patients
No. of new NCD patients in programme (Diabetes mellitus)	No. of new NCD patients in programme (Diabetes mellitus; Hypertension; Diabetes mellitus & Hypertension)
Total No. of NCD patients in programme (Diabetes mellitus)	Total No. of NCD patients in programme (Diabetes mellitus; Hypertension; Diabetes mellitus & Hypertension)
No. of EPI vaccine preventable diseases outbreaks	No. of EPI vaccine preventable diseases outbreaks
%18 month old children that have received all EPI vaccinations according to host country requirements	No. of children 18 months old that received all doses for all required vaccines x 100 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 5 - 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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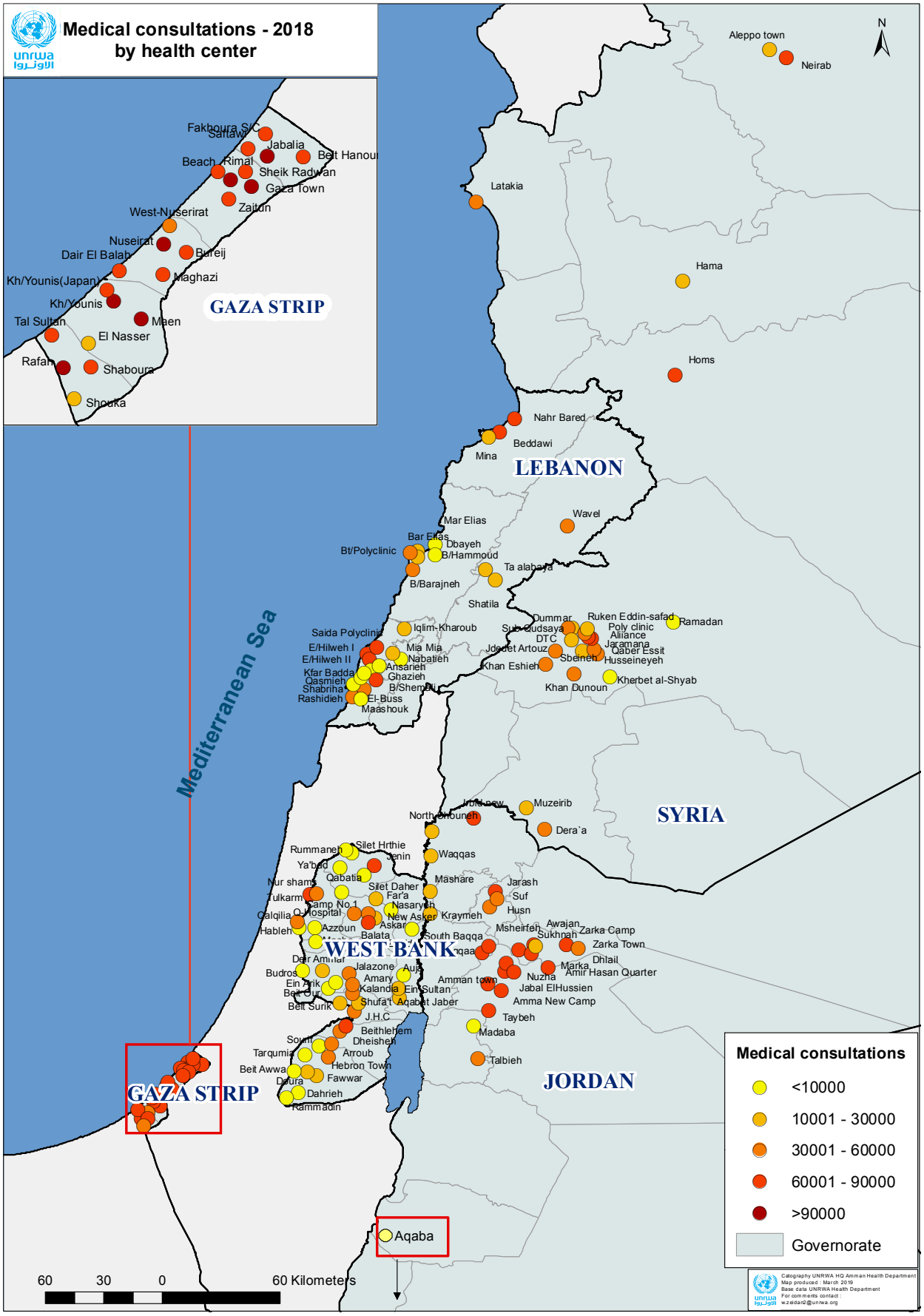
Annex 6 -Map: Medical consultations - 2018 by health centre



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