implementing the family health team approach in unrwa clinics:
case study reports from lebanon, west bank and jordan

UNRWA is a United Nations agency established by the General Assembly in 1949 and is mandated to provide assistance and protection to a population of some five million registered Palestine refugees. Its mission is to help Palestine refugees in Jordan, Lebanon, Syria, West Bank and the Gaza Strip to achieve their full potential in human development, pending a just solution to their plight.

UNRWA’s services encompass education, health care, relief and social services, camp infrastructure and improvement, microfinance and emergency assistance.

UNRWA’s health programme serves 63.5 per cent of the eligible population, approximately 3.2 million refugees.¹ This report was jointly developed by the Mailman School of Public Health, Columbia University, US and UNRWA; with special thanks to Professor Alastair K. Ager (professor of clinical population and family) and Anushka Kalyanpur (master of public health candidate).

The ageing of the Palestine refugee population and the increasing emergence of non-communicable diseases (NCDs) has created new challenges for health services administered by UNRWA. The family health team (FHT) approach offers a strategy for the provision of comprehensive primary health care, with continuity of care for the entire family through a multi-disciplinary team of service providers. This report documents the impact of the introduction of this approach on patient experiences at three UNRWA clinics. Findings suggest there is potential for the FHT approach to reduce waiting times and improve the quality and efficiency of care. The adoption of a structured appointments system, electronic health records management, and strengthened capacities for preventive care may be critical in maximising the benefits of the FHT approach.

Changing demographic and health context for Palestine refugees

According to the World Health Organization, non-communicable diseases (NCDs) such as diabetes, hypertension and cardiovascular disease accounted for 52.8 per cent of all deaths in the Middle East in 2008 and are projected to cause 70 per cent of all deaths in the region by 2030.² This situation is particularly worrisome for countries in which UNRWA operates, as NCDs accounted for 84 per cent of mortality in Jordan, 86 per cent in Syria, and 81 per cent in Lebanon in 2004.³ This change in epidemiological profile in the areas of operation is occurring along with a demographic transition of the beneficiary population. Currently, refugees under the age of 18 represent 34.6 per cent of the population, while 30 per cent are over the age of 40.

Ageing populations burdened by non-communicable diseases require long-term management and have unique health-care needs. UNRWA’s health programme is particularly relevant in this context, as the Agency supports many impoverished refugees who do not have alternative access to health services.

UNRWA’s response: the family health team approach

Responding to the changing needs of Palestine refugees in the wake of an increasing imbalance between limited resources and rising costs and demands for services, UNRWA is utilising existing resources to reform and modernise its primary health-care service delivery through the implementation of the FHT approach. As of August 2012, the FHT approach

has been piloted in 17 clinics in five fields. Preliminary results from these pilot clinics will help inform the gradual implementation of this approach more broadly across UNRWA health facilities.

The FHT approach supports the delivery of comprehensive primary health-care services and continuity of care for the entire family through a multi-disciplinary team of health providers. Each team includes at least one doctor and one or more practicing nurses, and can be expanded to include senior staff nurses, midwives, clerks, and other staff.

Prior to the implementation of the FHT approach, service delivery in UNRWA clinics followed a vertical approach whereby each clinician was responsible for providing a specific type of service such as NCD care, mother and child health (MCH), or general outpatient services. Alternatively, FHT implementation transforms service delivery into a horizontal approach, whereby a small team of providers become responsible for all aspects of care for an individual and his or her family.

During the preparation phase of implementing FHTs, staff members at all clinics are given a two- to four-week on-the-job training by peers to become acquainted with the new services they are expected to provide. This includes a task-shifting component for clinic staff. For example, nurses are able to prescribe iron supplements, folic acid, and ointments; tasks that were previously performed by the physician. Similarly, clerks perform some of the administrative tasks that used to be performed by nurses. This redistribution of tasks facilitates an equal workload among staff.

**Continuity and quality of care**

Under the FHT approach, families are allocated to teams to build up long-term relationships with providers to improve the comprehensiveness and quality of care through prevention and management of non-communicable diseases, mother and child health, and curative care across the entire patient life-cycle. It also encourages staff to become aware of environmental, socio-economic, cultural, and additional patient characteristics that could impact the health of families.

There is an emphasis on efficiency under the FHT approach, supported through the implementation of a formalised appointment system, an electronic health (e-health) records system, and the physical reorganisation of the clinic to facilitate easy navigation of service-delivery points for patients.

**Generating evidence**

To measure the impact of the FHT on patient experience, an evaluation utilising patient-flow analysis and key informant interviews was undertaken in three pilot clinics: Rashidieh Health Centre in Lebanon; Aqabat Jaber Health Centre in the West Bank; and Taybeh Health Centre in Jordan.

This evaluation aimed to generate evidence on the impact of FHTs on wait times, consultation patterns and staff perceptions in these clinics. The following five indicators were used to analyse the impact of FHTs:

1. **Average number of daily consultations with physicians:** Prior to the introduction of FHTs, physician workload was determined by type of service; physicians were responsible for treating either. NCDs, MCH, or general outpatient services. With the introduction of FHTs, physicians are responsible for treating the comprehensive needs of the patient. As a result, the patient no longer has to see multiple physicians for different ailments. In this way, the patient has one single source of information, eliminating repeat visits and unnecessary over-utilisation of services.

2. **Wait time to see physician:** Under the FHT approach, the reorganisation of the clinics, enhanced by the implementation of the appointment system, is expected to facilitate the spreading out of patient arrivals to the clinic throughout the day and the easy navigation of service points for patients. Increased organisation and efficiency aim to decrease wait time to see the physician and other clinicians.

3. **Contact time with physicians:** Less unnecessary visits to the clinic, and thus a decrease in overall daily medical consultations, improved organisation of service-delivery points, resulting in a decrease in wait time in the clinic, should allow providers more contact time with patients for counselling and discussing other socio-economic or environmental circumstances of the patient that could impact their health.

4. **Screening for NCDs:** As the team of service providers becomes acquainted with the entire family, it is anticipated that screening for NCDs should take place on a more regular basis. The frequency of such screening was thus examined.

5. **Rational use of medicines:** Repeat consultations between the same physician and patient improve the physician’s ability to control and monitor prescriptions. Improved monitoring of prescriptions aims to decrease the “drug shopper” phenomena.
The family health team

Rashidieh Health Centre, Lebanon
- Location: Rashidieh camp, Tyre region, Lebanon
- Population served: 14,979
- Number of family files: 2,647
- Date of FHT implementation: 23 January 2012

The preparation phase for implementation of the FHT approach took three months. At Rashidieh Health Centre, staff preparation also included an exchange visit to another clinic piloting the approach. Staff members were divided into teams with a physician, practical nurse, and clerk. Other staff were shared between teams. Families were allocated to one of two teams based on the location of their home. After this period of preparation, including the reorganisation of the clinic and community outreach, the FHT approach was implemented in Rashidieh on 23 January 2012.

As shown in Figure 1-1 below, a client-flow analysis conducted on June 23, 2012 with a sample size of 198 patients suggests that the wait time to see physicians decreased by 48.7 per cent while contact time with physicians increased by 46.4 per cent.\(^5\)\(^6\)

Routine data suggests that six months after implementation of the FHT approach, the number of patients seen by physicians at Rashidieh decreased by 32.5 per cent from 245 to 166.\(^7\)\(^8\) Since implementation, routine data at the clinic indicates that the antibiotic prescription rate decreased from 26.2 per cent to 20.8 per cent while the percentage of patients screened for NCDs remained the same at 1.6 per cent.

Figure 1-1. Impact of FHT approach on physician contact and wait time in Rashidieh Health Centre

Figure 1-2. Impact of FHT approach on average daily medical consultation per physician in Rashidieh Health Centre

Engaging camp residents, in particular community representatives, in awareness-raising for the new approach contributed to positive results in Rashidieh camp.

Nimer Hourani, one of the community representatives, explained: “With the help of UNRWA staff, we created a ‘Friends of Health’ committee to help publicise the idea of family health in the community. Initially, people were wary that the services they had relied on for so many years were going to change.” In response, the committee organised a small media campaign to highlight that the FHT approach was a reorganisation of services, rather than a reduction in services. Furthermore, after seeing the efficiency of the new system, particularly less waiting time in the clinic, the community has become convinced of its merits.”

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\(^5\) \(p\text{-value}<.05\)
\(^6\) Baseline data was received from UNRWA Lebanon field office based on monitoring of the clinic between January 10-12, 2011
\(^7\) \(p\text{-value}<0.005\)
\(^8\) The number of daily consultations per physician was 123 before FHT and 83 after FHT.
At Aqabat Jaber camp, the preparation phase for implementing the FHT approach also lasted three months. This included training of staff members and the assignment of one physician and two practical nurses to each team. Service-delivery points within the clinic were reorganised and minor changes were made to the infrastructure of the clinic to facilitate patients’ navigation of services through the clinic. After raising awareness about the FHT approach among the community, it was implemented on January 1, 2012.

A client-flow analysis conducted on 11 July 2012 with a sample size of 110 patients suggests that the implementation of the FHT approach has resulted in a 75 per cent decrease in wait time to see physicians while contact time with physicians has similar at 4.14 minutes. Routine data suggests that the average total number of daily consultations by physicians at Aqabat Jaber Health Centre has decreased from 130 to 122; the percentage of patients screened for NCDs has increased by 1.2 per cent (from 2.7 to 3.9 per cent); and the antibiotic prescription rate has remained at 25 per cent.

In Aqabat Jaber camp, ownership of the FHT approach is seen as a distinctive feature of the new approach. Dr. Ahmed Joubeh, the senior medical officer who has worked at the clinic for 28 years explains; “we raised awareness among patients through discussions of the approach in the health centre waiting rooms and at community events such as World Health Day festivities. Soon, community members expressed their interest in volunteering to help with the new approach,” notes Dr Ahmed. Wall-paintings by community members highlighting aspects of the new approach are an indication of community ownership of FHT services. Discussions with patients at the clinic indicated that all patients were aware of which team they belonged to and knew their physician by name.

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9 Baseline data was received from UNRWA West Bank field office based on a CFA conducted in December 2011.
10 The average number of daily consultations per physician was 65 before FHT and 61 after FHT.
Taybeh Health Centre, Jordan

- Location: South Amman, Jordan
- Population served: 21,366
- Number of family files: 3,301
- Date of FHT implementation: 1 March 2012

Unlike the other two clinics, Taybeh is not located within a camp. The stark difference between the populations served by the three clinics is suggested by the marked differential in the ratio of primary health-care facilities per 100,000 persons across the three countries - 1.2 in Jordan compared to 6 in Lebanon and 4.8 in the West Bank.11

Taybeh Health Centre followed a preparation phase similar to the other clinics which included:

- Briefings on the FHT approach for clinic staff by UNRWA health department staff; formation of teams, each composed of two physicians, two practical nurses, midwife, and clerk;
- The allocation of families to teams based on their registration card number;
- A re-structuring of the clinic;
- Community outreach including discussions with community members and schools.

The client-flow analysis conducted on June 20, 2012 with a sample size of 321 patients indicated that the wait time to see the physician was 17.1 minutes and the contact time with the physician was 3.2 minutes.12

Routine data sources at the clinic indicated that after the introduction of the FHT approach, the total average number of daily consultations for physicians at Taybeh decreased from 303 to 229.13 As the FHT approach was implemented only three months prior to evaluation, the percentage of patients screened for NCDs remained the same at 2.3 per cent, while the antibiotic prescription rate was also relatively similar with an increase of three per cent.

Although the implementation is in an earlier stage of development compared to the other clinics, staff members were vocal about the positive effects of the approach. They are particularly motivated by the elimination of the hierarchy within the team approach. Senior staff nurse Tamara Rahahle noted that “the new system allows us to see patients as a member of the family. By knowing the family history and other socio-economic influences on their lives, we are able to provide better services.” Staff-members are confident that as the health team and patients become more accustomed to the system, there will be an increase in contact time between the provider and patient. Patients discussed the easy navigation of services, decreased waiting time in the clinic, and greater trust of the providers as the impact of the approach.

Findings and challenges

As a result of the FHT approach, patients are able to get their information about different health needs from one provider, decreasing repeat visits.

This approach has led to a decline in the number of daily consultations with physicians in all three clinics. Patient waiting time in the clinic has decreased tremendously in both clinics where baseline data was available. However, contact time between physician and patient has increased only in Rashidieh.

A plausible explanation for the increase in contact time only in Rashidieh is that adherence of patients to the appointment system was best in that health centre. As noted in Figure 4 below, the in-flow of patients to Rashidieh was distributed evenly throughout the day, in contrast to both Aqabat Jaber and Taybeh where approximately 70 per cent of patients arrived before 10:30am.

Furthermore, e-health was implemented earlier in Rashidieh than it was in Taybeh, and is yet to be implemented in Aqabat Jaber. As e-health reduces clinicians’ time spent on administrative duties, it may have contributed to greater contact time in Rashidieh. In Aqabat Jaber, contact time has remained the same, while in Taybeh, contact time was lower than both clinics.

Figure 3. Physician contact and wait time in Taybeh Health Centre after implementation of FHT approach

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12 Data on contact and wait time prior to implementation of FHT is unavailable.
13 Unlike the other two clinics, Taybeh has four doctors instead of two. However, there is an unequal workload among the four doctors. Moreover, the number of daily consultations per physician is unavailable.
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Friendly competition between teams to achieve targets could help to improve contact time and eliminate excess time spent waiting in the clinic between service providers.

Sustainability

UNRWA has used existing resources to reorganise and restructure service delivery in order to provide patient-centred care; maximising quality and containing costs. The impact of the FHT approach as seen from the three health centres is already creating gradual change at the clinic-management and service-delivery levels. Furthermore, the e-health system and appointment system - integral components of health-care reform – are improving efficiency. As adherence to the appointment system improves and the e-health system matures and is implemented in all clinics, it will present goal-setting and performance-tracking opportunities for clinic staff.

Other incentive systems for staff should be explored to provide greater motivation for them to achieve the goals of the FHT approach. Furthermore, training for clinic staff on teamwork and improved counselling and education will lead to more-informed patients, empowering them to make healthy lifestyle decisions for the entire family.

As adopted in the FHT pilot clinics, UNRWA will emphasise community participation from the earliest stage of implementation of the FHT approach. The Agency will also emphasise the need for continuous re-evaluation of the approach, leaving space for innovation and flexibility at each clinic to ensure the success and sustainability of family health teams.

Figure 4: Time of patient arrival across the three clinics

In certain instances, wait time has decreased while contact time has not improved. This may indicate that although the FHT approach and the appointment system have improved the management of patient time between service-delivery points, the behaviour of physicians has not yet been adjusted to maximise the benefits of the new approach.

Although staff members of clinics cite the ability to learn more about the family history and socio-economic background of patients as advantages of the system, physicians and other service providers must be trained to actually do this in practice.

Providers must be trained on the concept and purpose of the new approach, ways to adjust their behaviour, and methods to achieve the targets of the approach. For example, providers could adopt a checklist of questions to ask patients to gain a better understanding of the health of the family. Furthermore, the checklist could include components of counselling on healthy lifestyles.

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