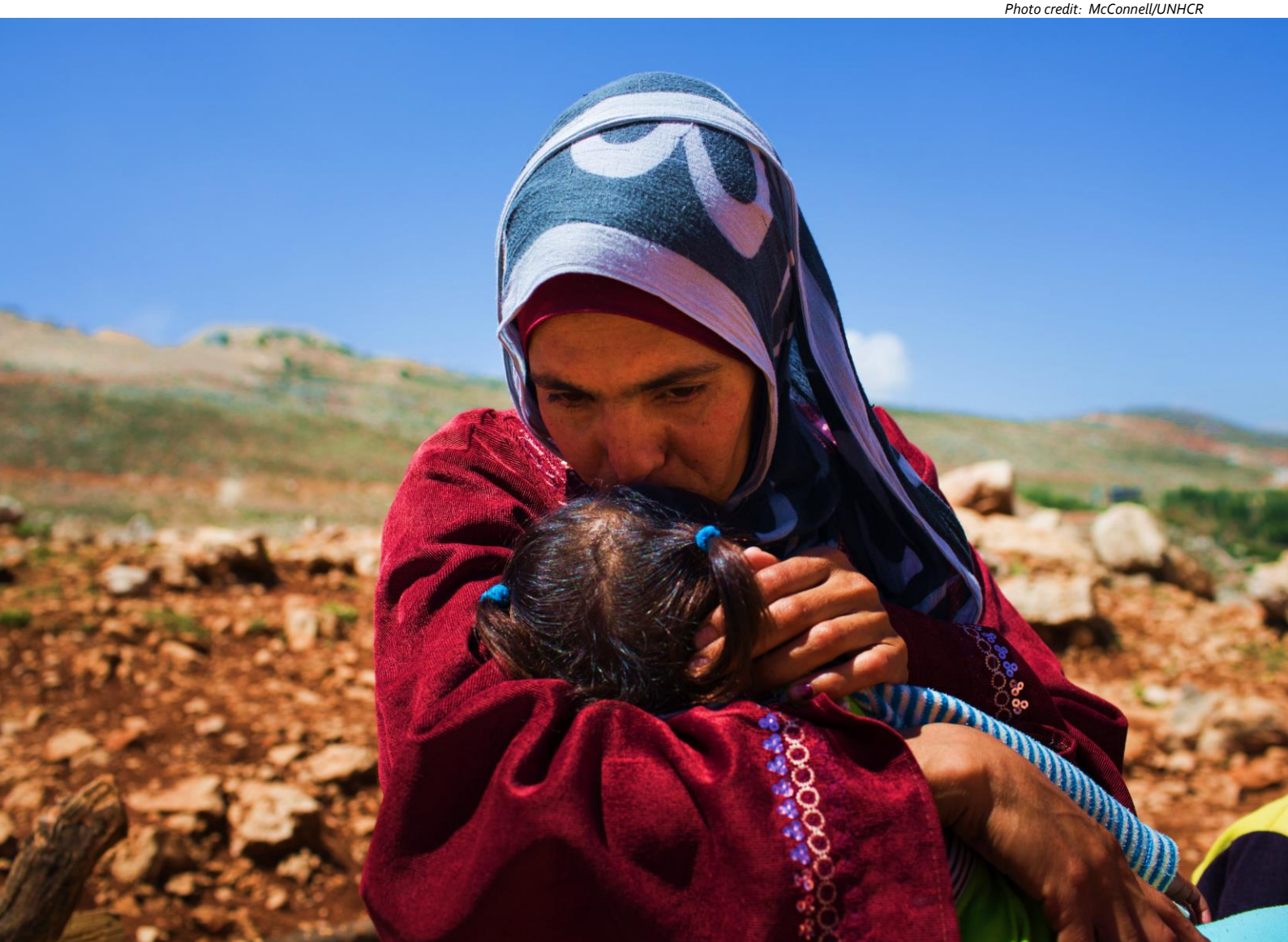
HEALTH ACCESS AND UTILISATION SURVEY AMONG NON-CAMP SYRIAN REFUGEES

LEBANON, JULY 2014

Photo credit: McConnell/UNHCR



We are grateful to the Syrian refugees who participated in this survey. We are also grateful to the Ministry of Public Health, and other local and international partners who have continuously provided healthcare services for refugees. The survey was conducted by UNHCR Public Health team in Lebanon with support from UNHCR Public Health Section in Geneva. Analysis of data and preparation of report was carried out by UNHCR Public Health Section, Geneva.

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Executive summary

A household telephone survey targeting Syrian refugees in Lebanon was conducted between 18 and 25 July 2014. An estimated 12.1% of refugees needed health care services in the month before the survey and a majority (73.2%) were able to seek care mostly through government-affiliated primary health care (PHC) facility (24.9%), private facilities (21.9%), NGO-operated primary health care centres (15.2%), government hospitals (8.3%), traditional or religious healer (2.3%) and mobile clinics (0.2%).

Refugees who needed care spent an average USD 90 in the month preceding the survey. That is equivalent to an estimated expenditure of USD 12.1 million over 1 month by all refugees in the country. The main areas of expenditure were services and treatment at outpatient and inpatient (52.5%), outside facilities for medicine and supplies used for treatment (29.0%), transport (8.2%) and self-treatment (3.5%). To cope with the healthcare expenditure, refugees borrowed money (53.9%), used household income (39.4%), and/or relied on relatives or friends for payment (27.8%).

The proportion of households with regular access to water declined from 76.6% in a previous smaller survey conducted in September 2013 to 44.3% in this survey. The main source of drinking water is municipal water network or public standpipe (36.0%), water purchased from vendors (33.0%), and bottled water (15.1%). Compared to September 2013, the proportion whose main source of water was protected well or spring declined from 20.4% to 8.7%. An estimated 55.4% of households reported storing water in containers at home compared to 33.1% in September 2013. Storing water for consumption can also introduce new risks in terms of infectious disease transmission. Ensuring water is stored in good clean containers and are adequately treated is important.

Sanitation conditions are on a positive trend. The average number of persons per latrine reported was 8.5 compared to 9.7 in 2013 which suggests a positive trend. An estimated 78.7% of households

had regular access to a toilet or latrine. The proportion of sharing a latrine or toilet with 15 or more was 15.0% compared to 21.4% in 2013.

There was broad improvement in level of knowledge about available healthcare services. The proportion of households who know that refugee children <12 years have free access to vaccination increased from 27.3% in 2013 to 72.4%. Similarly, the proportion of households that know medications for acute illness are free at the PHC centre has increased from 24.7% in 2013 to 39.8% while the proportion aware that a maximum of Lebanese Pounds 1000 (USD 0.67) is needed to refill prescription for chronic medication improved to 23.8% from 1% in September 2013. Despite improvements, the levels of knowledge of available health services are still low and more work is needed to increase awareness. Considering the level of literacy in this refugee population, as recommended in the previous survey, we again recommend the repeated use of short messaging services (SMS) to inform the refugee population.

Mobile clinics seem not well suited for delivering routine healthcare services. Of the 12% of refugees who needed some medical care in the month before the survey, ~75% sought care; <1% of those who sought care were first seen at a Mobile Medical Unit (MMU). MMUs were more effective in delivering vaccines to children. Re-focusing the mission of MMUs to preventive care e.g. vaccination may be a good way to get the most out of these units.

The proportion of refugees that reported facing difficulties obtaining vaccination for children has declined from 31% in 2013 to 7% now – a major achievement. Among children younger than 5 years, 79.8% were reported to have a child immunisation card. Children were mostly vaccinated at a government-affiliated PHC centre in Lebanon (34.4%), NGO-operated PHC centre in Lebanon (29.0%), or mobile clinics or mobile vaccination teams (30.8%). The main difficulties encountered in obtaining vaccinations were long wait (43.1%), transport difficulties (33.1%) and being asked to pay for vaccination (32.9%). The proportion of children <5 years who receive a **polio** vaccine at least once was 91.2%. The proportion of children between 9 months and <5 years to have received at least one dose of a **measles** containing vaccine was reported at 77.6%. These polio and measles coverage indicators suggest that the needed herd immunity threshold to prevent sustained local transmission in the event of an outbreak has not been reached. The refugees live among the Lebanese host community and an understanding of host community coverage and pattern of mixing with refugees is needed to gauge the risk of polio or measles for both populations. However, even without that information ensuring at least 90% of children in all regions receive more than 3

doses of polio vaccine and 2 doses of measles vaccine is crucial if the goal is to prevent sustained transmission in the event of an outbreak. A re-focusing of MMU activity from a routine PHC-like service delivery to a unit focused on preventive activities e.g. childhood vaccinations may help increase coverage.

There remain difficulties in seeking antenatal care among pregnant refugee women. Among women and girls between 14 and 54 years who responded to reproductive health-related questions, 28.3% were pregnant at least once in the past 2 years while in Lebanon. An estimated 70.5% of pregnant women reported receiving care at an antenatal clinic during their pregnancy. For pregnant women who sought antenatal care, 30.5% reported having difficulty getting care. The difficulties reported include not being able to afford cost of care (84.2%), and transport difficulties (26.9%). For pregnant women who did not seek antenatal care (29.5%), 47.1% said it was too expensive, 32.3% felt it was unnecessary, 21.7% said the facility declined to provide services, 17.3% reported transport difficulties, and 16.1% did not know where to go. Among those who delivered, only 49.5% reported having made the recommended 4 or more times of ANC visits by time of delivery. New strategies targeted at pregnant women are needed to improve ANC.

The proportion of women who paid directly for part or all of the cost of their deliveries was 80.3%, with an average amount of USD 230. The proportion of women who delivered via caesarean section was estimated at 30%; this has cost implications for UNHCR and partners. The reasons behind the high proportion of caesarean delivery is being explored in a different study. The proportion of children born in hospitals who received a birth notification letter was 80.2%; the proportion of all new-borns who received a birth certificate was 51.5%. Considering the importance of birth documentation for purposes of protection. UNHCR and the government need to identify avenues of improving access to vital registration documents to children born as refugees.

Among household members with chronic conditions, 56% were unable to get access to care. Among household members who were ≥18 years, 14.6% were reported to have at least one chronic condition. The proportion with chronic condition varied by age, increasing from 4.5% among 18 to 29 year olds to 46.6% for household members who were 60 years or old. The main reported chronic conditions were hypertension (25.4%), and ischaemic heart disease and other cardiovascular diseases (23.4%). The proportion of household members with chronic diseases who reported difficulty accessing medicine or other health services for their chronic condition were 56.1%. The main reason for difficulty was inability to afford fees (78.9%), long wait at the clinic (13.3%), and not

knowing where to go (11.6%). UNHCR and partners can help improve access to care for chronic illness by 1) increasing quality of primary health care provided to refugees with chronic conditions, 2) providing additional assistance to families with household members with chronic conditions, and 3) increasing access to medication by ensuring refugees know about existing services for refugees with chronic illness.

In conclusion, repeated telephone surveys have been found to be a useful tool in monitoring key population-level health access and utilisation indicators and recommend that the telephone survey methodology as described here be standardised and adapted across the region to monitor the health access and utilisation of refugees in non-camp settings. Mobile clinics seem not well suited for delivering routine healthcare services. Of the 12% of refugees who needed some medical care in the month before the survey, ~75% sought care; <1% of those who sought care were first seen at a Mobile Medical Unit (MMU). MMUs were more effective in delivering vaccines to children. Re-focusing the mission of MMUs to preventive care e.g. vaccination may be a good way to get the most out of these units.

Anas, a 12 year old boy, washes his face after finishing work in a charcoal shop in Bebnine, Akkar, Lebanon. Anas works also in a grocer's shop. He makes $3 to £4 per day and is proud of supporting his family. Photo credit: McConnell/UNHCR

Introduction

Since the beginning of the Syria civil war, more than 100,000 Syrians have been killed and millions have either been displaced internally within Syria or have fled and sought asylum in neighbouring countries. Lebanon is especially bearing a huge share of the refugee burden resulting from this unfolding crisis. Of the 2.9 million refugees displaced since the onset of the conflict, more than 1.1 million (42%) have sought asylum in Lebanon. The number of Syrian refugees in the country is now equivalent to 25% of the estimated 4.47 million Lebanese population. The number of refugees and their proportion of the overall population will only increase as the conflict across the border continues. The capacity of local authorities, national governments, and humanitarian organizations to cope with the huge demands will greatly depend on the continued support and goodwill of the international community.

UNHCR and partners recognise the link between robust support for all refugees and their local host communities, and the preservation of existing protection space. All refugees in Lebanon live outside official refugee camps – in cities, towns and villages across the country. Where refugees live in non-camp settings, reliable data on the health access and utilisation is not consistently available. Ad hoc reports from agencies providing services paint an inconsistent picture. In an effort to develop a cost-effective and efficient mechanism for regular monitoring of the health access and utilisation of non-camp refugees, UNHCR is carrying out household telephone surveys among registered Syrian refugees in Lebanon. The main objectives are: 1) evaluate access to and utilisation of key health services by registered Syrian refugees; 2) evaluate challenges, if any, faced by refugees in accessing health care services; and 3) monitor trends in access to and utilisation of services.

This work is not a substitute for more rigorous surveys that include home visits and household-level direct observation. The primary purpose is to provide programmatic support and develop an additional easily replicable tool for monitoring implementation of key activities. The goal for UNHCR is to carryout repeat surveys about once or twice a year and use the data to monitor the health access needs of refugees. A preliminary survey with a much smaller sample was conducted in September 2013.

Findings from the second survey in Lebanon is presented.

Context

The Lebanese government and UNHCR in collaboration with partners provide healthcare services to Syrian refugees in Lebanon. The Lebanese health system is highly privatised and fees are often charged for services provided. Refugees registered with UNHCR can receive care for free or at a subsidised cost at designated facilities across the country.

Services covered by UNHCR and partners

- Consultation fees for primary healthcare services at UNHCR designated facilities are between Lebanese Pounds 3,000 to 5,000 (USD 2 to 3.3); the remainder of the cost is covered by UNHCR and other health partners.
- All routine childhood vaccinations are free for children <12 years.
- Medications for acute illness are free for all refugees at Ministry of Public Health (MOPH) and Ministry of Social Affairs (MOSA) linked clinics.
- For chronic medications, a handling fee of LP 1000 (USD 0.67) is paid by refugees for each refill of prescriptions.
- Family planning services including pills, condoms, insertion of IUDs are provided for free.
- Dental care is subsidised through designated primary healthcare centres.
- For lab and diagnostic tests, UNHCR covers up to 85% of costs for children <5 years old, seniors ≥60 years, and pregnant women; the remaining 15% is paid by the patient or other agencies. In certain instances involving refugees with special needs, the proportion paid by UNHCR and UNHCR partners can be increased to 90%.
- UNHCR pays up to 75% of the total cost of hospital services only if admission is for life-saving emergency healthcare, and obstetric care, neonatal care. Refugees and/or other agencies are expected to pay the remaining 25% of the cost. If expensive care (≥ USD 1500) is needed, treatment is first approved by an Exceptional Care Committee. The committee considers the need for and adequacy of the suggested treatment, the cost and the need for financial assistance, and feasibility of the treatment plan and prognosis.

Methods

The survey was carried out over 6 days between July 18 and July 25, 2014. All refugees of Syrian nationality, registered in Lebanon, with a telephone number in the database, and living in Lebanon were targeted. Unregistered refugees, refugees who moved outside Lebanon, and refugee households with no telephone numbers were not eligible and were excluded.

In identifying a suitable sample size, the intention was to achieve confidence levels of at least ±5% for measures at the household level and at least ±10% for key outcomes in sub-populations. We planned to contact up to 580 households with a goal of successfully enrolling at least 550 households. From an initial household list of 253,924 registered with UNHCR, 2,688 (1.1%) were excluded because they had no phone numbers. From a sample frame of 251,236 registered households, using a proportionate stratified random sampling strategy with region of residence and number of days since registration as stratification variables and the household as the primary sampling unit, 580 households were selected for interview. A separate replacement household list was prepared and made available to a Survey Coordinator.

Households were contacted and interviewed over the phone by seven trained interviewers. Each day, each interviewer was given a list of 15 household members to interview. Each eligible household was called at least three times (each subsequent call at least two hours apart) before a replacement household was selected. A Survey Coordinator was responsible for providing replacement household after criteria for replacement were met. Informed verbal consent was sought at the beginning of the interview and only consenting households were interviewed. Any non-consenting households were excluded.

During the interview all persons living within the same location, sharing the same kitchen and eating from same pot were considered household members and enrolled. Households were administered an extended questionnaire that collected basic demographic information and assessed at household level some aspects of shelter, water, sanitation, and level of knowledge about available health services. Depending on age and sex of household members, access to or utilisation of childhood vaccination services (children <5 years), reproductive health (females between 14 and 54 years), and chronic conditions (men and women ≥18 years) was assessed. All household members were also asked about their access to or utilisation of health services in the

preceding month. For those seeking care the previous month, health care-related expenditure in the preceding month was evaluated.

Data was entered directly into android-based phones on the Open Data Kit system. All analyses were conducted using STATA 12 for Windows. In obtaining the final estimates and the confidence intervals, analysis took into account sampling error and within household clustering. Weighted proportions and 95% confidence intervals were obtained for measured parameters. Inverse probability and post-stratification weights were used to correct for probability of selection, non-response and ensure the final sample closely resembles source population in terms of region of residence, date of registration, and household size. Survey data was weighted using household residence data from the UNHCR registration database and household composition data collected during the interview (Appendix Table 1).

Findings

Demographic characteristics

A total of 566 households including 481 (85.0%) primary households (selected in the initial sampling) and 85 (15.0%) replacement households were enrolled. Among the replaced households, the major reasons in order of the frequency for non-enrolment were 1) telephone was consistently off or unreachable (53.8%), 2) telephone was not valid (35.7%), and 3) consent not given (10.5%).

The dates of arrival in Lebanon varied from February 2010 to July 2014 with 23.1% arriving before July 2012, 18.4% between July and December 2012, 21.1% between January and June 2013, and 37.4% after July 2013 (Figure 1). The distribution by region of residence was Beirut and Mt Lebanon 29.6%, Bekaa 30.9%, North Lebanon 25.2%, and South Lebanon 14.3% (Table 1). A total of 3,518 household members were recruited. The majority of household members were female (51.6%). The distribution by age was children <5 years (18.6%), 5 to 14 years (27.9%), 15 to 59 (49.2%), and 60 years or older 4.2% (Figure 2). The average reported size of household was 6.3. In the households surveyed, the average age of the head of the household was 36.7 years and the majority were male (83.2%). The languages spoken by the head of the household included Arabic (100%), English (7.9%), Kurdish (2.4%), French (1.0%), Armenian (0.4%), Turkish (0.4%), Syriac (0.4%), Greek (0.2%) and Persian (0.2%) (Table 1). At least 84.0% of heads of household were literate; 79.9% had completed primary school, and 14.2% had a finished secondary school or a higher education in a technical college or university degree (Figure 3).

Figure 1 – Dates of arrival reported by interviewed households, Lebanon, July 2014 (n=566)

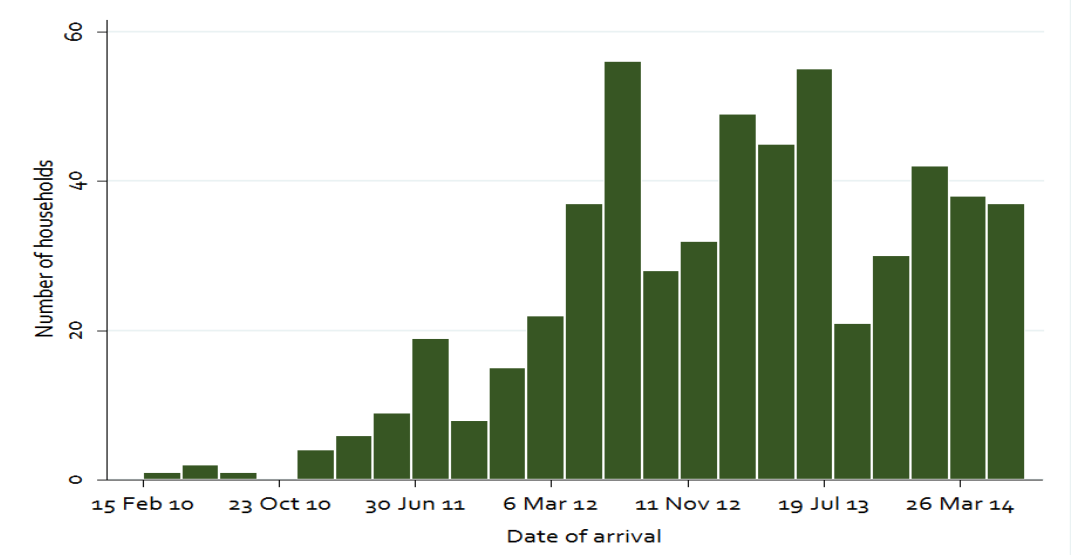


Figure 2 – Age distribution of recruited household members, Lebanon, July 2014 (n=3,518)

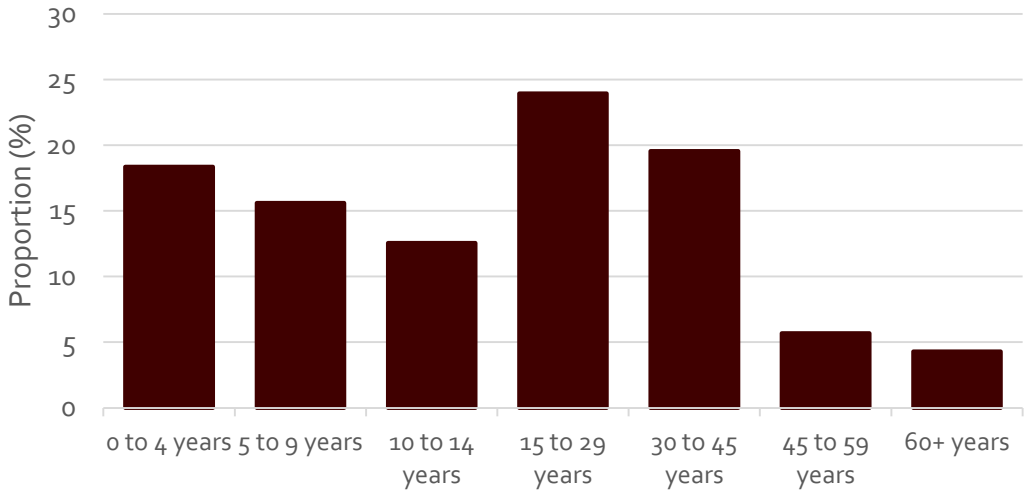


Figure 3 – Level of education of the head of the household, Lebanon, July 2014 (n=566)

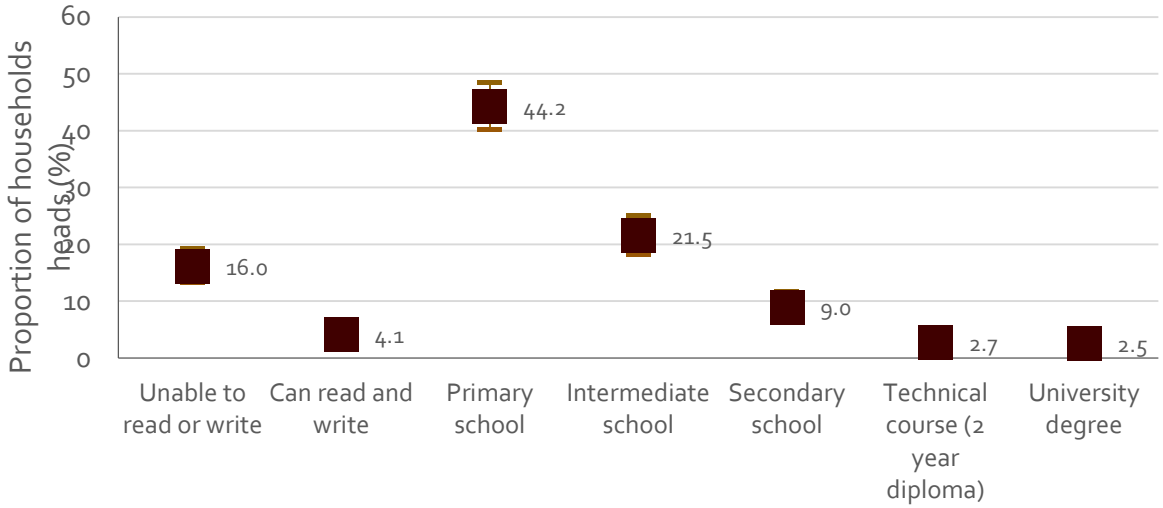


Table 1 – Demographic characteristics of survey respondents, Lebanon, July 2014

	Total (n)	*Unweighted proportion or mean*, %*	*Weighted proportion or mean*, % (95% CI)*
Total number of households enrolled	566	-	-
Household members enrolled	3,518	-	-
Gender of household members (n=3,518)			
Female	1,811	51.5	**51.6 (50.1 – 53.1)**
Male	1,707	48.5	**48.4 (46.9 – 49.9)**
Age distribution of household members (n=3,518)			
Average age in years	3,518	20.9	**20.9 (20.3 – 21.6)**
Age groups			
0 to 4 years	646	18.4	**18.6 (17.1 – 20.1)**
5 to 9 years	549	15.6	**15.2 (14.0 – 16.5)**
10 to 14 years	442	12.7	**12.7 (11.5 – 14.1)**
15 to 29 years	842	23.9	**23.8 (22.1 – 25.7)**
30 to 45 years	688	19.7	**19.9 (18.8 – 21.1)**
45 to 59 years	200	5.7	**5.5 (4.8 – 6.4)**
60+ years	151	4.3	**4.2 (3.5 – 5.1)**
Residence now (n=566)*			
Beirut and Mt Lebanon	163	28.8	**29.6 (25.9 – 33.5)**
Bekaa	182	32.2	**30.9 (27.3 – 34.8)**
North	143	25.3	**25.2 (21.8 – 29.0)**
South	78	13.8	**14.3 (11.6)**
Date of arrival (n=566)			
Before July 2012	131	23.1	**23.1 (19.8 – 26.7)**
July to December 2012	105	18.6	**18.4 (15.5 – 21.9)**
January to June 2013	119	21.0	**21.1 (17.9 – 24.7)**
July to December 2013	85	15.0	**15.1 (12.3 – 18.3)**
January 2014 and after	126	22.3	**22.3 (19.1 – 25.9)**
Average household size	566	6.4	**6.3 (6.0 – 6.6)**
Gender of household head (n=566)			
Female	98	17.3	**16.8 (13.8 – 20.3)**
Male	468	82.7	**83.2 (79.7 – 86.2)**
Average age in years of head of household (n=566)	566	36.9	**36.7 (35.7 – 37.7)**
Language spoken by household head (n=491)*			
Arabic	566	100	**100 (-)**
Kurdish	13	2.3	**2.4 (1.4 – 4.1)**
Turkish	2	0.4	**0.4 (0.1 – 1.5)**
English	44	7.8	**7.9 (5.9 – 10.5)**
French	6	1.1	**1.0 (0.5 – 2.3)**
Armenian	2	0.4	**0.4 (0.1 – 1.5)**
Greek	1	0.2	**0.2 (0.0 – 1.4)**
Iranian	1	0.2	**0.2 (0.0 – 1.2)**
Syriac	2	0.4	**0.4 (0.1 – 1.6)**
Education level of household head (n=566)			
No education	92	16.3	**16.0 (13.2 – 19.3)**
Literate	23	4.1	**4.1 (2.7 – 6.1)**
Primary school	250	44.2	**44.2 (40.2 – 48.4)**
Intermediate school	122	21.6	**21.5 (18.3 – 25.1)**
Secondary school	50	8.8	**9.0 (6.9 – 11.7)**
Technical college	15	2.7	**2.7 (1.6 – 4.4)**
University	14	2.5	**2.5 (1.5 – 4.2)**

**see methods for weighting procedures*

Shelter, water and sanitation

Among households interviewed, 65.2% said they lived in an independent house or apartment, 21.1% lived in tents, and 10.2% shared shelter with multiple families (Table 2). This was similar to what was found in the first survey conducted in September 2013 (Figure 4). There were variations in type of shelter between regions; the proportion living in an independent house or apartment was highest in Beirut and Mt Lebanon (82.3%) and lowest in Bekaa (43.6%) (Figure 4). Households with regular access to water were 44.3% a decline from the 76.6% who reported having regular access in the previous survey. The main source of drinking water was municipal water network or public standpipe (36.0%), water purchased from vendors (33.0%), and bottled water (15.1%) (Table 2). Compared to September 2013, the proportion whose main source of water was protected well or spring declined from 20.4% to 8.7%. An estimated 55.4% of households reported storing water in containers at home compared to 33.1% in September 2013. An estimated 78.7% of households had regular access to a toilet or latrine; the average number of persons per latrine reported was 8.5 a decrease from 9.7 in 2013 (Table 2). The proportion of households with persons to latrine ratio of 15 or more was only 15.0% compared to 21.4% in 2013 (Figure 5). An estimated 73.4% of households reported having sufficient soap for hand-washing at home (Table 2).

Having a few kicks in a hall in Bekaa Valley

Photo credit: Malkawi/UNHCR

Table 2 – Shelter, Water, Sanitation and Hygiene, Lebanon, July 2014

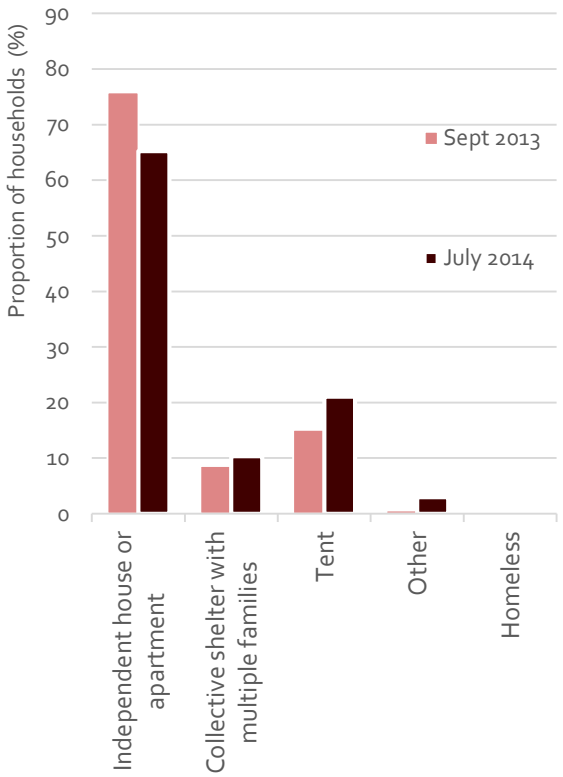
	Total (n)	*Unweighted proportion or mean*, %*	*Weighted proportion or mean*, % (95% CI)*	*Proportion in September 2013 (n=94), % (95% CI)*
Shelter				
Independent house or apartment	366	64.7	**65.2 (61.2 – 69.1)**	75.8 (65.5 – 83.7)
Collective shelter with multiple families	58	10.3	**10.2 (8.1 – 13.2)**	8.6 (4.2 – 16.6)
Tent	123	21.7	**21.1 (17.9 – 24.6)**	15.1 (8.9 – 24.5)
Homeless	17	3.0	**3.0 (1.9 – 4.8)**	0 (-)
Other	2	0.4	**0.4 (0.1 – 1.6)**	0.6 (0.1 – 4.0)
Household has regular access to water	249	44.0	**44.3 (40.2 – 48.4)**	**76.6 (66.2 – 84.5)**
Main source of your drinking water				
Municipal water network/public standpipe	205	36.2	**36.0 (32.1 – 40.0)**	27.9 (19.2 – 38.5)
Purchased from a vendor	186	32.9	**33.0 (29.2 – 37.0)**	27.1 (18.6 – 37.5)
Protected well or spring	50	8.8	**8.7 (6.7 – 11.3)**	20.4 (12.9 – 30.6)
Unprotected well or spring	29	5.1	**4.9 (3.4 – 7.0)**	2.2 (0.5 – 8.6)
Bottled/mineral water	83	14.7	**15.1 (12.4 – 18.4)**	17.3 (10.6 – 27.1)
Other sources	29	5.1	**2.3 (1.3 – 3.9)**	5.2 (1.9 – 13.4)
Family stores water in containers at home	314	55.9	**55.4 (51.3 – 59.5)**	**33.1 (23.7 – 44.1)**
Household has regular access to a toilet or latrine	445	78.6	**78.7 (75.2 – 81.9)**	**92.5 (84.8 – 96.4)**
Average number of persons per toilet or latrine	560**	8.6	**8.5 (8.0 – 9.1)**	9.7 (8.2 – 11.2)
Number of persons per toilet or latrine				
1 to 4	111	19.6	**20.6 (17.4 – 24.2)**	17.7 (10.7 – 27.8)
5 to 9	270	47.7	**47.2 (43.1 – 51.3)**	43.0 (32.5 – 54.1)
10 to 14	99	17.5	**17.2 (14.3 – 20.6)**	18.0 (11.0 – 28.0)
15+	86	15.2	**15.0 (12.3 – 18.2)**	21.4 (13.9 – 31.6)
Household has sufficient soap	418	73.9	**73.4 (70.1 – 77.4)**	82.3 (71.9 – 89.4)

** see methods for weighting procedures*

Girls having a bit fun and "making the world a beautiful garden", Kamed el Loz, Bekaa, Lebanon.
Photo credit: Addario/UNHCR

Figure 4 – Proportion of households by shelter, Lebanon, July 2014

a) Comparing July 2014 and September 2013 surveys (n=566)



b) Comparing different regions

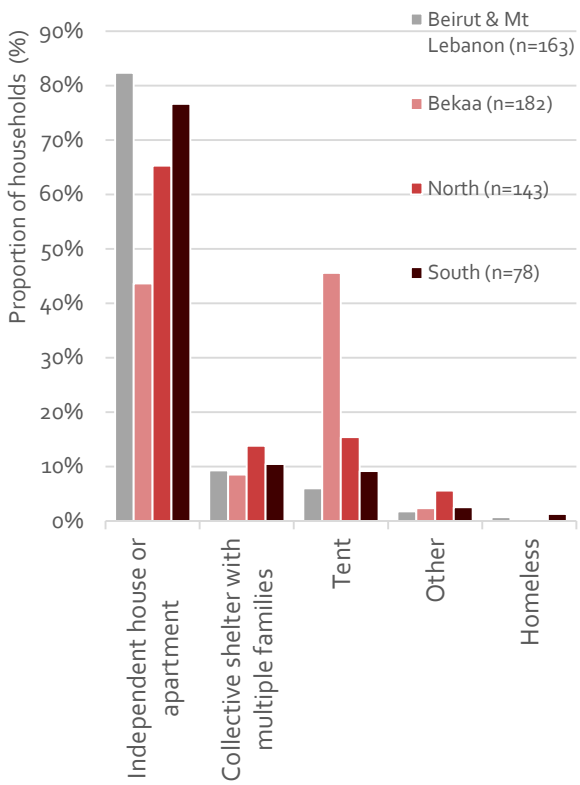
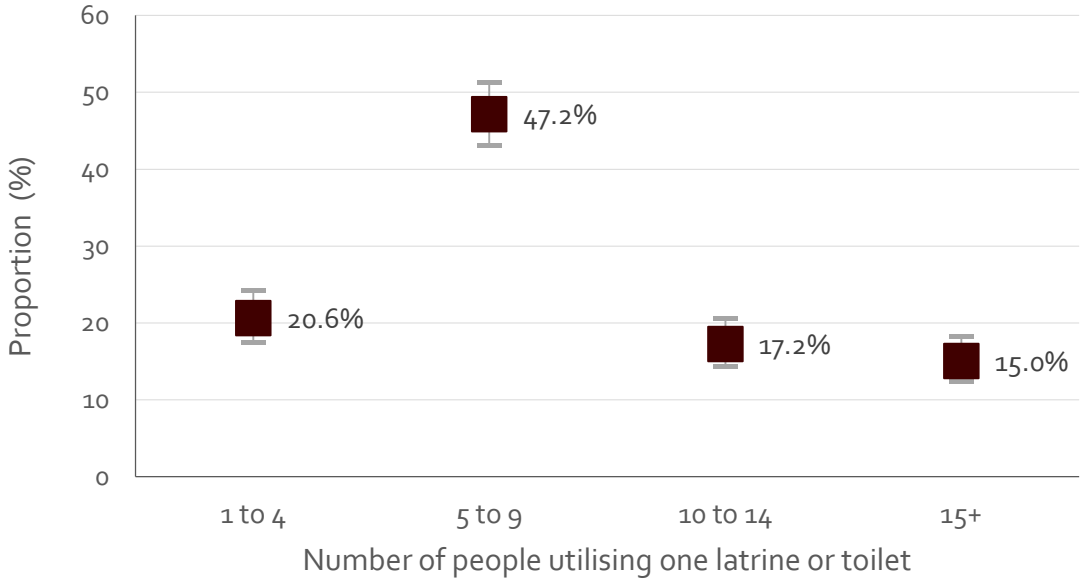


Figure 5 – Proportion of households by number of persons utilising one latrine or toilet, Lebanon, July 2014 (n=566)



Access to, utilisation of, and out-of-pocket costs of health care services in month preceding survey

An estimated 12.1% of refugees needed health care services in the preceding month and a majority (73.2%) were able to seek care (Table 3). In seeking care, refugees went to government-affiliated PHC facility (24.9%), private facility (21.9%), NGO-operated primary health care centres (15.2%), government hospitals (8.3%), traditional or religious healer (2.3%) and mobile clinics (0.2%) (Figure 6). The main health problems reported by those who sought care were acute illness (58.0%) especially acute respiratory illnesses (27.7%) and diarrhoea (14.9%) (Figure 7). Other health problems for which care was sought were chronic conditions (15.3%), reproductive health conditions (11.2%), Trauma and other injuries (10.1%), and dental care (5.2%) (Figure 7). An estimated 66.6% of those who needed care were able to get the care they needed.

Figure 6 – First facility care was sought, Lebanon, July 2014 (n=313)

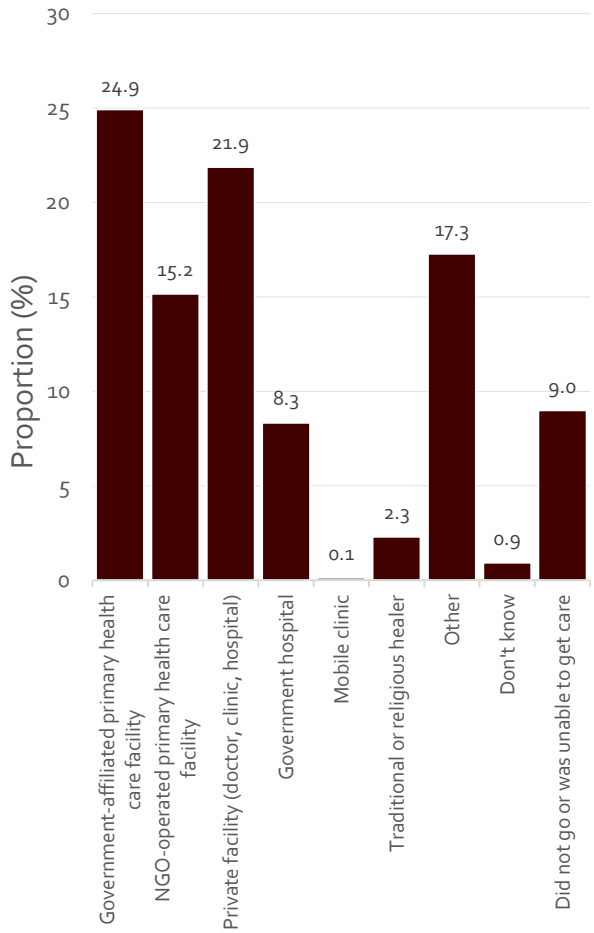


Figure 7 – Reported reasons for seeking care in previous month, Lebanon, July 2014 (n=311)

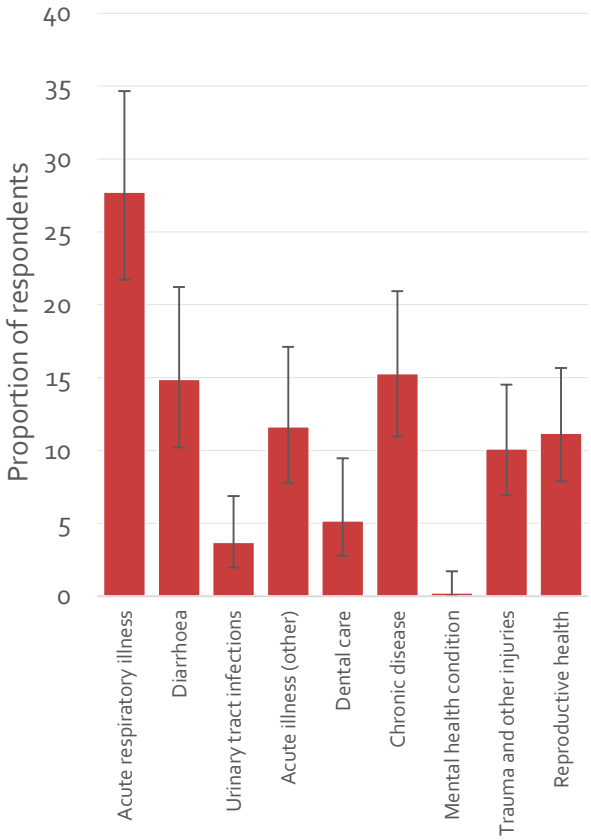


Table 3 – Access to and utilisation of health care services in preceding month, Lebanon, July 2014

	Total (n=3,518)	***Unweighted proportion or mean*, %***	***Weighted proportion or mean*, % (95% CI)***
Needed health care services in past month (n=3,518)	422	12.0	**12.1 (10.6 – 13.8)**
Sought health care services in the past month (n=422)	313	74.2	**73.2 (66.3 – 79.1)**
Specific health problem for which care was sought (n=311)			
Acute respiratory illness	86	27.7	**27.7 (21.7 – 34.7)**
Diarrhoea	44	14.2	**14.9 (10.2 – 21.2)**
Urinary tract infections	12	3.9	**3.7 (2.0 – 6.9)**
Acute illness (other)	36	11.6	**11.6 (7.7 – 17.1)**
Dental care	19	6.1	**5.2 (2.8 – 9.5)**
Chronic disease	46	14.8	**15.3 (11.0 – 20.9)**
Mental health	1	0.3	**0.2 (0.0 – 1.7)**
Trauma and other injuries	33	10.6	**10.1 (6.9 – 14.5)**
Reproductive health	34	10.9	**11.2 (7.9 – 15.7)**
FIRST place person went for care (n=)			
Government-affiliated primary health care facility	77	24.7	**24.9 (19.2 – 31.7)**
NGO operated primary health care facility	48	15.4	**15.2 (10.9 – 20.8)**
Private facility (doctor, clinic or hospital)	72	23.1	**21.9 (16.6 – 28.3)**
Government hospital	27	8.7	**8.3 (5.7 – 12.1)**
Mobile clinic	1	0.3	**0.2 (0.0 – 1.0)**
Traditional or religious healer	5	1.6	**2.3 (0.8 – 6.5)**
Other	51	16.4	**17.3 (11.9 – 24.4)**
Don't know	3	1.0	**0.9 (0.2 – 4.6)**
Didn't go or was unable to get care	28	9.0	**9.0 (5.3 – 15.0)**

Syrian refugee and her child arrive in Arsal, Lebanon

Photo credit: Purvisl/UNHCR

Overall an estimated **USD 12.1 million (estimate range: 8.6 to 15.5 million)** was spent by refugees directly for health care services in the single month preceding the survey. For every household, this was approximately equivalent to 27.5% of the reported average monthly non-assistance household income of USD 173. For those who needed care, the average out-of-pocket expenditure was USD 90. Looking at the healthcare expenditure, refugees spent money at outpatient and inpatient facilities for services and treatment (52.5%), outside facilities for medicine and supplies used for treatment (29.0%), on transport (8.2%) and self-treatment (3.5%) (Figure 8, Table 4). To cope with the healthcare expenditure, refugees borrowed money (53.9%), used household income (39.4%), relied on relatives or friends for payment (27.8%), utilised savings (8.5%), sold or exchanged vouchers (1.4%), sold food (1.4%), sold non-food items or household assets (1.3%) (Table 4, Figure 9)

Figure 8 – Estimated out-of-pocket healthcare expenditure in the month preceding the survey, Lebanon, July 2014 (n=566)

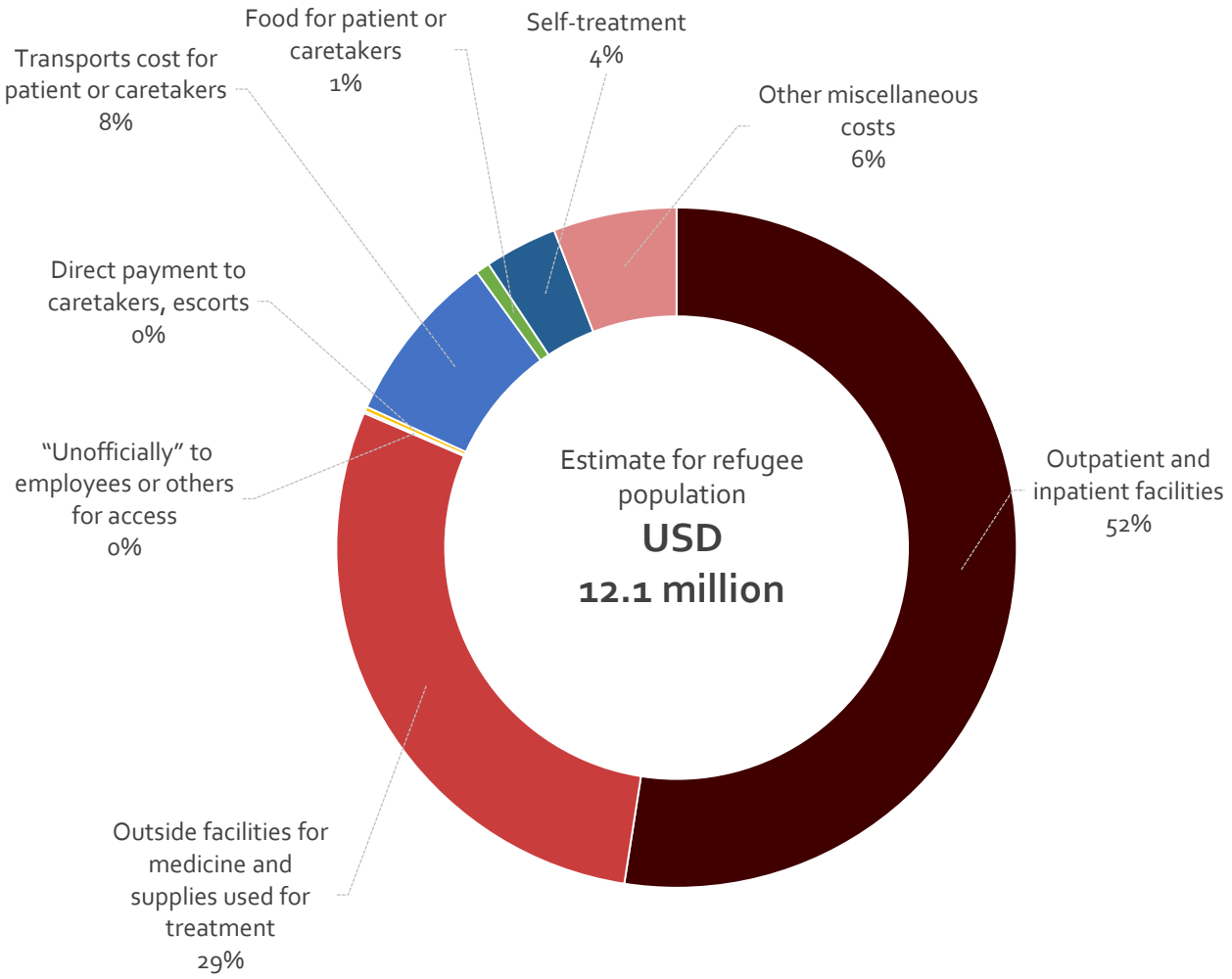
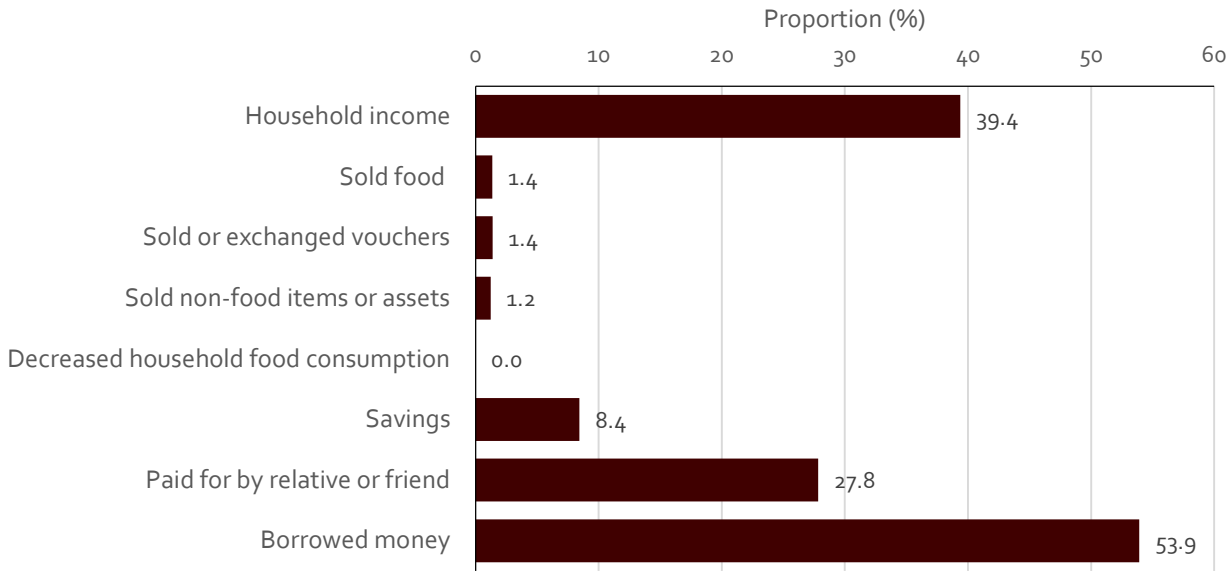


Figure 9 – Syrian refugees out-of-pocket healthcare costs coping strategies in the month preceding the survey, Lebanon, July 2014 (n=566)



Syrian mother from Homs, Syria bakes bread outside her shelter in Turbide, Bekaa, Lebanon.
Photo credit: Addario/UNHCR

Table 4– *Estimated out-of-pocket costs of health care services in preceding month, Lebanon, July 2014*

	Total (n=3,518)	***Unweighted proportion or mean*, %***	***Weighted proportion or mean*, % (95% CI)***
Average monthly household income (excluding assistance) (n=566)	**566**	172.4	**173.0 (157.9 – 188.0)**
Average out-of-pocket expenditure in US dollars (n=420)	**420**	87.2	**89.9 (65.4 – 114.4)**
Where was the money spent? (n=420)			
Paid to outpatient and inpatient facilities for services	420	43.4	**47.2 (27.5 – 66.8)**
Outside the facilities for medicine and	420	26.9	**26.1 (20.9 – 31.3)**
"Unofficially" paid to employees or others for access	420	0.1	**0.1 (0.0 – 0.3)**
Direct payment to caretakers, escorts	420	0.2	**0.2 (0.0 – 0.6)**
Transports cost for patient or caretakers	420	7.3	**7.4 (5.4 – 9.3)**
Food for patient or caretakers	420	0.5	**0.6 (0.3 – 0.9)**
Self-treatment	420	2.8	**3.1 (1.0 – 5.3)**
Other miscellaneous costs	420	5.9	**5.3 (1.6 – 8.9)**
Health care expenses coping strategies (n=328)			
Household income	130	39.6	**39.4 (31.8 – 47.5)**
Sold food	4	1.2	**1.4 (0.2 – 7.6)**
Sold or exchanged vouchers	5	1.5	**1.4 (0.4 – 5.0)**
Sold non-food items or assets	4	1.2	**1.3 (0.4 – 3.4)**
Decreased household food consumption	0	0.0	**0.0 (-)**
Savings	32	9.8	**8.5 (5.3 – 13.2)**
Paid for by relative or friend	87	26.5	**27.8 (20.1 – 35.9)**
Borrowed money	167	50.9	**53.9 (46.1 – 61.5)**
ESTIMATED TOTAL *out-of-pocket expenditure in US dollars paid by Syrian refugees in Lebanon in the month preceding the survey* ***(best estimate, [minimum estimate - maximum estimate])***	**12.1 million (8.6 to 15.5 million)**		

Knowledge about health services

The proportion of households who know that refugee children <12 years have free access to vaccination increased from 27.3% in 2013 to 72.4% (Table 5, Figure 10). Slightly over half of households (54.4%) now know that refugees pay only between Lebanese Pounds 3000 and 5000 (USD 2 to 3.3) for consultations at PHC centres. The proportion of households that know medications for acute illness are free at the PHC centre has increased from 24.7% in 2013 to 39.8% in 2014. The proportion who know that a maximum of Lebanese Pounds 1000 (USD 0.67) is needed to refill prescription for chronic medication increased from 1% in 2013 to 23.8% now (Table 5, Figure 10). The proportion of households that is aware of the availability of assistance to refugees when it

comes to paying for hospital costs for life saving and emergency referrals is 58.6% (Figure 10). Figure 11 below shows the variations in knowledge about health services by region.

Figure 10 – Knowledge about health services, Lebanon, July 2014 (n=566)

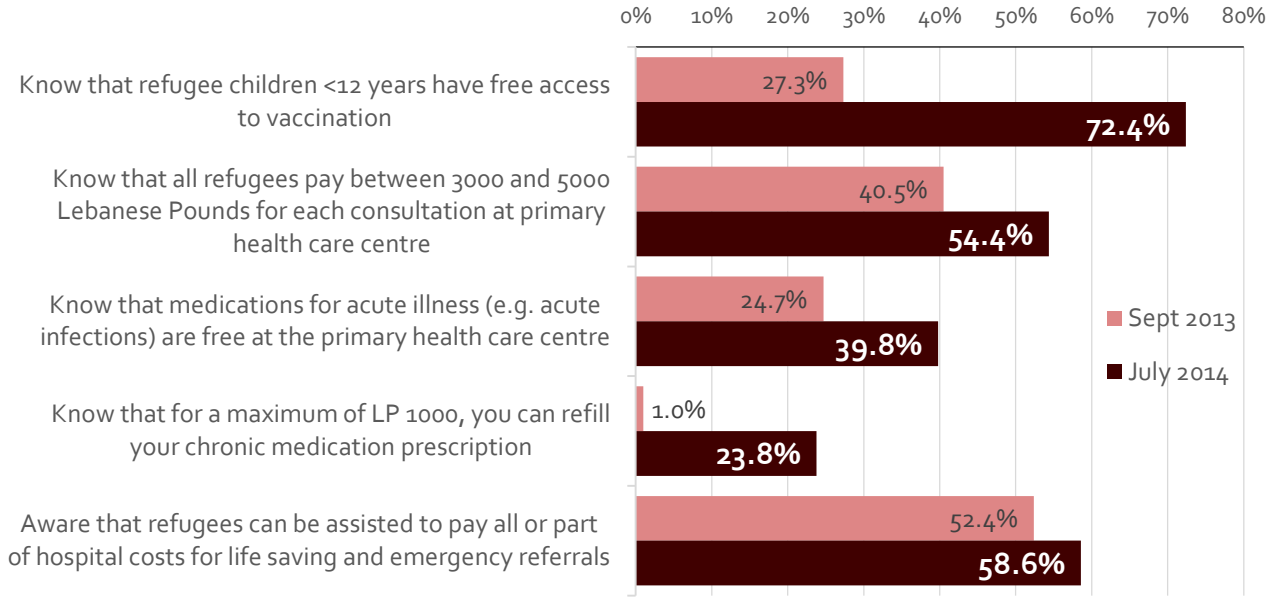


Figure 11 – Knowledge about health services by region of current residence, Lebanon, July 2014

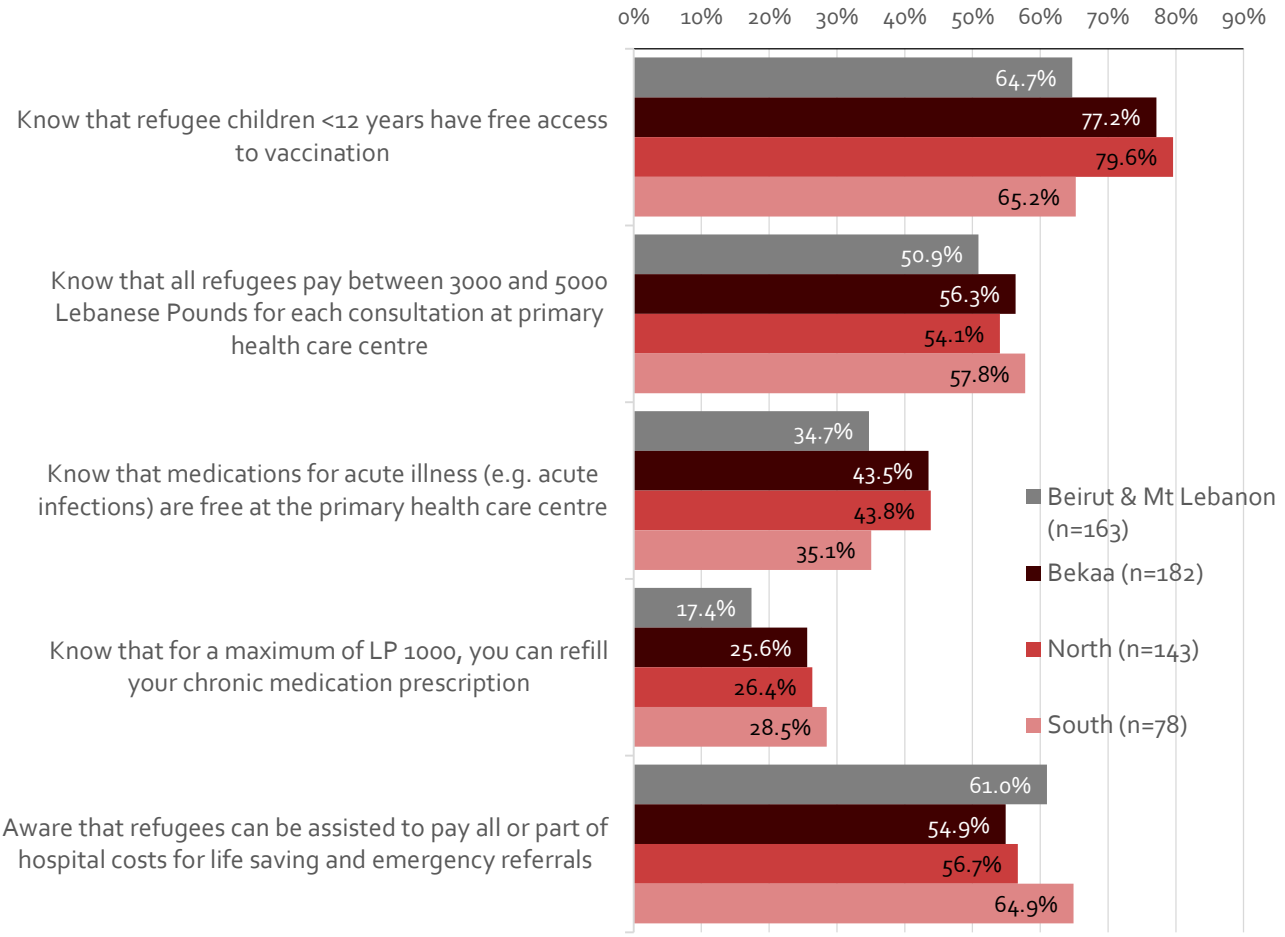


Table 5 – Knowledge about health services, Lebanon, July 2014 (n=566).

	Total (N=491)	*Unweighted proportion or mean, %*	*Weighted proportion*, % (95% CI)*	*Proportion in September 2013 (n=94), % (95% CI)*
Know that refugee children <12 years have free access to vaccination	412	72.8	**72.4 (68.5 – 76.0)**	**27.3 (18.6 – 38.2)**
Know that all refugees and local Lebanese pay between 3000 and 5000 Lebanese Pounds for each consultation at primary health care centre	309	54.6	**54.4 (50.2 – 58.4)**	**40.5 (30.4 – 51.5)**
Know that medications for acute illness (e.g. acute infections) are free at the primary health care centre	226	39.9	**39.8 (35.8 – 43.9)**	**24.7 (16.4 – 35.5)**
Know that for a maximum of LP 1000, you can refill your chronic medication prescription	134	23.7	**23.8 (20.5 – 27.5)**	**1.0 (0.1 – 7.1)**
Aware that refugees can be assisted to pay all or part of hospital costs for life saving and emergency referrals	331	58.5	**58.6 (54.5 – 62.6)**	**52.4 (41.6 – 62.9)**

** see methods for weighting procedures. The last column shows the result of the initial survey in September 2013*

Childhood vaccinations

Among children younger than 5 years, 79.8% were reported to have a child immunisation card (Figure 12, Table 6). The proportion of children <5 years who receive a polio vaccine at least once was 91.2% (Figure 12). The proportion of children between 9 months and <5 year to have received at least one dose of a measles containing vaccine was reported at 77.6% (Table 6). Figure 13 below shows variations for the vaccination coverage between regions. Children were vaccinated at a government-affiliated PHC centre in Lebanon (34.4%), NGO-operated PHC centre in Lebanon (29.0%), mobile clinics or vaccination teams (30.8%), before coming to Lebanon (6.6%), or private doctor, clinic or hospital in Lebanon (5.2%), (Table 6, Figure 14). The proportion facing difficulties in obtaining vaccinations declined from 31.4% in September 2013 to 7.0% (Table 6). The main difficulties encountered were long wait (43.1%), transport difficulties (33.1%) and being asked to pay for vaccination (32.9%) (Table 6).

Figure 12 – Proportion of children with immunisation card, and proportions that have received at least one dose of polio and measles vaccines, Lebanon, July 2014

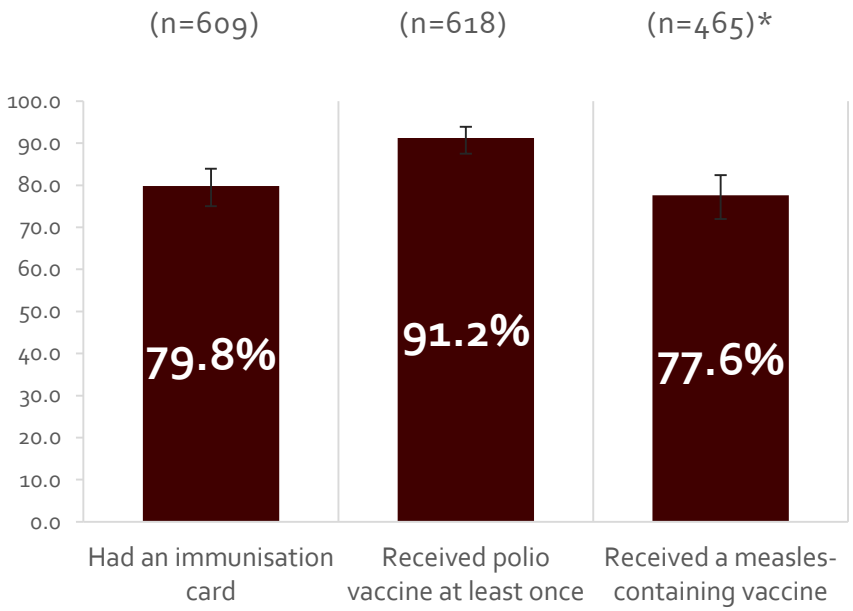


Figure 13 – Proportion of children with immunisation card, and proportions that have received at least one dose of polio and measles vaccines by region, Lebanon, July 2014

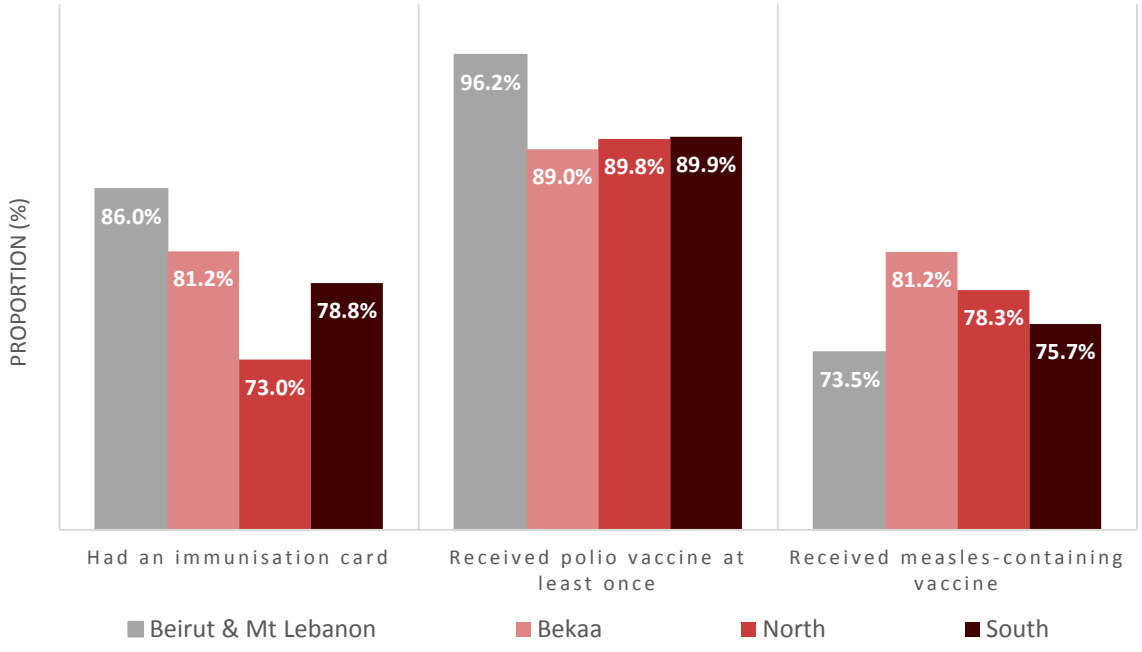


Figure 14 – Where children received their vaccines, Lebanon, July 2014 (n=488)

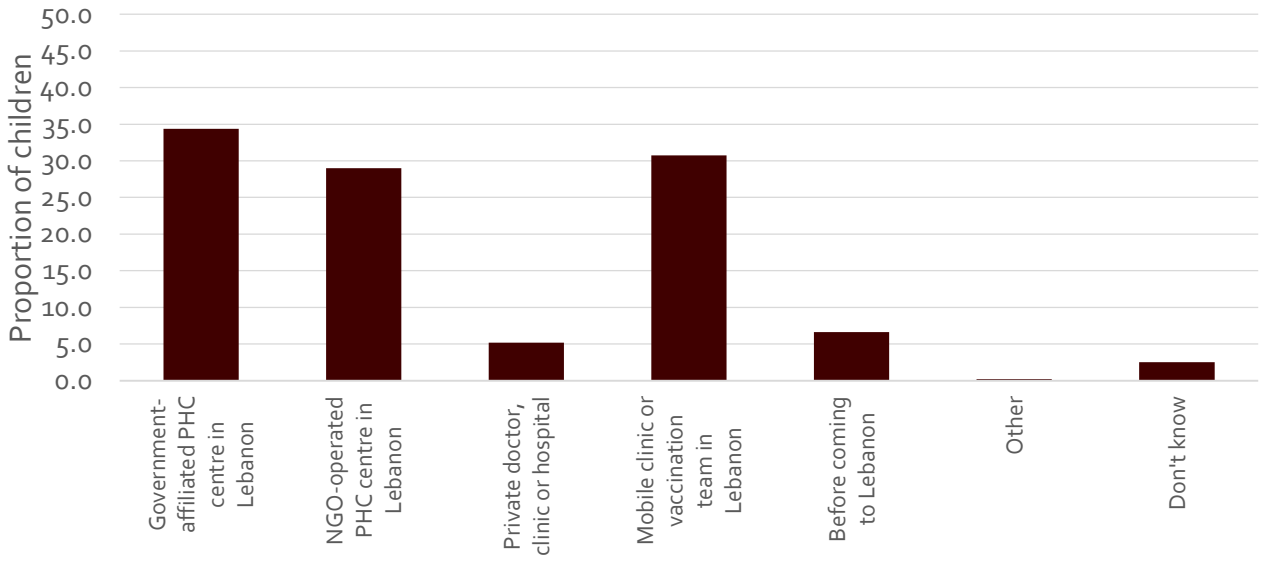


Table 6 – Childhood vaccinations, Lebanon, July 2014.

	Total	*Unweighted proportion or mean*, %*	*Weighted proportion or mean*, % (95% CI)*	*Proportion in September 2013 (n=94), % (95% CI)*
Child had an immunisation card (n=609)	488	80.1	**79.8 (75.0 – 83.9)**	NC
Where vaccinated last time if having a card (n=488)				
Government primary health care centre in Lebanon	168	34.4	**34.4 (28.5 – 40.7)**	NC
NGO operated primary health care centre in Lebanon	139	28.5	**30.0 (23.6 – 35.1)**	NC
Private doctor, clinic or hospital in Lebanon	22	4.5	**5.2 (3.0 – 8.8)**	NC
Mobile clinic or vaccination team in Lebanon	156	32.0	**30.8 (25.2 – 36.9)**	NC
Before coming to Lebanon	32	6.6	**6.6 (4.3 – 10.1)**	NC
*Other***	1	0.2	**0.2 (0.0 – 1.3)**	NC
Received polio vaccine at least once (n=618)	564	91.3	**91.2 (87.5 – 93.9)**	NC
Receiving a measles containing vaccine at least once (n=465)	358	77.0	**77.6 (72.0 – 82.4)**	NC
Faced difficulties obtaining vaccinations (n=618)	42	6.8	**7.0 (4.8 – 10.2)**	**31.4 (20.4 – 45.0)**
Difficulties encountered (n=42)				
Long wait	16	38.1	**43.1 (25.4 – 62.7)**	4.9 (0.6 – 31.3)
Staff were rude	7	16.7	**19.4 (8.3 – 38.9)**	0.0 (-)
Difficulty understanding the language	0	0.0	**0.0 (-)**	0.0 (-)
Was asked to pay for vaccination	15	35.7	**32.9 (17.7 – 52.9)**	32.7 (13.0 – 61.3)
Couldn't afford transportation to facility	15	35.7	**33.1 (17.6 – 53.3)**	28.8 (10.7 – 57.7)
Didn't know where to go	5	11.9	**15.4 (5.6 – 36.0)**	NC
*Other****	1	2.4	**3.5 (0.5 – 21.1)**	54.4 (29.9 – 77.0)

* see methods for weighting procedures; **at school; ***for September 2013, it includes those who didn't know where to go; NC: not collected in previous survey or sample was too small. The last column shows the result of the initial survey in September 2013

Reproductive health

Among women and girls between 14 and 54 years who responded to reproductive health-related questions, 28.3% were pregnant at least once in the past 2 years while in Lebanon (Table 7). An estimated 70.5% of pregnant women reported receiving care at an antenatal clinic during their pregnancy. For pregnant women who sought antenatal care, 30.5% reported having difficulty in getting care. The difficulties reported include not being able to afford cost of care (84.2%), and transport difficulties 26.9% (Table 7). For pregnant women who did not seek antenatal care (29.5%), 47.1% said it was too expensive, 32.3% felt it was unnecessary, 21.7% said the facility declined to provide services, 17.3% reported transport difficulties, and 16.1% did not know where to go (Table 7).

Among women who were pregnant in the past 2 years, the majority (62.5%) had already delivered by the time of the interview, 33.0% were still pregnant at the time of interview and 4.6% reported having an early pregnancy miscarriage (Table 7). Among those who delivered, 69.9% had vaginal deliveries and 30.1% underwent caesarean section (Figure 15). Among those who had delivered by the time of the interview, the proportion that reported to have received antenatal care at least on four occasions was 49.5% (Figure XX). Deliveries occurred at a government hospital (52.3%), private health facility (27.2%), at a government or NGO operated facility other than a hospital (10.2%), at home and with a skilled birth attendant (4.0%) and at home without skilled birth attendant (2.1%) (Table 7).

A wedding in exile. Syrian refugees celebrating a wedding in Lebanon. The father of the groom said, "we live with death but we want to create life out of death, and from sadness we want to create happiness"

Photo credit: Addario/UNHCR

Table 7 – Reproductive health, Lebanon, July, 2014

	Total (N=934)	***Unweighted proportion or mean*, %***	***Weighted proportion or mean*, % (95% CI)***	***Proportion in September 2013 (n=94), % (95% CI)***
Women pregnant since arriving in Lebanon (n=934)	250	26.8	**28.3 (25.0 – 31.9)**	**16.2 (11.8 – 21.8)**
Received some antenatal care at any time during pregnancy (n=250)	176	70.4	**70.5 (63.5 – 76.6)**	74.2 (55.2 – 87.0)
Received ANC care but had difficulty getting care? (n=176)	55	31.3	**30.5 (23.5 – 38.5)(**	11.0 (2.9 – 33.4)
Difficulties faced in getting ANC care (n=55)				
Long wait at the clinic	2	3.6	**3.7 (0.8 – 15.4)**	NC
Staff were rude	2	3.6	**4.7 (1.2 – 17.2)**	NC
Language difficulty	0	0.0	**0.0 (-)**	NC
Was asked to pay and couldn't afford	47	85.6	**84.2 (70.4 – 92.2)**	NC
Transport difficulties	15	27.3	**26.9 (15.8 – 41.9)**	NC
Did not know where to go	1	1.8	**1.3 (0.2 – 9.1)**	NC
Other	8	14.6	**14.9 (7.2 – 28.2)**	NC
What prevented you from getting antenatal care during your pregnancy? (n=72)				
Felt it was unnecessary	21	29.2	**32.3 (21.0 – 46.2)**	NC
Too expensive	35	48.6	**47.1 (34.3 – 60.3)**	NC
Transport difficulties	13	18.1	**17.3 (9.3 – 30.1)**	NC
Language difficulty	0	0.0	**0.0 (-)**	NC
*Did not have time***	3	4.2	**5.3 (1.7 – 15.5)**	NC
Did not know where to go	12	16.7	**16.1 (8.8 – 27.7)**	NC
Don't like the health services or staff	2	2.8	**2.4 (0.5 – 10.5)**	NC
Health facility refused to provide services	14	19.4	**21.7 (12.1 – 35.7)**	NC
Didn't have necessary documents	0	0 .0	**0.0 (-)**	NC
*Other****	6	8.3	**5.4 (2.1 – 13.3)**	NC
Pregnancy outcome (n=249)				
Delivered baby	157	63.1	**62.5 (55.8 – 68.7)**	63.8 (43.5 – 80.1)
Miscarriage	11	4.4	**4.6 (2.5 – 8.4)**	-
Still pregnant	81	32.5	**33.0 (27.0 – 39.5)**	36.2 (19.9 – 56.5)
Number of ANC visits attended by delivery (n=250)				
Did not attend ANC	41	27.2	**27.0 (19.5 – 36.1)**	NC
1 visit	15	9.9	**9.5 (5.6 – 15.8)**	NC
2 or 3 visits	22	14.6	**14.0 (8.4 – 22.4)**	NC
4 or more visits	73	48.3	**49.5 (40.4 – 58.6)**	NC
Where delivered (n=)				
Government hospital	81	51.6	**52.3 (43.6 – 60.9)**	46.3 (20.9 – 73.8)
Government or NGO primary health care facility	15	9.6	**10.2 (6.1 – 16.7)**	13.5 (2.8 – 45.9)
Private facility	44	28.0	**27.2 (20.1 – 35.7)**	34.9 (13.5 – 64.8)
Went back to Syria to deliver	6	3.8	**4.2 (1.9 – 9.4)**	0 (-)
Home with skilled birth attendant	6	3.8	**4.0 (1.7 – 8.9)**	0 (-)
Home (other)	5	3.2	**2.1 (0.8 – 5.0)**	5.3 (0.7 – 32.3)

*Type of delivery**** (n=151)*				
Caesarean section	42	27.8	**30.1 (22.8 – 38.6)**	33.8 (13.3 – 62.9)
Vaginal delivery	109	72.2	**69.9 (61.4 – 77.2)**	66.3 (45.4 – 87.2)
Paid for the delivery (n=151)	117	77.5	**80.3 (71.8 – 86.7)**	76.7 (46.8 – 92.5)
Approx. amount (in USD) paid (n=116) *[mean, adjusted mean (95% CI)]*	116	233	**230 (165 – 294)**	203 (78 – 329)
*Baby got hospital birth notification (n=131)*****	106	80.9	**80.2 (71.7 – 86.7)**	NC
*Baby got birth certificate**** (n=151)*	77	51.0	**51.5 (42.7 – 60.3)**	NC

**see methods for weighting procedures; **couldn't get time off work, was busy caring for children, too busy to wait; ***returned to Syria for medical, wanted to abort, had early miscarriage; ****excludes deliveries in Syria; *****facility deliveries only; NC: not collected in previous survey or sample was too small*

The proportion of women who paid directly for the cost of their deliveries was 80.3%. The average amount in US dollars paid was USD 230 (Table 5). The proportion of children born in hospitals who received a birth notification letter was 80.2%; the proportion of new-borns who received a birth certificate was 51.5% (Table 5).

Figure 15 – Antenatal care clinic visits reported, Lebanon, July 2014 (n=151)

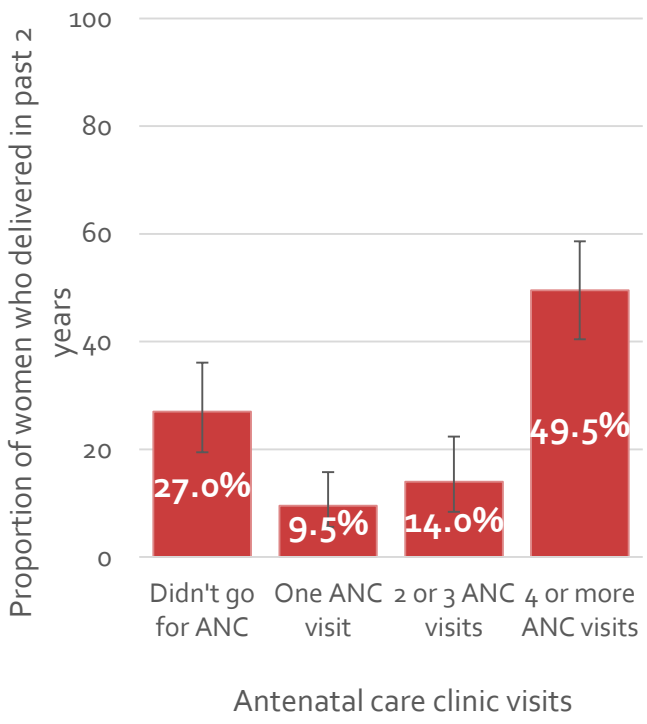


Figure 16 – Mode of delivery among women who delivered in previous 2 years, Lebanon, July, 2014 (n=151)

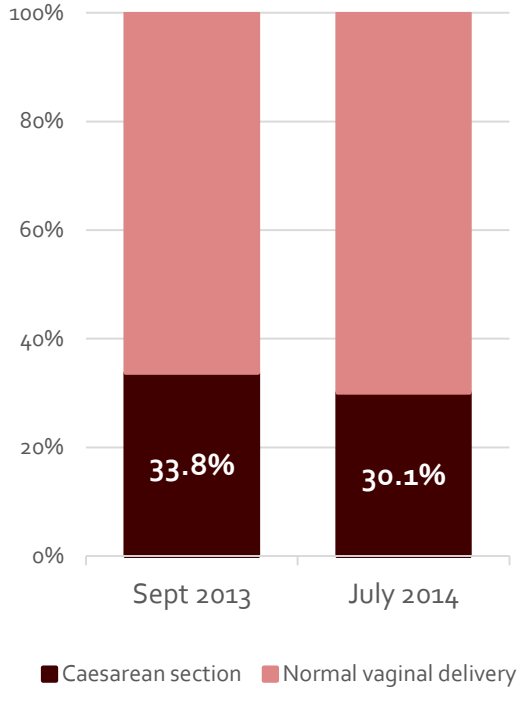


Figure 17 – Birth documentations for new-born infants, Lebanon, July, 2014

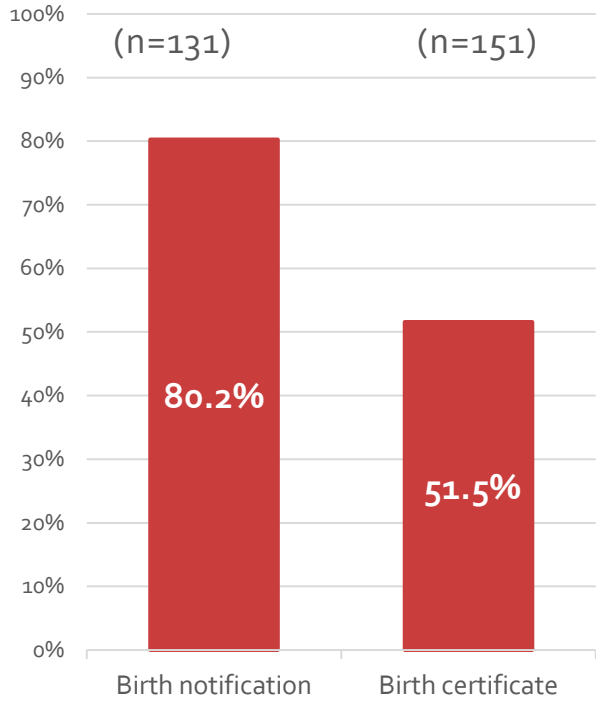
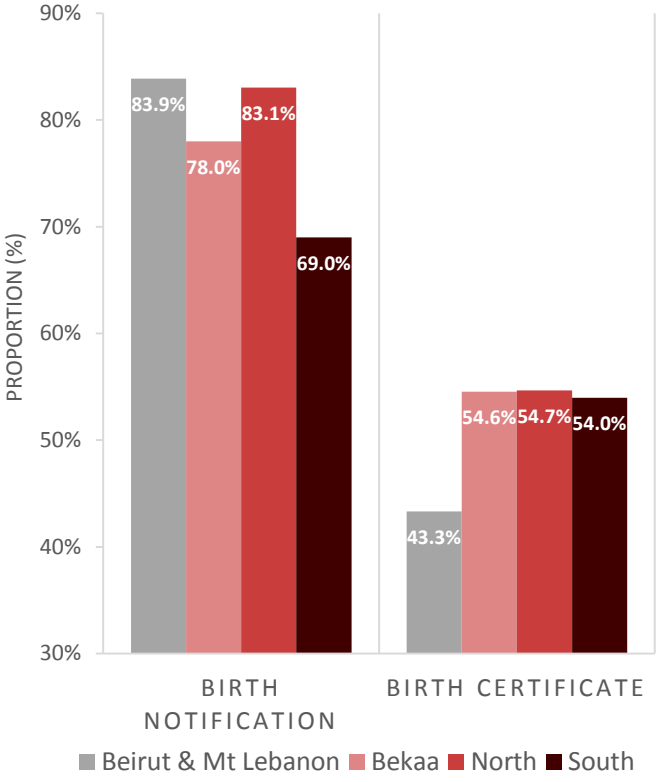


Figure 18 – Birth documentations for new-born infants by region, Lebanon, July, 2014



Chronic diseases

Among household members who were ≥18 years, 14.6% were reported to have at least one chronic condition (Table 8). The proportion with chronic condition varied by age (Figure 19). While only 4.5% of 18 to 29 year olds were reported to have at least one chronic condition, that proportion increased by age group to 12.8% for 30 to 44 years, 31.5% for 45 to 59 years and 46.6% for household members who were 60 years or older (Figure 19). The main reported chronic conditions were hypertension (25.4%), and ischaemic heart disease and other cardiovascular diseases (23.4%) (Table 8). The proportion of household members with chronic diseases who reported difficulty accessing medicine or other health services for their chronic condition were 56.1% (Figure 20). The main reason mentioned for difficulty in getting needed care was inability to afford fees (78.9%), long wait at the clinic (13.3%), and not knowing where to go (11.6%) (Table 6).

Table 8 – Chronic conditions, Lebanon, July 2014

	Total (N=1,711)	***Unweighted proportion or mean*, %***	***Weighted proportion or mean*, % (95% CI)***
Household members ≥ 18 years reporting at least one chronic condition	244	14.3	**14.6 (12.6 – 16.8)**
Reported chronic conditions by age group			
18 to 29 years (n=672)	28	4.2	**4.5 (3.0 – 6.7)**
30 to 44 years (n=688)	85	12.4	**12.8 (10.2 – 15.8)**
45 to 59 years (n=200)	63	31.5	**31.5 (24.7 – 39.3)**
60+ years (n=151)	68	45.0	**46.6 (37.5 – 56.0)**
Reported chronic conditions (n=244)			
Hypertension	64	26.2	**25.4 (20.2 – 31.3)**
Diabetes	43	17.6	**15.9 (11.8 – 21.1)**
Ischaemic heart disease	15	6.2	**5.0 (2.8 – 8.6)**
Cardiovascular disease (other)	48	19.7	**18.4 (14.0 – 23.9)**
Lung disease	25	10.3	**10.7 (7.0 – 16.1)**
Cancer and other neoplasms	5	2.1	**1.8 (0.7 – 4.5)**
Liver disease	6	2.5	**2.1 (0.9 – 4.9)**
Kidney disease	15	6.2	**6.6 (4.0 – 10.7)**
Epilepsy/seizures	40	16.4	**17.2 (12.3 – 23.6)**
Muscloskeletal condition	30	12.3	**13.3 (9.2 – 18.8)**
Other	54	22.1	**21.0 (15.5 – 27.7)**
Household member with chronic illness UNABLE to access medicine or other health services (n=244))	141	57.8	**56.1 (48.4 – 63.5)**
Reason for inability to access medicine or other service (n=)			
Long wait	21	14.9	**13.3 (7.8 – 21.9)**
Staff was rude	3	2.1	**2.4 (0.8 – 7.5)**
Language difficulties	0 (-)	0.0	**0.0 (-)**
Couldn't afford user fees	109	77.3	**78.9 (69.7 – 85.8)**
Cannot afford transportation	15	10.6	**9.5 (5.5 – 16.0)**
Did not know where to go	15	10.6	**11.6 (6.5 – 20.0)**
*Other***	32	22.7	**21.2 (14.1 – 30.7)**

* see methods for weighting procedures

**

"A tent in Syria is better than a castle in Lebanon" says 70 year old Syrian refugee in Lebanon.

Photo credit: Addario/UNHCR

Figure 19 – Reported chronic conditions by age category, Lebanon, July 2014

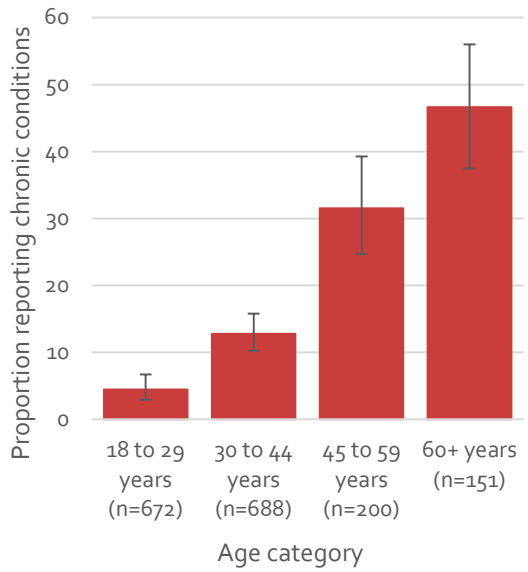
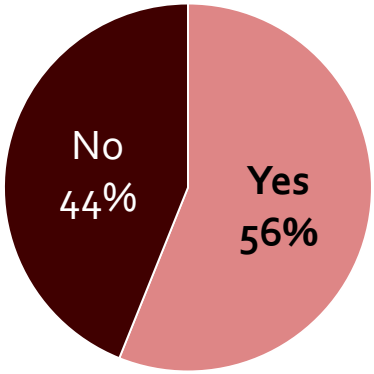


Figure 20 – Had difficulty getting care or accessing medicine for chronic condition? Lebanon, July 2014 (n=244)



Studying by the sheep pen. Turbide, Bekaa, Lebanon. Photo credit: Addario/UNHCR

Conclusions and Recommendations

1. **Repeat telephone surveys can be a useful tool in monitoring key population-level health access and utilisation indicators.** We have used this survey to compare findings now with findings from a smaller survey conducted in September 2013. This is the first time we were able to do such a comparison. In light of this evidence, and considering the difficulty in gathering reliable data from non-camp settings, the telephone survey methodology as described here should be standardised and adapted across the region to monitor the health access and utilisation of refugees in non-camp settings.
2. **The proportion of refugees with regular access to water has deteriorated. From 77% in September 2013 it is now 44%.** This may partly be due to seasonal variations (the previous survey was carried out in the first week of September). Considering that the refugee population in Lebanon has increased by more than 40% in the last 10 months, it is likely more and more, refugees are finding it difficult to regularly get access to water. This can be observed in the increase in households that store water in containers at home (from 33% to 55%).
    a. Storing water for consumption can introduce new risks in terms of infectious disease transmission. Ensuring water is stored in good clean containers and are adequately treated is important. Our telephone survey could not have an observation component and we were unable to gauge the quality of water stored at home.
3. **Sanitation conditions are on a positive trend.** There was an apparent modest decline in the average number of persons using one latrine or toilet from 9.7 to 8.5. The proportions of refugees using a latrine or toilet shared by 15 or more people decreased from 21% to 15%. This is a major achievement considering the increasing flow of refugees from Syria. Despite the tremendous inflow of refugees in the past 10 months, it seems the sanitation strategy has maintained or improved sanitation conditions.
4. **Mobile clinics seem not well suited for delivering routine healthcare services.** Of the 12% of refugees who needed some medical care in the month before the survey, ~75% sought care; <1% of those who sought care were first seen at a Mobile Medical Unit (MMU). MMUs were more effective in delivering vaccines to children. Re-focusing the mission of MMUs to preventive care e.g. vaccination may be a good way to get the most out of these units.
5. **Refugees who needed care spent an average USD 90 in the month preceding the survey. That is equivalent to an estimated expenditure of USD 12.1 million over 1 month by all refugees in the country.** On average, more than 27% of household non-assistance income was

spent on health care in one month. Out-of-pocket healthcare expenses were primarily due to inpatient and outpatient costs (52%). The number one strategy for coping with health care expenses was to borrow money (54%).

6. **Since the last survey in 2013, there has been improvement in the level of knowledge about available health services amongst refugees.** The proportion aware that refugee children <12 years have free access to vaccination has increased from 27% to 72%. The proportion who know medications for acute illnesses are free at PHC centres has increased from 25% to 40%. The proportion aware that a maximum of LP 1000 (USD 0.67) is all that's needed to refill medications for chronic conditions has improved from 1% to 24%. These are all positive movements. However, the levels of knowledge are still low and more work is needed to increase awareness. Considering the level of literacy in this refugee population, as recommended in the previous survey, we again recommend the repeated use of short messaging services (SMS). In an assessment of polio vaccination uptake in Jordan, direct messaging using SMS was found to be the most effective mechanism for communicating with non-camp refugees.
7. **The proportion of refugees that reported facing difficulties obtaining vaccination for children has declined from 31% in 2013 to 7% now – a major achievement.** The proportion of children <5 years who received at least one dose of polio vaccine was estimated at 91% and proportion of children between 9 months and <5 years who received at least one dose of measles-containing vaccine was 78%. These two coverage indicators suggest that the needed herd immunity threshold to prevent sustained local transmission in the event of an outbreak has not been reached. The refugees live among the Lebanese host community and an understanding of host community coverage and pattern of mixing is needed to gauge the risk of polio or measles for both populations. However, even without that information ensuring at least 90% of children receive more than 3 doses of polio vaccine and 2 doses of measles vaccine is crucial if the goal is to prevent sustained transmission. A re-focusing of MMU activity from a routine PHC-like service delivery to a unit focused on preventive activities e.g. childhood vaccinations may help increase coverage and thus prevent.
8. Antenatal care (ANC) coverage was found to be low and t**here remain difficulties in seeking antenatal care among pregnant refugee women.** Only 70% of women who were pregnant sought ANC. Among those who already delivered, only 50% reported making the recommended 4 or more ANC clinics before delivery. New strategies targeted at pregnant women are needed to improve ANC.

9. **The proportion of women who delivered via caesarean section was estimated at 30%, which is high.** This has cost implications for UNHCR and partners. Approx. 80% of women who delivered paid for part or all the cost of delivery. The average amount paid was ~USD 230. **Only 80% of children born in hospitals received a birth notification letter and only 52% receive a birth certificate.** Considering the importance of birth documentation for purposes of protection. UNHCR and the government need to identify avenues of improving access to vital registration documents to children born as refugees.
10. **Among household members with chronic conditions, 56% were unable to get access to care.** Cost of care (79%) is the primary reported reason for difficulty in accessing care. UNHCR and partners can help improve access to care for chronic illness by 1) increasing quality of primary health care provided to refugees with chronic conditions, 2) providing additional assistance to families with household members with chronic conditions, and 3) increasing access to medication by ensuring refugees know they about existing services for refugees with chronic illness.

Sharing a collective shelter with 5 families, Arsal, Bekaa, Lebanon. Photo credit: Malkawi/UNHCR

Limitations

While we adhered to a rigorous sampling and interview process, interviews were held with one key informant from each household. Lack of information by the informant or poor recall may lead to bias. There was some confusion among respondents regarding the difference between birth notification and birth certificate. An overestimation in the proportion with birth certificate may arise if some with only birth notification responded affirmatively to questions on birth certificate. The Survey was also limited to only refugees who are have registered with UNHCR and have a telephone number on the database. Even though almost all registered refugees (99%) had a phone number on the database, a few of the contacts sampled (15%) had invalid phone numbers, could not be reached or declined consent. We endeavoured to correct for non-response during the analysis stage by utilising post-stratification weighting. However, if excluded non-camp refugees are systemically different from those we interviewed, then findings may not be generalisible to the excluded population.

Two boys selling flowers by the sea in Byblos, Lebanon. They go to school by the day and work in the evening. Their older brother doesn't go to school at all. "I would if I could" he says, "but who would pay my father with the rent. Photo credit: Addario/UNHCR

Appendix

Appendix Table 1 – *Comparing population and survey sample data, Lebanon, July 2014*

	Population as of July 16 2014 (N=251,236), n (%)	*Final sample (n=566) Unweighted n (%)*	*Weighted proportions (n=566)*
Residence on registration (n=566)*			
Beirut and Mt Lebanon	71,787 (28.6%)	156 (27.6%)	28.6%
Bekaa	81,372 (32.4%)	191 (33.8%)	32.2%
North	68,910 (27.4%)	156 (27.6%)	27.6%
South	29,165 (11.6%)	63 (11.1%)	11.6%
*Registration date***			
Before 24/5/2013	83,214 (33.1%)	201 (35.5%)	34.9%
24/5/2013 to 28/11/2013	83,987 (33.4%)	182 (32.2%)	32.4%
After 28/11/2013	84,035 (33.5%)	183 (32.3%)	32.7%
Persons registered together			
1 to 3	96,251 (38.3%)	203 (35.9%)	38.4%
4 or 5	88,235 (35.1%)	199 (35.2%)	35.1%
6+ persons	66,750 (26.6%)	164 (29.0%)	26.5%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