

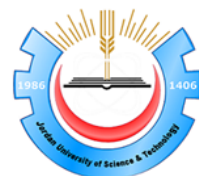


Syrian Refugee Health Access Survey in Jordan

December 2014



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BLOOMBERG SCHOOL
of PUBLIC HEALTH



Jordan University of
Science & Technology



World Health
Organization

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Executive Summary

The objective of this national assessment of access to health care by Syrian refugees in Jordan was to characterize the health status and care-seeking behaviors of Syrian refugees living outside of camps and to inform issues related to their access to health care. The survey sample was nationally representative of Syrians in Jordan. A summary of key findings is as follows:

- **Demographics:** The survey population was young, 53.8% of household members reported were age 17 or under and only 3.9% were over 60 years old. The average household size was 6.2. Educational attainment among household heads and respondents was low, with less than a quarter having completed secondary school.
- **Living Conditions and Household Economy:** The majority of households (87.1%) lived in apartments or houses, with most (96.1%) renting their accommodations. Households reported an average of 1.8 rooms for sleeping and 3.75 people per sleeping room. Crowding, defined as five or more people per sleeping room, was observed in 25.1% of households. The mean monthly household expenditure was 472 JD per month (median= 416 JD). Expenditures were primarily for housing (30.9%), food (29.4%), health (9.7%), and transportation (7.4%). Mean and median monthly household incomes, excluding humanitarian assistance, were 228 JD and 100 JD, respectively. Asset sales or borrowing in the three months preceding the survey were reported by 68.8% of households.
- **UNHCR Registration and Receipt of Humanitarian Assistance:** A substantial portion (95.0%) of households reported registration of all members with UNHCR. Most households also received assistance: 93.7% reported receiving cash or vouchers from the UN or an NGO in the month preceding the survey, with an average value of 201 JD.
- **Household Health Care Access and Utilization:** In general, most households (84.5%) reported receiving care at a public health facility since arriving in Jordan, averaging 6 visits to public health facilities in the six months preceding the survey. Conversely, less than half of households (45.7%) reported seeking care at private sector facilities since arriving in Jordan, averaging 4.4 private facility visits in the six months preceding the survey. Mean household spending on health in the month preceding the survey was 57 JD, with an average of 32.1 JD spent on consultation and diagnostic fees and 24.9 JD spent on medications.
- **Adult Health:** The majority of households (86.1%) reported they last time an adult household member was ill they were able to receive needed medical care. Adult health care was most often sought at public facilities (52.9%), with 33.4% seeking care in private facilities, and 9.8% in charity/NGO facilities. Cost was the greatest barrier to care, reported by 64.5% of households; however, among the adult care seekers, 60.4% reported accessing medical care without an out-of-pocket payment. The average out-of-pocket cost to the household for the most recent adult care-seeking visit for those paying was 24.4 JD. Prescriptions were given to 87.4% of adult health care seekers and 89.8% of those patients were able to obtain all of the prescribed medication. Of those receiving medication, 58.5% reported paying and the average out-of-pocket medication cost following the most recent health care visit was 14.2 JD.
- **Hospitalizations:** In the year preceding the survey, 21.2% of households reported one or more hospitalizations of a household member in Jordan for reasons other than childbirth, the most common being injury (20.7%). The average number of hospitalizations in the preceding year per household was 2.1, with an average length of stay of 5.9 days. A large portion of hospitalizations were in public sector facilities (68%), due to affordability (reported by 41.8% of households seeking care). The major reason for choosing a public facility was affordability

41.8%). Out-of-pocket payments were reported by 22.3% of households for the most recent hospitalization, with an average cost of 146.3 JD.

- **Chronic Health Conditions:** The presence of hypertension, cardiovascular disease, diabetes, chronic respiratory disease, or arthritis in one or more household members was reported by 43.4% of households. Of 1363 index cases with a chronic health condition diagnosis, 84.7% had received care in Jordan, most commonly at public facilities (53.9% of care seekers). Among those receiving care for a chronic condition in Jordan, 31.6% had an out-of-pocket payment for the most recent care received. The average cost for patients receiving care was 13.3 JD (median= 0 JD). Medications were prescribed for 88.9% of chronic health condition cases, and 85.5% reported currently taking medication. In Medication use stopped, or medication ran out, for longer than two weeks in the past year by 26.5% of cases, most commonly due to high cost as reported by 59.1% of those stopping medication.
- **Children's Health:** The majority of households (90.9%) reported that medical attention was sought the last time a child household member needed medical care. Child health care was most often sought at public facilities (54.6%), with 24.6% seeking care in private facilities and 8.9% in charity/NGO facilities. Cost was the greatest barrier to care, reported by 68% of households. However, among the child care seekers, most (70.7%) reported accessing medical care without an out-of-pocket payment. The average out-of-pocket cost to the household for the most recent child care-seeking visit for all patients was 13.4 JD. Prescriptions were written for 88.6% of child health care seekers, and 90.6% of those patients were able to obtain all of the prescribed medication. Of those receiving medication, 57% reported paying for it. The average out-of-pocket medication cost for all prescriptions was 8.8 JD.
- **Antenatal Care and Deliveries:** Among respondents, 20.3% reported that a woman in the household gave birth in the past year, 87.9% of whom delivered in Jordan. Antenatal care (ANC) was sought by 82.2% of women who were pregnant in Jordan, with an average of 6.2 antenatal visits among women receiving ANC. Cost was the most common barrier to antenatal care-seeking, and was reported by 32.6% of women not receiving antenatal care during pregnancy in Jordan. The most common location for ANC was a private Jordanian clinic or doctor (30.4%). The majority of deliveries took place in a public hospital (51.8%), primarily for reasons related to cost (54.8%). The majority of households did not pay any out-of-pocket payment for the delivery (67.4%). The average out-of-pocket payment was 70.1 JD among all deliveries and 217.6 JD among households paying for the delivery.

Acknowledgements

This survey was a joint effort by The Center for Refugee and Disaster Response at Johns Hopkins University Bloomberg School of Public Health, The World Health Organization, The School of Nursing at Jordan University for Science and Technology, The United Nations High Commissioner for Refugees, and The Ministry of Health of the Hashemite Kingdom of Jordan.

The study team would like to extend its gratitude to the organizations and partners that contributed to this survey. Team members from Johns Hopkins Bloomberg School of Public Health's Center for Refugee and Disaster Response included Dr. Shannon Doocy, Dr. William Weiss, Dr. Gilbert Burnham, Emily Lyles and Timothy Roberton, and Tyler Alvare. Professor Arwa Oweis and Dr. Laila Akhu-Zaheya from the Faculty of Nursing a WHO collaborating center/Jordan University for Science and Technology provided logistical support, facilitated recruitment and training of interviewers, and coordinated data collection. Technical support from the World Health Organization in Jordan was provided by Dr. Said Aden, Dr. Lana Meiqari, Miranda Shami, Mary Sweidan and the EPI team. The study team would also like to acknowledge Rick Brennan, Claudine Prudhon, Altaf Musani, Richard Garfield and Basel Al-Yousfi for their support and efforts to facilitate the survey. Additional support was provided by Ann Burton and The United Nations High Commissioner for Refugees in Jordan and from Paul Spiegel and Marian Schilperoord in Geneva.

The study was funded through generous contributions from The World Health Organization, without which this survey would not have been possible.

The report was prepared by Dr. Shannon Doocy, Emily Lyles, Timothy Roberton, Dr. William Weiss, and Dr. Gilbert Burnham. Inquiries about the study can be sent to Dr. Shannon Doocy (doocy1@jhu.edu).

Introduction

The Syrian Civil War, which began in March 2011, has caused an estimated 4.6 million Syrians to flee the country.¹ At the beginning of July 2014, more than 2.9 million Syrian refugees were registered or awaiting registration with UNHCR, in addition to an unregistered population that is unknown in size.² New arrivals continue across host countries throughout the region and the Syrian refugee population is projected to increase as the conflict continues. The largest Syrian refugee populations are in Lebanon, Turkey, Jordan, and to a lesser extent in Iraq and Egypt. Jordan has kept its border open to Syrians fleeing the unrest and by mid-2014 there were an estimated 602,000 Syrian refugees registered with UNHCR in Jordan.³ Refugees live in a variety of conditions ranging from formal camps and informal settlements to being integrated within host country communities in rented accommodations, staying with host families or in temporary housing. The majority (84%) of registered Syrian refugees in Jordan, lives outside of refugee camps and are living in Jordanian communities; the remaining 16% of refugees live in formal camps including Za'atri camp in the northern part of Jordan (85,186 refugees), Azraq camp east of Amman (9,059 refugees), and in the Emirati Jordanian Camp in Zarqa (3,754 refugees).³

Humanitarian agencies, the Government of Jordan (GoJ), and host communities have been struggling to meet the needs of the rapidly growing refugee population. The burden on the health system, including demand for trauma care, surgery, maternal health, and chronic disease care, has increased dramatically as a result of the influx of Syrian refugees. In Jordan, the Ministry of Health (JMoH) provides full access to health services for Syrians residing outside of refugee camps if they have an updated UNHCR-issued asylum seeker certificate and Ministry of Interior Service Card issues in the governorate in which they are seeking services. In camps, the burden of healthcare provision is provided by UNHCR, JMoH, and other partners. Refugee populations seek care across the public, non-government (NGO), and private sectors. In 2013, the JMoH spent an estimated US\$188 million on the care of refugees in 2013 and an additional US\$180 million is required to upgrade facilities to cope with the increased burden.⁴ Refugees in Jordan face a range of difficulties accessing health services. The high prevalence of chronic health conditions creates challenges with respect to high costs, continuity of care and access to medications, many of which are expensive.

To date, the focus of humanitarian agencies has been on meeting urgent and life threatening needs. Some health assessments of Syrian refugees, both those living inside and out of camps, have been undertaken in Jordan; however, few include a nationally representative sample. The assessment reported here fills that gap and reflects the health status, unmet needs, access to, and utilization of health services among Syrian refugees in non-camp settings in June 2014. The objective of this study is to support the JMoH, UNHCR, WHO and health service providers in Jordan by providing information that can inform humanitarian response planning, refugee health programming and health systems strengthening efforts.

¹ ACAPS. (2014). Regional Analysis Syria: Part II - Host Countries. Accessed 8 July 2014. URL: http://www.acaps.org/reports/downloader/part_ii_host_countries_july_2014/90/syria

² UNHCR. (2014). Syria Regional Response. Accessed 5 July 2014. URL: <http://data.unhcr.org/syrianrefugees/regional.php>

³ UNHCR. (2014). Jordan Country Profile. Accessed 5 July 2014. URL: <http://www.unhcr.org/53b6ab779.html>

⁴ Murshidi MM., et al. (2013). *Syrian refugees and Jordan's health sector*. Lancet **382**(9888):206-207.

Methods

Objective

The objective of the survey was to characterize the care-seeking behaviors of Syrian refugees and to better understand issues related to health care access among the refugee population. This information can inform humanitarian assistance and health service planning at local, national, and regional levels. In addition, the assessment can help understand the burden of the Syrian refugee population on the health sector in Jordan and serve as a basis for advocacy.

Sample Size Calculations

The sample size is based on the study objectives of assessing health status and access to health care among Syrian refugees in the region (Jordan, Lebanon, Turkey, etc.). A high level of precision in point estimates was not required given that the primary purpose of the study is to inform humanitarian programming. Given this and the challenges of data collection in urban refugee populations, a modest sample size was identified. The sample size calculations were based on the most conservative prevalence of 50%. Sample size calculations assume 80% power ($1-\beta$) and a design effect of 2.0 to account for a cluster sample design. The minimum and maximum planned sample sizes were increased to account for a 10% non-response rate and the possibility of incomplete reporting. The minimum sample size identified was 900 refugee households, which allows for the characterization of prevalence rates for health access and status with $\pm 5\%$ precision. In Jordan, however, partner organizations requested an increased precision of point estimates and additional power for comparisons between different sub-national regions. Data collection was planned with a sample size of 1500 refugee households to allow for the detection of statistically significant differences of greater than 10% between refugees in Central Jordan (primarily Amman) and the North (estimating that similar proportions of the Syrian refugee population reside in Amman and the North, and thus the sample distribution is adequate for regional comparison).

Sample Design

A two-stage cluster survey design with probability proportional to size sampling was used to attain a nationally representative sample. A 125 cluster x 12 household design was chosen because the costs of visiting many locations was relatively low given the small geographic size of Jordan and the concentration of the refugee population into large urban areas. In addition to the statistical benefits of having a large number of clusters that are small in size, the design presented logistical benefits where the smaller cluster size increased the feasibility of completing, in one day or less, clusters in areas with low density of Syrian refugees---where identifying refugee households living within Jordanian host communities would be a time consuming process. A nationally representative sample, inclusive of the sparsely populated Southern governorates, was used because it was preferable given the aims of informing humanitarian assistance planning nationally and given the feasibility with few additional resource requirements.

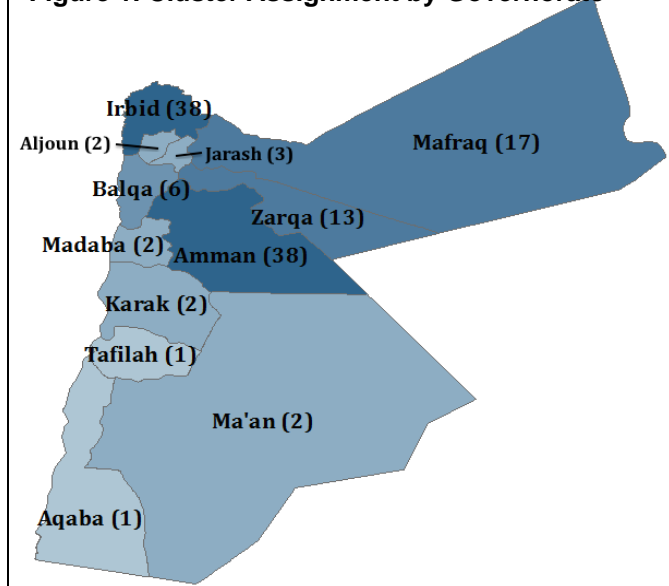
Most Syrian households are living within Jordanian communities but, aside from refugees registered with UNHCR, there are no publically available records of their specific location or address in Jordan. Probability proportional to size sampling was used to assign the number clusters to sub-districts using UNHCR registration data, assuming that non-registered refugees had similar housing patterns.

Detailed information on the UNHCR registered population, cluster allocation and sampled households by sub-district is presented in Annex Table 1. The registered refugee population and cluster allocation by governorate is summarized in Table 1. The 125 clusters were assigned with 38 clusters (30%) in Amman governorate, 38 clusters (30%) in Irbid governorate, and 49 clusters (40%) distributed proportionately to Syrians refugees in the remaining governorates (Figure 1).

Table 1. Cluster Allocation by Governorate

	Registered Refugees (%)	Clusters N	Clusters %
Ajloun	2.3%	2	1.6%
Al Aqabah	0.5%	1	0.8%
Al Balqa	3.3%	6	4.8%
Al Karak	2.0%	2	1.6%
Al Mafraq	13.4%	17	13.6%
Amman	30.2%	38	30.4%
At Tafilah	0.5%	1	0.8%
Az Zarqa	10.4%	13	10.4%
Irbid	31.0%	38	30.4%
Jarash	2.5%	3	2.4%
Ma'an	1.3%	2	1.6%
Madaba	1.6%	2	1.6%
Total	100%	125	100%

Figure 1. Cluster Assignment by Governorate



In each cluster, UNHCR randomly selected five registered refugee households that were listed as living in that cluster's assigned sub-district. Households were called and their residence location within the sub-district was verified; the first household that resided in the sub-district and agreed to schedule a meeting with the study team was used as the index household for the cluster. The study team met this household, conducted an abbreviated interview, and enquired about Syrian households living in the vicinity. The results from the index household interview are not included in the survey database, so as to minimize the bias toward interviewing registered vs. non-registered households. The household(s) to which the index households referred the interview teams, were interviewed using the complete questionnaire and were included in the survey database. Upon completion of each interview, respondents were asked to provide a referral to, and if possible an introduction to the nearest Syrian household. This process was repeated until 12 interviews (not including the index household) were completed for the cluster. To improve the representativeness and geographic coverage, no more than three households were sampled from within the same apartment building. Only Syrian households arriving in Jordan in 2011 or after were eligible to participate in the survey; however, none of the households approached for interview arrived in Jordan before 2011.

Questionnaire Design

The questionnaire was developed by consensus between WHO, UNHCR and JHSPH with the aim of providing a comprehensive assessment of the health of Syrian refugees that could inform humanitarian assistance planning at local, national and regional levels. As such, UNHCR and WHO preferences for priority content areas was taken into account. The final questionnaire focused on health service utilization, access to care, barriers to care-seeking, children's health and chronic medical conditions. To the extent possible, existing questionnaire content from WHO surveys, UNHCR assessments and other surveys of refugee populations were adapted for use to improve the validity of the tool and comparability of results. The questionnaire went through numerous drafts with feed-

back from UN agency headquarter staff in Geneva and technical staff in the Jordan country offices. Translation to Arabic was conducted by a professional company with prior translation experience for UN agencies and NGOs. Following translation, a pre-pilot test was conducted in April 2014 to identify major issues in content, translation, and interview flow and to estimate interview duration. The questionnaire was modified further based on the results of pilot testing and additional feedback from partner organizations. Subsequent to content modifications, the translation was reviewed and discussed by in-country researchers and WHO technical staff, including a Syrian physician, and a consensus translation was agreed upon. This version of the questionnaire was pilot tested immediately before the survey was conducted and final changes to the questionnaire were made based on feedback from interviewers.

Survey Implementation

The survey was conducted by faculty and graduate students at Johns Hopkins School of Public Health (JHSPH) and Jordan University of Science and Technology (JUST) School of Nursing. JUST faculty and students formed the data collection teams, and in total 48 interviewers and six team leaders were trained. Most interviewers and all team leaders had prior experience conducting health survey research in Jordan. The study team received two days of classroom training that focused on the questionnaire, e-data collection using tablets, interview techniques, basic principles of human subjects' protections and sampling methods. Following classroom training, a pilot survey of 67 households in Amman was conducted to finalize the questionnaire and understand potential logistical challenges that might arise. An additional day of training was then held to provide the full interviewer team with the opportunity to practice locating households and conducting interviews with the target population.

Data was collected in the field between June 8th and 22nd, 2014 by six teams supervised by study team members from JUST and JHSPH. Each team consisted of approximately six to eight interviewers, both male and female, and one team leader. Team leaders arranged the starting household interview in each cluster using a list of phone numbers of registered Syrian refugees in the designated sub-district provided by UNHCR. After conducting an abbreviated interview with the starting household, team leaders asked about Syrian households living in the vicinity. Each team then conducted interviews in the households referred to by starting households. To account for the time required for identifying households, the sample size was limited to 12 households per cluster with each team completing two clusters per day (a total of 24 full interviews per day per team). In sub-districts with fewer registered refugees or areas more geographically difficult to access, teams were scheduled to complete only one cluster per day.

Referral households identified for participation in the survey were approached and an adult household member was asked if they were interested in participating in the survey. Interviews were conducted with either the head of household or the caretaker/health decision maker. The household head was prioritized as the respondent of the early sections; however, questions related to pregnancy and child health were asked directly to the woman or the mother of the child in question, or a suitable adult proxy if this person was not available. Questions about hospitalizations and chronic diseases were asked directly to the afflicted individual selected, if that person was available, or, if not, another household member familiar with the person's condition or hospitalization. If households were encountered that were child-headed or had a child caretaker/health decision maker, this individual was interviewed so that this vulnerable population group was not excluded; these individuals are acting as adults and the same informed consent process was used as in other households. If no one was at home in the identified household, a second referral from the previously interviewed household was approached. If no interview could be conducted due to absence of an ap-

appropriate household decision maker, refusal to participate, or if the household was already interviewed, this household was recorded with the appropriate reason for not completing an interview and referral to another Syrian household was requested.

Interviews were conducted in three different manners: (1) by two interviewers (one male, one female) in each household, (2) by one male interviewer (in households with only males present), or (3) by one female interviewer (in households with only females present). Interviews lasted an average of 45 minutes and typically ranged from 30-60 minutes depending on the household size and number of children and individuals with chronic medical conditions. Interviews were conducted in a place that allowed confidentiality of responses. Respondents had the option of completing the interview inside or outside their home. In some instances, respondents were more comfortable completing the interview inside the home whereas in other cases such as a female-headed household or interview conducted when the husband is not at home, it was preferred that the interview be conducted outside or in view of another household or family member.

To protect the anonymity of respondents, no information was recorded on the survey instrument that could be used to identify the household or individual (including names, phone numbers, address, or other uniquely identifying characteristics). Interviewers obtained verbal informed consent from all participants by reading a consent form in Arabic outlining the purpose of the assessment, intended use of results, confidentiality, and the voluntary nature of participation. Potential respondents were informed that no identifying information would be recorded on the survey instrument or reported and that they had the right to decline to participate, stop the interview at any time, or to decline to answer any question. Potential respondents were also informed that the decision to take part or to refuse to take part would have no influence on access to assistance or protection. Interviewers were provided with information for participants on available services and registration with UNHCR in case this was requested.

Team leaders were responsible for coordinating their teams, including managing the number of interviews completed in a cluster. In some cases more than 12 households per cluster were interviewed because the final interviews were being completed simultaneously. In addition to managing interviewers, team leaders completed a short cluster summary form and also took GPS coordinates at a central location for the cluster (i.e., not at the household) to facilitate mapping and spatial analysis of results.

Data Management and Analysis

Data was collected on tablets using Magpi, a mobile data platform by Datadyne LLC (Washington, DC). The template forms were developed online by the study team and subsequently downloaded onto each tablet during training. During data collection, team leaders transmitted records to the JHSPH Magpi web account immediately following completion of each cluster. In the event that records could not be sent directly after cluster completion, they were downloaded directly by JHSPH study team members as soon as possible. An internet connection was not required for data collection, only for transmission of data to the server in cases where 2/3G coverage was available.

JHSPH and JUST study team members actively supervised interviewers in the field to ensure data collection procedures were adhered to and that data quality was maintained. Team leaders reviewed all questionnaires for completion and quality before submitting data and leaving the cluster area. Using Magpi's dashboard feature, real-time review of the data being collected was conducted to ensure that adequate data quality was maintained and that an acceptable number of interviews were completed on a daily basis. Study coordinators used the dashboard feature to identify ques-

tions and interviewers with problematic reporting and immediate action was taken to address concerns including follow up targeted training and increased supervision. Upon completion of data collection, data files were merged and cleaned. Data was analyzed using the Stata 13 (College Station, TX) and Tableau Desktop (Seattle, WA) software packages. Descriptive statistics presented in the report include frequencies, means, medians, confidence intervals and ranges; cross tabulations with statistical tests (chi-square or ANOVA) for comparison by region and/or sector of health care provider were also conducted. The Stata 'svy' command was used to account for the cluster survey design so that the standard errors of the point estimates were adjusted for survey design effects. Preliminary analysis and findings were shared with and discussed by all the collaborating organizations prior to finalization of results to ensure their accuracy and the best possible interpretation of findings within the Jordanian context.

Given that increases in cluster size were small, distributed across geographic areas, and did not appear to bias the sample or have an impact on point estimates based on a sensitivity analysis, the decision was made to include extra interviews in the final analysis. Results were not adjusted by cluster size. While 75% of clusters included complete interviews for the planned number of 12 households, the number of households in the remaining 25% (32) of clusters ranged from 13 to 17. It was not deemed necessary to weight results by cluster size because clusters with additional households were not disproportionately concentrated in any geographic area and the distribution of households interviewed in the final sample set was representative of the Syrian refugee population on the sub-district level. Furthermore because household index cases were used for most outcomes of study, the number of records per cluster included in a given analysis was expected to vary, thus weighting could be inappropriate.

Approvals

This study was approved by ethics review committees at Jordan University of Science and Technology and the World Health Organization in Geneva. The Johns Hopkins University Bloomberg School of Public Health Institutional Review Board also reviewed the protocol and determined that members of the JHSPH research team were not involved in human subjects research because they did not have direct contact with participants or access to personal identifiers. Permission to conduct the survey was also received from the Jordan Ministry of Health.

Results

A total of 1634 households were approached to participate in the survey. Of these households, 2.9% (n=47) were not at home, 0.8% (n=14) were already interviewed for this survey, and 1.4% (n=23) declined to be interviewed. The final sample included 1550 households, which equates to a response rate of 94.7%.

Study Population Characteristics

Demographics

Survey respondents were predominantly female (61.7%, CI: 58.6-64.8) with an average age of 38 years (median=36, range: 15-95). Educational attainment among respondents was low with less than a quarter of respondents completing secondary education. The highest level of schooling completed by respondents was as follows: no formal schooling 10.3%, (CI: 8.4-12.4), primary school (31.2%, CI: 28.7-33.7), preparatory school (35.2%, CI: 32.8-37.7), secondary school (14.5%, CI: 12.7-16.5), institute, technical degree or diploma (4.4%, CI: 3.4-5.9) and university or higher (4.5%, CI: 3.4-5.9). Of respondents that participated, 39.4% (CI: 36.1-42.7) identified themselves as the household head, 47.6% (CI: 44.2-50.9) as the household head and caretaker/health decision maker; and 13.1% (CI: 11.1-15.4) as the caretaker of the children or health decision maker (but not as head of household).

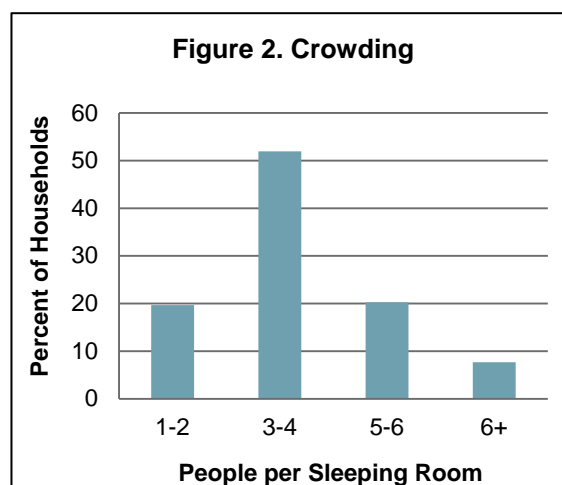
A total of 1550 households participated in the survey with 9580 household members. Household members were defined as people who share a living space (such as an apartment, basement, room in or attached to a house, or tent) and share meals, regardless of biological relation; short-term visitors staying in Jordan for less than one month were not counted as household members. The average household size was 6.2 (CI: 6.0-6.4) and ranged from 1 to 20. With an average household size of 6.7, Syrian refugees in the North of Jordan had a significantly larger household size than those in the Central and Southern regions, which had average household sizes of 5.7 and 5.4 members, respectively ($p<0.001$). The age distribution of the survey population was as follows: 20.2% 0-5 years, 33.6% 6-17 years, 31.5% 18-39 years, 10.9% 40-59 years and 3.9% 60+ years. Given the young age distribution of the population, it follows that most households (89.6%, CI: 87.8-91.2) had children. Overall, 64.6% (CI: 61.9-67.1) of households had one or more children in the 0-5 age range and 89.6% (CI: 87.8-91.2) had children between 6-17 years of age. The mean number of children in each age category was 1.3 (0-5 years) and 2.1 (6-17 years). Older adults, defined as age 60 years or above, were reported in 19.7% (CI: 17.7-22.0) of households and there was a mean of 0.24 older adults per household in the survey population. Only 1% of households reported having non-Syrian household members; however, 7.1% (CI: 4.1-11.8) of unregistered households cited a household with non-Syrian nationality as the reason for not registering. Educational attainment among household heads was low and, with less than a quarter having completed secondary school, was similar to patterns observed among all respondents.

Living Conditions

A substantial proportion of surveyed households (87.1%, CI: 83.8-89.8) lived in apartments or houses. Other types of accommodations included additions to houses (8.5%, CI: 6.8-10.5); tent, shacks or other temporary structures (2.7%, CI: 1.1-6.2); and unfinished buildings or construction sites (1.5%, CI: 0.9-2.4). Almost all households rented their accommodations (96.1%, CI: 93.2-97.7). A small proportion were hosted by families without making payments (2.5%, CI: 1.4-4.2) and approximately one percent reported other types of arrangements. These included occupying accom-

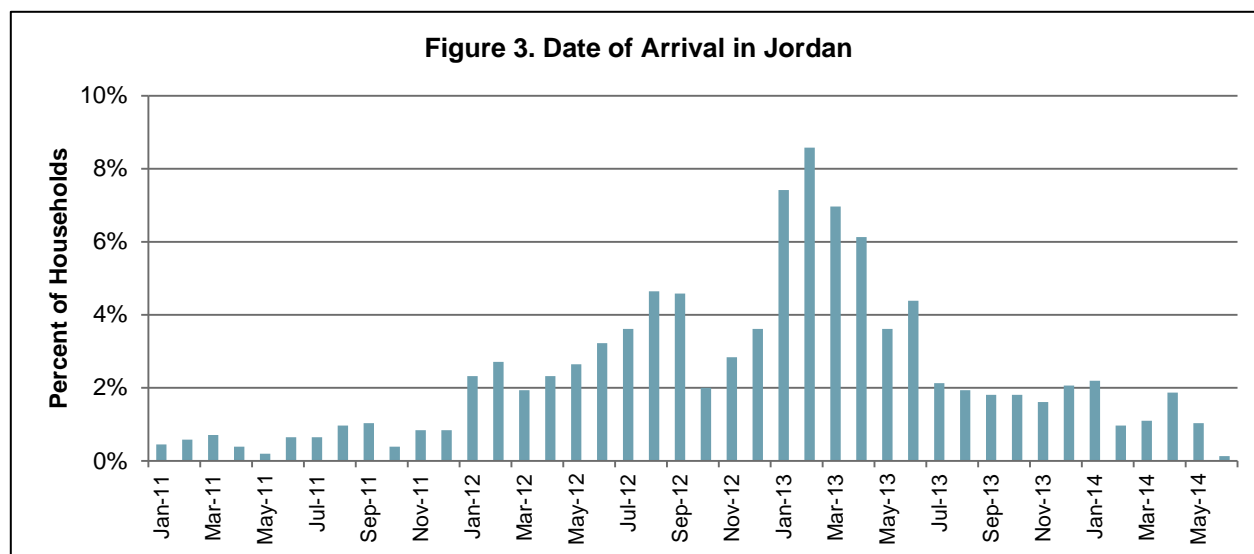
modations in exchange for work, paying to occupy land, and staying without permission. No significant differences in residence type ($p=0.853$) or stay arrangement ($p=0.738$) were observed by region within Jordan.

Crowding, defined as the number of household members per sleeping room, was assessed as a potential proxy for socioeconomic status and living conditions. Households reported an average of 1.8 rooms (median=2, range 0-4) used for sleeping and there was a mean of 3.75 (median=3.5, range 1-17) people per sleeping room. Significant differences in the number of people per sleeping room were observed by region, with the higher values in the North (mean=3.9) and the lower values in the South (3.2)($p<0.001$). The distribution of people per sleeping room is presented in Figure 2. The cutoff for crowding was defined (based on the distribution) as five or more people per sleeping room and 25.1% (CI: 22.3-28.1) households fell within this category.



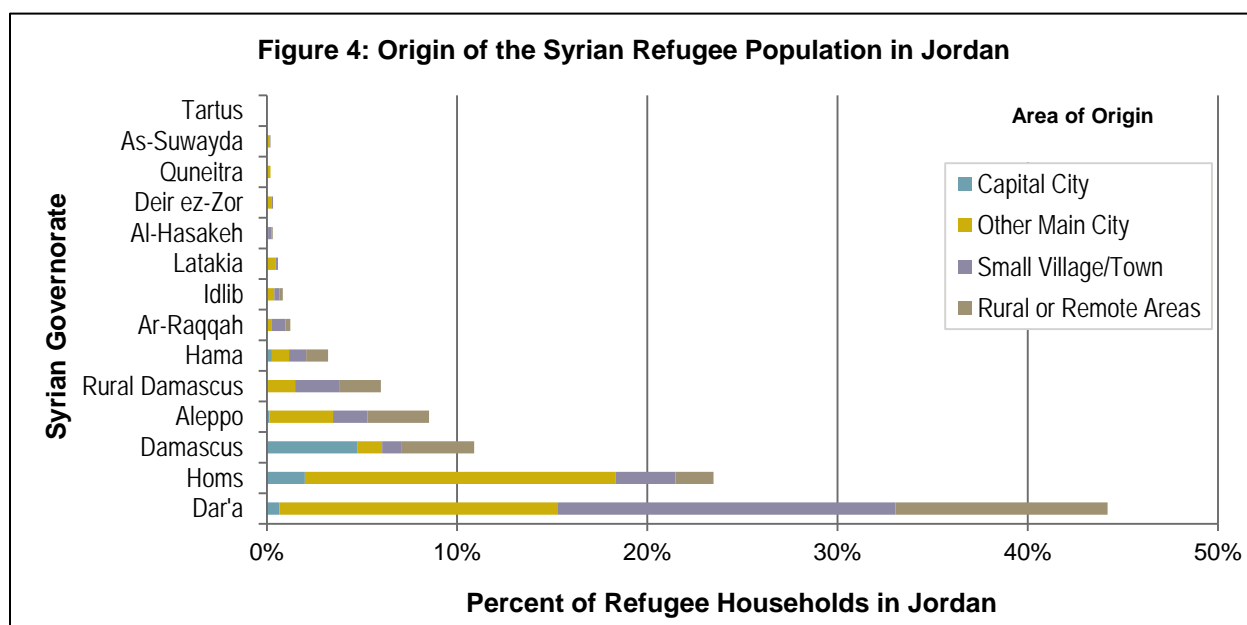
Timeframe of Arrival and Experiences in Syria

Only Syrian households arriving in Jordan in 2011 or after were eligible to participate in the survey; households arriving prior to 2011 were not directly affected by the conflict, were likely to have migrated for other reasons and/or have been in Jordan for an extended time period, and were unlikely to meet the definition of a refugee. Of the households included in the survey, 7.8% (CI: 6.5-9.3) arrived in 2011, 36.5% (CI: 33.5-39.5) arrived in 2012, 48.5% (CI: 45.3-51.6) arrived in 2013, and 7.3% (CI: 5.8-9.1) arrived within the first six months of 2014.



An overview of the Syrian location of origin of refugee households in Jordan is presented in Figure 4. The most frequent governorates of origin included Dar'a 44.2% (CI: 37.9-50.7) and Homs 23.5% (19.0-28.7). Other governorates that were represented included Damascus (10.9%, CI: 8.8-13.5), Aleppo (8.5%, CI: 6.3-11.4) and Rural Damascus (6.0%, CI: 4.2-8.6). Significant differences were ob-

served by region with respect to governorate of origin ($p < 0.001$) with households from Dar'a concentrated in the North of Jordan, accounting for 68.0% (CI: 59.5-75.4) of households in the region. Those from Homs were concentrated in the South (44.9%, CI: 20.9-71.5 of households in the region). Within their respective governorates of origin, households reported being from the governorate's capital city (7.9%, CI: 6.4-9.7), another main city (39.7%, CI: 35.6-43.9), a small village or town (28.4%, CI: 25.0-32.0), and rural or remote areas (24.1%, CI: 21.1-27.4).



More than three-quarters (77.4%, CI: 74.3-80.3%) reported that the household or a household member experienced a violent event in Syria. Types of violent events experienced included destruction of the home (74.8%, CI: 72.2-77.4), imprisonment of a household member (35.1%, CI: 31.9-38.4), conflict related injury (34.5%, CI: 31.8-37.3%), conflict related death (25.1%, CI: 22.1-28.7) and a kidnapped or missing household member (11.9%, CI: 10.0-14.2). Risk of experiencing a violent event varied significantly by governorate of origin in Syria ($p = 0.012$).

Household Welfare

Household Economy

Household economic status was characterized by both income and expenditures. Expenditures are believed to be a more valid measure of socioeconomic status in this context because of difficulties associated with accurately collecting income data as a result of sensitivities related to refugees not being able to work legally and misconceptions that households reporting low income will be targeted for humanitarian assistance. As such, average monthly expenditures may be a more accurate reflection of household economic status; they also are likely to reflect household wealth, notably available savings. Household income and expenditure data is summarized in Table 2.

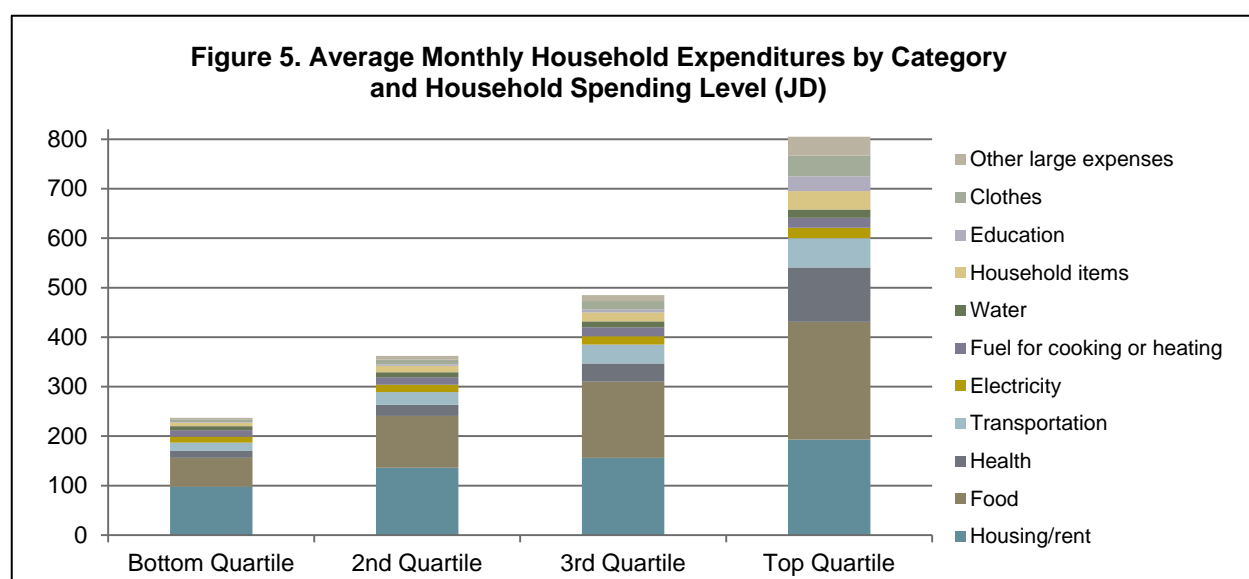
The mean monthly expenditure was 472 JD (CI: 450-494); the median was 416 JD.⁵ Significant differences in mean household expenditures were observed by region, with households in the North reporting the highest expenditures (mean=490 JD), in the Center average expenditures (mean=461 JD) and households in the South reporting the lowest expenditures (mean=415 JD) ($p<0.001$). One potential explanation for this observation is that higher spending levels are related to larger household size. Detailed information on expenditures and income by region is presented in Annex Table 7. Expenditure and income data by quartile in presented Table 2 and Figure 5 to illustrate variation in spending across the population. Median monthly expenditures in the top quartile were 695 JD as compared to 250 JD in the lowest quartile. Categories accounting for the highest proportion of spending included housing (30.9%), food (29.4%), health (9.7%), and transportation (7.4%), and non-specific spending (22.6%).⁶

Table 2. Household Income and Expenditures (Jordan Dinar)

	Survey Total (n=1550)			
	N	Median	Mean	95 CI
Expenditures (past month)				
Total Expenditures	1550	416	472	[450,494]
Expenditures by Quartile				
Top quartile	387	695	805	[757,852]
3rd quartile	387	481	484	[480,489]
2nd quartile	388	365	363	[359,366]
Bottom quartile	388	250	238	[230,245]
Expenditures by category				
Housing/rent	1550	150	146	[138,154]
Electricity	1550	15	16	[15,17]
Fuel (cooking/heating)	1550	15	16	[16,17]
Water	1550	10	12	[11,13]
Food	1550	100	139	[130,147]
Transportation	1550	25	35	[33,38]
Health	1550	20	46	[37,55]
Household items	1550	10	19	[16,21]
Education	1550	0	10	[7,14]
Clothes	1550	0	19	[16,21]
Other large expenses	1550	0	15	[10,20]
Income (past month)*				
Total Household Income	1550	100	228	[170,287]
Income by Quartile				
Top quartile	375	300	734	[513,955]
3rd quartile	361	160	168	[165,171]
2nd quartile	223	100	82	[78,86]
Bottom quartile	591	0	0	[0,0]
Sold assets or borrowed money in past 3 months (%)	1,066	---	68.8	[65.7,71.7]

*excluding humanitarian assistance

Mean and median monthly household incomes, excluding humanitarian assistance, were 228 JD (CI: 170-287) and 100 JD, respectively. Due to the sensitive nature of income, respondents were not



queried about income sources. Median monthly income in the top quartile was 300 JD as compared to 0 JD in the bottom quartile. No significant differences in monthly income were observed by region ($p=0.432$). Asset sales or borrowing, often an indicator of financial distress, were reported by 68.8% (CI: 65.7-71.7) of households in the three months preceding the survey. When assessed by expenditure quartile, asset sales or borrowing was more common in the top expenditure quartile (74.7%, CI: 69.4-79.3) and less common in the bottom expenditure quartile (59.8%, CI: 53.7-65.6) ($p=0.001$).

UNHCR Registration and Receipt of Humanitarian Assistance

Overall, 95.0% (CI: 93.6-96.1) of households reported that all members were currently registered with UNHCR or waiting for initial registration or renewal appointments. No significant differences in registration rates were observed by region ($p=0.445$). Registered households, as defined by UNHCR included those waiting for an appointment for new registration (81.8%, CI: 72.5-88.5), and those previously registered that were waiting for a renewal appointment (18.2% CI: 11.5-27.5). Among the 5.0% (CI: 3.9-6.4) of households that did not have a current valid registration, 67.5% (CI: 56.2-77.1) indicated they wanted to register with UNHCR. Reported reasons for not registering included lack of time (15.6%, CI: 8.6-26.6), insufficient benefits (11.7%, CI: 5.9-21.9), and distance (5.2%, CI: 2.0-13.0). Only 3.8% (CI: 1.7-8.2) reported not knowing about UNHCR or how to register. A sizeable proportion, 58.4% (CI: 45.7-70.2) indicated they had other reasons for not registering, which included household members with nationality other than Syrian (16.9%, CI: 9.9-27.2), problems with identification papers (7.8%, CI: 3.6-16.2), travel outside of Jordan or to Syria (3.9%, CI: 1.3-11.3), and fear (5.2%, CI: 1.7-14.9).

In total, 93.7% (CI: 92.1-94.9) of households reported receiving cash or vouchers from the United Nations (UN) or a non-government organization (NGO) in the month preceding the survey. Receipt of humanitarian assistance is summarized in Table 3. On average, households received assistance valued at 201 JD (CI: 177-225, median=144) in the month prior to the survey. There were no significant differences in receipt of cash or vouchers by region for either the proportion of households receiving assistance ($p=0.543$) or the amount received ($p=0.484$).

Table 3. Receipt of Humanitarian Assistance in the past month

	Receipt			Value (Jordan Dinar)*			Regional comparison p value**
	N	Percent	95 CI	Median	Mean	95 CI	
Cash from the UN or NGO							
Overall	384	24.8	[21.6,28.2]	120	230	[163,298]	
By Region							
North	173	23.8	[19.6,28.6]	120	180	[133,228]	0.436 ¹
South	184	24.7	[20.2,29.8]	110	148	[78,219]	0.174 ²
Central	27	34.6	[18.5,55.2]	120	290	[160,420]	
Vouchers from the UN or NGO							
Overall	1421	91.7	[89.9,93.1]	120	143	[136,150]	
By Region							
North	672	92.4	[89.8,94.4]	140	147	[138,156]	0.390 ¹
South	676	90.7	[88.0,92.9]	120	124	[113,135]	0.009 ²
Central	73	93.6	[88.0,96.7]	120	141	[130,153]	
Any UN or NGO Cash or Voucher Receipt and Combined Total of All Assistance							
Overall	1452	93.7	[92.1,94.9]	144	201	[177,225]	
By Region							
North	686	94.4	[92.0,96.1]	150	189	[168,210]	0.543 ¹
South	693	93	[90.6,94.9]	120	179	[142,216]	0.484 ²
Central	73	93.6	[88.0,96.7]	144	215	[169,261]	
Receipt of food, household items, or other aid from religious/community group							
Overall	232	15	[13.0,17.2]	---	---	---	
By Region							
North	126	17.3	[14.2,21.0]	---	---	---	0.540 ¹
South	92	12.3	[10.0,15.2]	---	---	---	
Central	14	17.9	[10.5,28.9]	---	---	---	

*among households reporting receipt of assistance

** ¹p-value for comparison of percentages and ² p-value for comparison of means

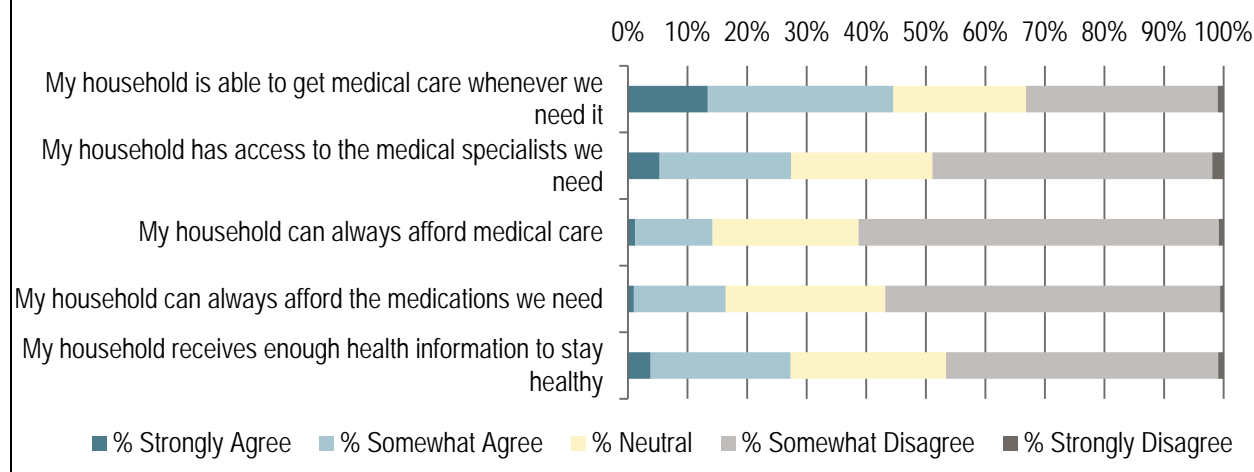
The majority of humanitarian assistance was in the form of vouchers, which were received by 91.7% (CI: 89.9-93.1) of households. The average value of the vouchers received was 143 JD (CI: 136-150, median=120). The proportion of households receiving vouchers was similar across regions ($p=0.390$). However, the value of vouchers received was significantly different where the average voucher value was highest in the North (147 JD) and lowest in the South (124 JD) ($p=0.009$). Given that household size varied significantly by region and was greatest in the North and smallest in the South, it is not unexpected that voucher values would follow a similar pattern, especially if amount received is calculated on a per person basis. Cash payments by NGOs and UN agencies were less common and reported by 24.8% (CI: 21.6-28.2) of households; the mean value of cash disbursements received in the month preceding the survey was 230 JD (CI: 163-298, median=120). No significant differences in receipt of cash assistance were observed by region for either the proportion of households receiving cash ($p=0.436$) or the amount received ($p=0.174$). In addition to the humanitarian assistance reported above, 15.0% (CI: 13.0-17.2) of households reported receiving aid (including food, household and non-food items and other types of assistance) within the past month from Islamic charities, mosques and other religious or community groups.

Household Health Care Access and Utilization

Perceptions of Health Access in Jordan

Household perceptions on five different components of access to medical care were assessed. These included the perceived ability to access medical care and medical specialists, affordability of medical care and medications, and receipt of health information (Figure 6). Of the different measures assessed, ability to access medical care was perceived most favorably with 44% of households agreeing with the statement *“my household is able to get medical care whenever needed;”* 22% were neutral and 33% disagreed. Access medical specialists was perceived as more challenging, with nearly half (49%) of households disagreeing with the statement *“my household has access to the medical specialists we need;”* 24% were neutral and 27% agreed. Perceptions of affordability of health services and medications were more negative. A large number of households (62%) felt health services were not affordable and disagreed with the statement *“my household can always afford medical care;”* 25% were neutral and 14% agreed. Perceptions on the affordability of medications were similar with 57% of households disagreeing with the statement *“my household can always afford medication;”* 27% were neutral and 16% agreed. Perceptions of access to health information was more mixed with 47% disagreeing with the statement *“my household receives enough information to stay healthy”* with 26% being neutral and 26% agreeing with the statement.

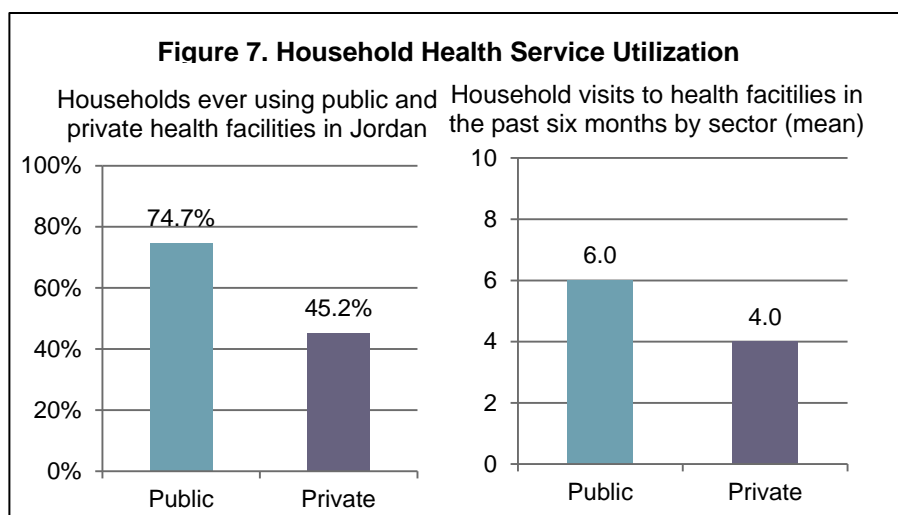
Figure 6. Perceptions of Household Access to Medical Care



Household Health Facility Utilization

Household health facility utilization in both the public and private sectors is summarized in Figure 7. The majority of Syrian households, 84.5% (CI: 83.0-87.5), reported seeking care at public sector facilities since their arrival in Jordan. Among households that ever sought care at a government health facility, a mean of 6.0 (median=4, range 0-90) visits were reported per household in the six months preceding the survey and a mean of 1.1 (median=0.75, range 0-18) visits per person.

Over half of households interviewed (58.2%, CI: 53.5-62.7) accessed public health facilities using public transportation, 38.1% (CI: 33.9-42.4) arrived by walking, and a small minority, 3.7% (CI: 2.5-5.4), arrived by car. Mean transport time to government facilities was 24 minutes (median=15, range 1-240). There were no significant differences in the proportion of



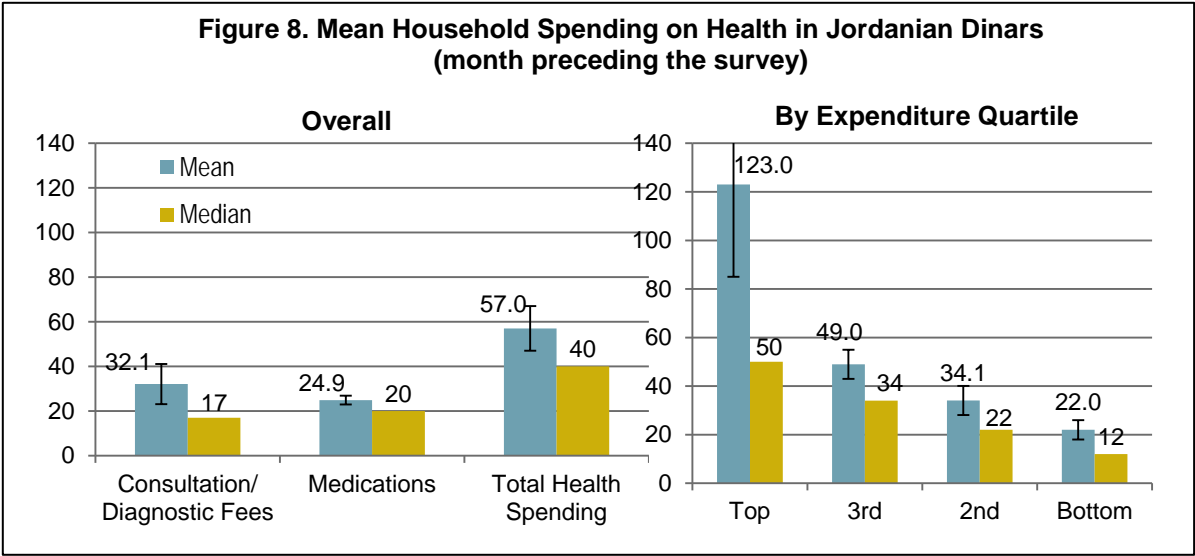
households that ever used a government health facility by region ($p=0.393$); however, there were significant differences in frequency of use within the six months preceding the survey and transportation time. Households in the South visited government facilities an average of 7.8 times in the six months prior to the survey as compared to households in the Northern and Central regions, which visited government health facilities an average of 6.2 and 5.6 times, respectively ($p=0.062$). Households in the South reported a shorter mean transportation time of 18 (CI: 16-20) minutes to a government health facility as compared to those in the Central and North regions, both of which reported mean transportation times of 24 (CI: 22-26) minutes ($p<0.01$).

Less than half of Syrian households, 45.2% (CI: 42.3-48.1), reported seeking care at private sector facilities since their arrival in Jordan. Among households that ever sought care at a private health facility, a mean of 4 (median=3, range 0-30) visits to a private facilities were reported per house-

hold in the six months preceding the survey and a mean of 0.7 (median=0.5, range 0-6.25) visits were reported per person. A substantial percentage of households (77.1%, CI: 72.8-81.0) accessed private health facilities using public transportation, 18.0% (CI: 14.5-22.1) arrived by walking, and a small minority, 4.9% (CI: 3.2-7.3), arrived by car. Mean transport time to private health facilities was 33.1 minutes (median=30, range 0-240). Mean travel time to private health facilities was shortest in Central Jordan at 31 minutes (CI: 27-34) compared to 35 (CI: 31-39) minutes in the North and 43 (CI: 29-58) in the South (p=0.068). There were no significant differences by region in the proportion of households that ever used a private health facility (p=0.808), nor in frequency of use within the six months preceding the survey and transportation time (p=0.817).

Household Spending on Health

In the month preceding the survey, mean household spending on health was 57.0 JD (CI: 46.8-67.3, median=40, range 0-5500) (Figure 8. Household spending on consultation and diagnostic fees averaged 32.1 JD (CI: 23.3-40.9, median=17, range 0-5000) and spending on medications 24.9 JD (CI:



22.7-27.1, median=20, range 0-800).

No significant differences were observed by region for total spending on health (p=0.247) or for spending on medications (p=0.038). Significant differences by region were observed for spending on consultations and diagnostic fees with the highest average expenditure in Central Jordan (3.64 JD, CI: 23.3-43.9) as compared 1.92 JD (CI: 16.5-47.3) in the North and 19.0 JD (CI: 12.4-25.5) in the South. Households in the South reported significantly higher frequency of use of government facilities, which may be one potential explanation for lower expenditures on consultations and diagnostic fees as compared to other regions. When assessed by socioeconomic status (household expenditure quartile), spending on health varied significantly (p< 0.001). Households in the top quartile spent an average of 123.0 JD on health (CI: 84.8-161.2, median=50) in the month preceding the survey as compared to 22.0 JD (CI: 18.2, 25.9, median=12) in the lowest quartile.

Adult Health

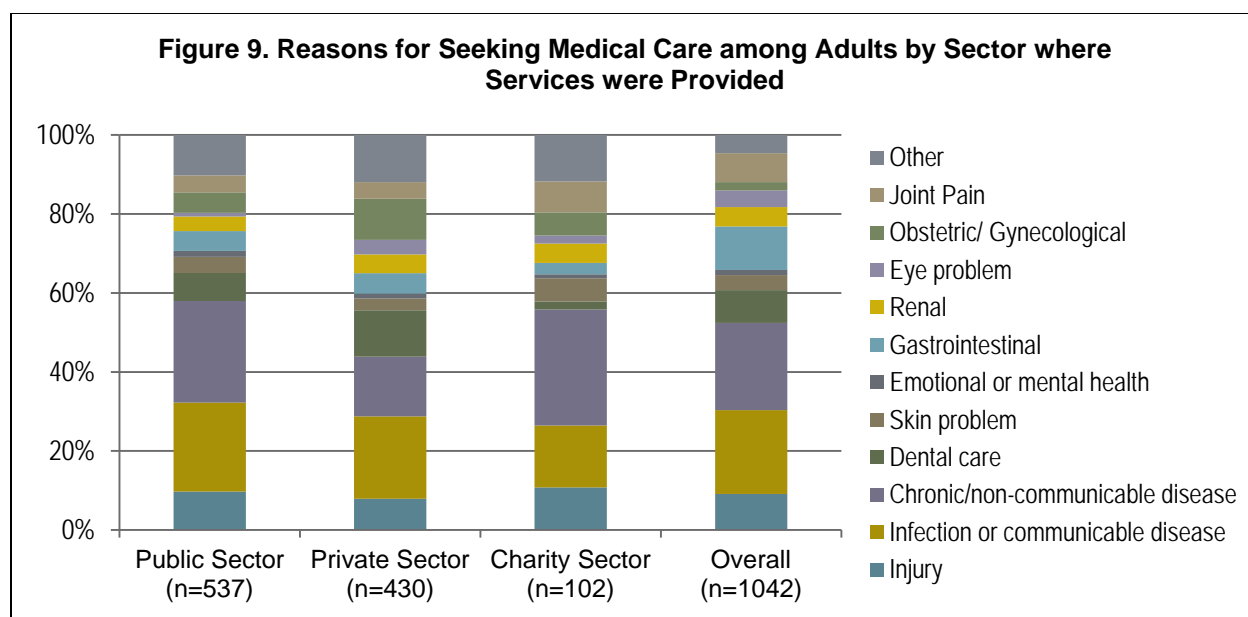
Health Seeking and Service Utilization among Adults

The primary reasons reported by adults for needing medical included infection or communicable disease (21.2%), chronic medical conditions and non-communicable diseases (19.4%), injuries

(9.4%) and dental care (7.8%); no significant differences in reasons for needing medical care were observed by region ($p=0.131$). Medical care for an adult was needed within the month preceding the survey in 48.2% of households (CI: 45.0-51.4). Among households in which medical care was ever needed for an adult in Jordan, the distribution for the last time such care was needed was as follows: <2 weeks ago, 37.8% (CI: 34.8-40.8); between two weeks and one month ago, 23.8% (CI: 21.4-26.4); 1 to less than 3 months ago, 22.0% (CI: 19.7-24.5); 3 to less than 6 months ago, 9.3% (CI: 7.8-11.1); 6 months to less than one year ago, 4.9% (CI: 3.8-6.3) and more than one year ago, 2.1% (CI: 1.4-3.2). Overall, 86.1% (CI: 83.6%-88.2%) of households reported medical attention was sought the last time an adult needed medical care. No significant differences in the last time care was needed ($p=0.212$) or care-seeking rates for that event ($p=0.192$) were observed by region.

Among the 13.9% (CI: 11.8-16.4) of households that did not seek care for an adult last time it was needed, the primary reason was cost: 64.5% (CI: 56.7-71.6) reported they could not afford to seek medical services. Other reasons included not being sick enough to seek care (6.5%, CI: 3.6-11.6), not knowing where to go (5.9%, CI: 3.3-10.3), provider having inadequate medications or equipment (5.3%, CI: 2.9-9.6%), still waiting for a scheduled appointment (5.3%, CI: 2.9-9.6%) and transportation difficulties (4.1%, CI: 2.0-8.3). No significant differences in reasons for not seeking care were observed by region ($p=0.188$).

Among adult household members that most recently sought care, approximately half (52.9%) sought care in public sector facilities including public hospitals (22.9%, CI: 20.1-26.0), primary health care centers (21.0%, CI: 17.3-25.2), and comprehensive health centers (7.6%, CI: 6.0-9.5). Another 33.4% sought care in private sector facilities including private hospitals (9.3%, CI: 7.5-11.5), private clinics (22.0%, CI: 19.1-25.1), shops or other informal providers (0.3%, CI: 0.1-0.9), pharmacies (5.4%, CI: 4.0-7.2), and Syrian doctors (1.7%, CI: 1.1-2.7). While most Syrian doctors are not licensed to practice and prescribe medication in Jordan, many informally provide care outside of the official Jordanian health system to neighbors and family. Charity/NGO facilities including Islamic charities (2.6%, CI: 1.8-3.8) and non-religious charities (7.2%, CI: 5.3-9.6) were the most recently used source of care for the remaining 9.8% (CI: 7.6-12.5) of adults seeking care. Differences in adult care-seeking by region were marginally statistically significant ($p=0.073$) and are presented in detail in Annex Table 11. A higher proportion of households in the South (70.7%) used public sector facilities as compared to in the North (52.9%) and Central (47.8%) regions.

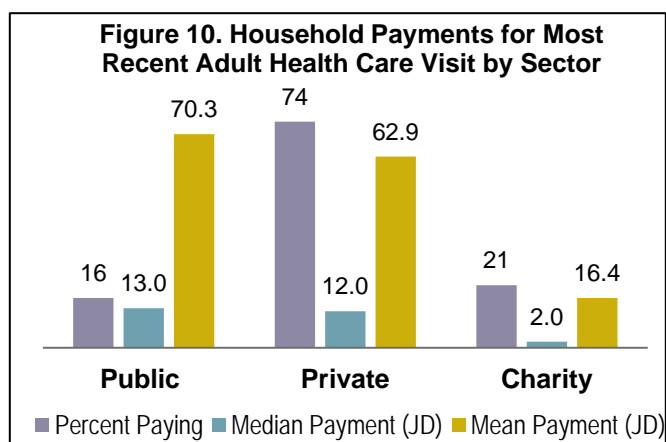


The most common reasons reported for the most recent visit to a health facility among adults that sought care included infection or communicable diseases (20.8%, CI: 18.5-23.4), chronic medical conditions and non-communicable diseases (20.4%, CI: 17.9-23.2), injuries (8.7%, CI: 7.1-10.7) and other reasons (36.6%, CI: 33.2-40.1); the most commonly reported other reasons included obstetric/gynecological problems (7.3%, CI: 5.8-9.1), gastrointestinal problems (4.9%, CI: 3.6-6.6), joint/back pain (4.6%, CI: 3.4-6.2), and renal/urinary problems (4.2%, CI: 3.1-5.8). Differences in the reason for care-seeking were marginally statistically significant by region ($p=0.077$) and statistically significant by sector of provider ($p<0.001$); these differences are summarized in Figure 9 and presented in detail in Annex Table 12.

Spending on Adult Health

Among the adult care seekers, 60.4% (CI: 56.9-63.8) reported accessing medical care without an out-of-pocket payment. The proportion of adult care seekers that had out-of-pocket payments at their most recent visit varied significantly both by region and sector. Out-of-pocket payments were more common among Syrian households in Central Jordan and were reported by 46.8% (CI: 41.3-52.4) of households as compared to 32.7% (CI: 29.0-36.7) in the North and 31.0% (CI: 23.6-39.6) in the South ($p=0.001$). When compared by provider sector, 74.4% (CI: 69.2-79.0) of those seeking care in the private sector had out-of-pocket payments as compared to 16.4% (CI: 13.2-20.1) in the public sector and 20.6% (CI: 12.5-32.1) that sought care at charity/NGO facilities.

Household expenditures for the most recent adult health visit are summarized in Figure 10 and presented in detail in Annex Table 12. The average out-of-pocket cost to the household for the most recent adult care-seeking visit was 24.4 JD (CI: 11.8-36.9, median=0, range 0-5000).⁷ No significant differences in the amount of out-of-pocket payments were observed by region ($p=0.113$ for all care-seeking households and $p=0.369$ for only households with an out-of-pocket payment). Significant differences in payment amount were observed by sector. Mean out-of-pocket payments for the most recent adult health visit by provider sector for all households were as follows: private sector, 46.8 JD (CI: 18.1-75.6, median=10); public sector, 11.5 JD (CI: 0-23.3, median=0), and charity/NGO 3.4 JD (CI: 0-8.3, median=0) ($p=0.008$). Among households with out-of-pocket payments only, the mean was 62.9 JD (CI: 24.7-101.1, median=12) in the private sector, 70.3 JD (CI: 1.5-139.2, median=13) in the public sector, and 16.4 JD (CI: 0-39.6, median=2) at charity/NGO facilities ($p=0.001$).



Access to Medicines for Adults

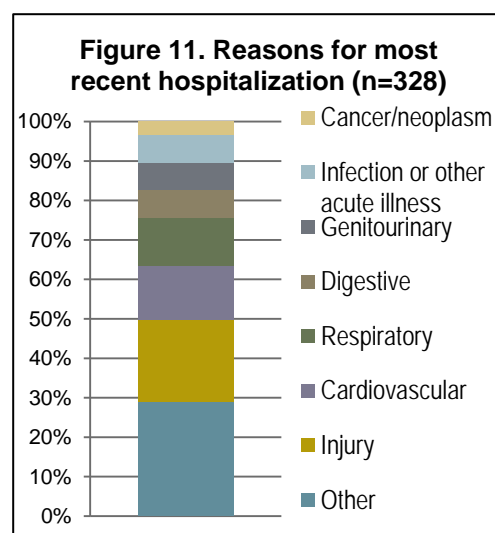
Among adult care seekers, 87.4% (CI: 85.0-89.5) reported being prescribed medication at their most recent visit to health facility. No significant differences were observed by region ($p=0.274$) with respect to the proportion of patients receiving a prescription. Significant differences in the proportion of patients receiving a prescription were observed between provider types with the greatest proportion of patients receiving a prescription in private facilities (91.6%, CI: 88.5-93.9) and the lowest in charity/NGO facilities (84.3%, CI: 75.5-90.4) ($p=0.005$). Of those prescribed medication 89.8% (CI: 87.5-91.7) were able to obtain all of the prescribed medications. Slightly more than half (58.5%, CI: 54.1-62.8) reported paying for the medications and the average out-of-pocket cost among all households that accessed medications was 14.2 JD (CI: 11.7-16.8, median=5, range 0-500).⁸ No significant differences in the proportion of households paying for medication ($p=0.132$) or out-of-pocket expenses were observed by region ($p=0.370$). Among those that did not access medications, the primary reasons included that the medication was out of stock at the public facility (51.6%, CI: 41.6-61.5%) or that the household could not afford the medication (39.8%, CI: 30.3-50.1); reasons for not obtaining medications were similar across regions ($p=0.875$).

⁷ Average out-of-pocket cost for only households that paid was 62.1 JD (CI: 30.5-93.8, median=10).

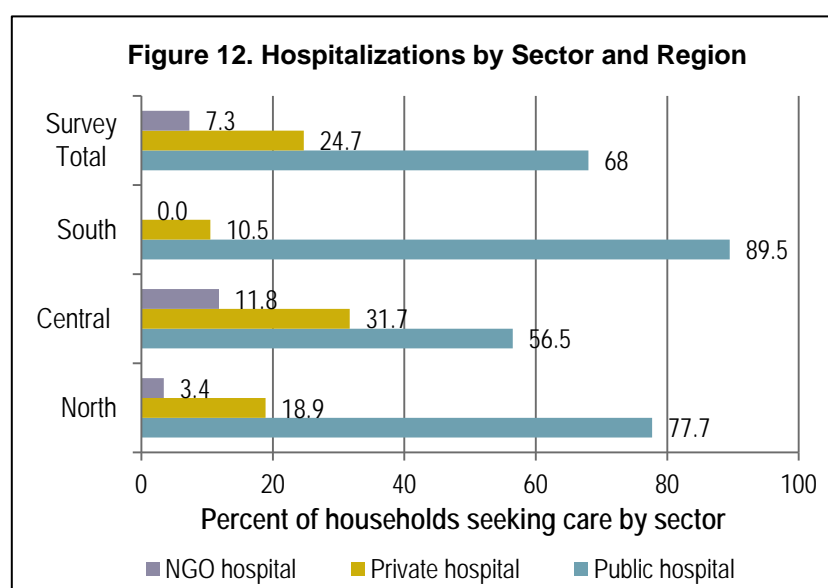
⁸ Average out-of-pocket cost for only households that paid for medications was 24.3 JD (CI: 20.4-28.2, median=15).

Hospitalizations in Jordan

In the year preceding the survey, 21.2% (CI: 18.9-23.6) of households reported one or more hospitalizations of a household member in Jordan for reasons other than childbirth. Households reported an average of 2.1 (CI: 1.7-2.3, median=1, range=1-20) hospitalizations in the six months preceding the survey. No significant differences were observed in the proportion of households with a hospitalization ($p=0.847$) or the average number of hospitalizations by region (0.690). The primary reasons for hospitalization included injury (20.7%, CI: 16.7-25.5), cardiovascular conditions (13.7%, CI: 10.4-17.8), and respiratory conditions (16.7-25. Causes of hospitalization are presented in Figure 11; no significant differences were observed by region ($p=0.333$) or facility type ($p=0.438$).



Most households reported the most recent hospitalization was in a public sector facility (68.0%, CI: 61.7-73.7) with the minority using private hospitals (24.7%, CI: 19.7-30.4) and charity/NGO hospitals (7.3%, CI: 4.9-10.9). Significant differences in hospital utilization were observed by region, where households in the South were most likely to use public sector facilities (89.5%) whereas those in Central Jordan more often sought care at private hospitals (31.7%) and charity/NGO hospitals (11.8%) ($p=0.006$) (Figure 12).



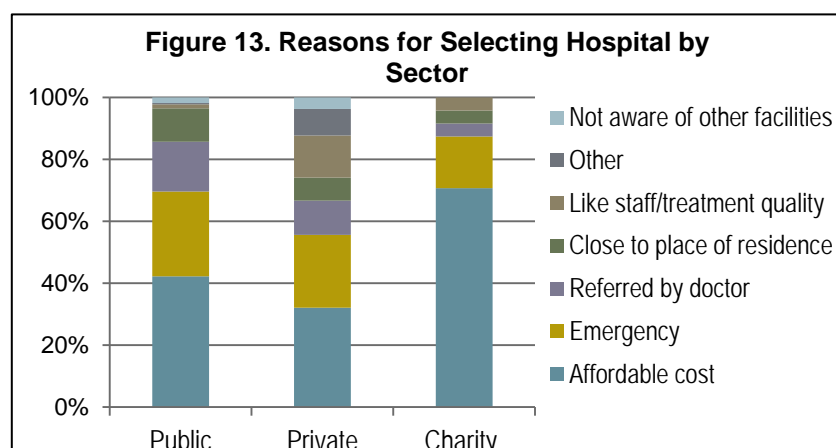
The average length of hospitalization was 5.9 days (CI: 4.5-7.2, median=2, range 1-120) and there were no significant differences in length of stay by sector ($p=0.339$). However significant differences were observed in length of stay by region. Average hospital stay was longest in the North at 6.6 days (CI: 4.2-9.1, median=3, range 1-120) as compared to 5.4 days (CI: 4.0-6.9, median=2, range 1-80) in Central Jordan and 3.2 days in the South (CI: 1.5-4.8, median=2, range 1-16) ($p=0.04$).

Out-of-pocket payments for the most recent hospitalization are presented in detail in Annex Table 15 In total, 22.3% (CI: 17.6-27.7) of households reported on an out-of-pocket payment for the most recent hospitalization. The average out-of-pocket cost to the household for the most recent hospitalization was 146.3 JD (CI: 62.5-230.0, median=0, range 0-6000).⁹ Significant differences in the amount of out-of-pocket payments were observed by region and provider type. Out-of pocket-

⁹ Average out-of-pocket cost for only households that reported payment was 657.2 JD (CI: 311.5-1002.9, median=150).

payments for hospitalizations were reported by 31% (CI: 24.2-38.9) of households in Central Jordan as compared to 14.9% (CI: 9.8-21.9) in the North and 5.3% (CI: 0.7-29.1) in the South; this is likely related to the different care-seeking patterns where households in Central Jordan were least likely to seek care at a public hospital. Mean out-of-pocket payments for the most recent hospitalization by provider sector for all households were as follows: private sector, 421.3 JD (CI: 112.8-729.9, median=0); public sector, 47.3 JD (CI: 5.4-89.3, median=0), and charity/NGO 137.0 JD (CI: 0-381.1, median=0) ($p=0.053$). Among households with out-of-pocket payments only, mean payment amounts were 1034.2 JD (CI: 363.2-1705.2, median=250) in private hospitals, 657.6 JD (CI: 0-1700.2, median=50) at charity/NGO hospitals, and 301.7 JD (CI: 54.8-548.5, median=100) at public hospitals ($p=0.147$).

Reasons for selecting the hospital where care was sought are summarized in Figure 13 with the most common being affordable cost (41.8%, CI: 36.2-47.5) and health emergency (25.6%, CI: 21.1-30.7). Reasons for seeking care varied significantly by provider sector ($p<0.001$) as illustrated in Figure 13; no significant differences were observed by region ($p=0.243$).



Chronic Health Conditions

To obtain information on access to health services and medications for chronic conditions, respondents were questioned regarding five conditions that are the most prevalent among the Syrian refugee population in Jordan: hypertension, cardiovascular disease,¹⁰ diabetes, chronic respiratory disease,¹¹ and arthritis. Respondents were asked a series of questions about each of these conditions, beginning with the number of people in the household diagnosed with the condition organized into four age groups: under 17 years, 18-39 years, 40-59 years, and 60 years and over. For each condition, following inquiries to determine the prevalence, a series of questions regarding care-seeking, access, and utilization of health services were asked about the experiences of one randomly selected household member who had been diagnosed with the condition in question. The following analysis is based on responses from household index cases for each of the five conditions.

Prevalence of Chronic Health Conditions in Adults¹²

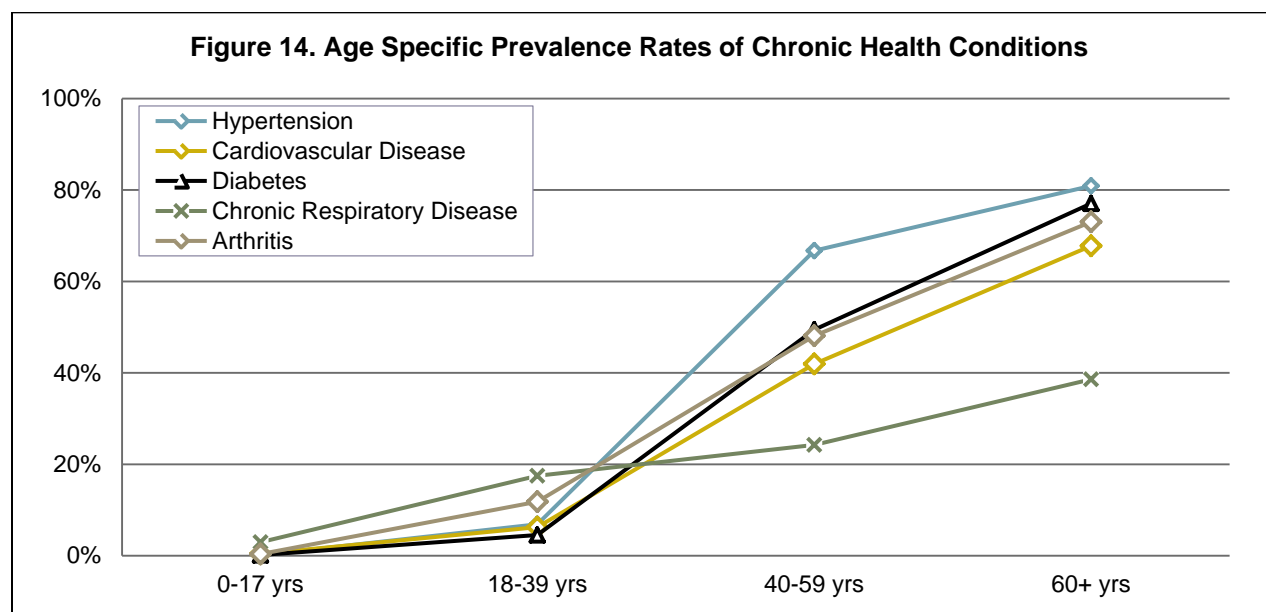
Just under half (43.4%, CI: 40.5-46.4) of households reported that one or more household members had been previously diagnosed with one of the five chronic health conditions included in the survey. Among adult household members (those over 17 yrs old), hypertension had the highest overall prevalence (9.7%, CI: 8.8-10.6), followed by arthritis (6.8%, CI: 5.9-7.6), diabetes (5.3%, CI: 4.6-6.0), chronic respiratory disease (3.1%, CI: 2.4-3.8), and cardiovascular disease (3.7%, CI: 3.2, 4.3).

¹⁰ Includes heart failure, angina, arrhythmias [irregular heartbeats], a previous heart attack, or previous stroke.

¹¹ Includes asthma, chronic bronchitis, emphysema, and chronic obstructive pulmonary disease

¹² Reported age-specific prevalence is weighted by the number of household members in each age group. Adult prevalence is weighted by the number of household members over 17 years old reported by respondents.

Among 0-17 year olds, the most prevalent reported chronic condition was chronic respiratory diseases (3.0%, CI: 2.1-3.8). Few individuals under 17 years old reported diagnosis with a chronic condition. Chronic respiratory diseases (17.5%, CI: 12.5-22.5) and arthritis (11.8%, CI: 9.0-14.6) were most prevalent among those 18 to 39 years old. Prevalence of all chronic conditions was dramatically higher in those 40 years old and over. Hypertension was most prevalent in those between ages 40 and 59 years (66.8%, CI: 40.0-93.5) and in those 60 years and over (80.9%, CI: 75.8-86.0). Age-specific prevalence of each condition is provided in Figure 14 and Annex Table 17.

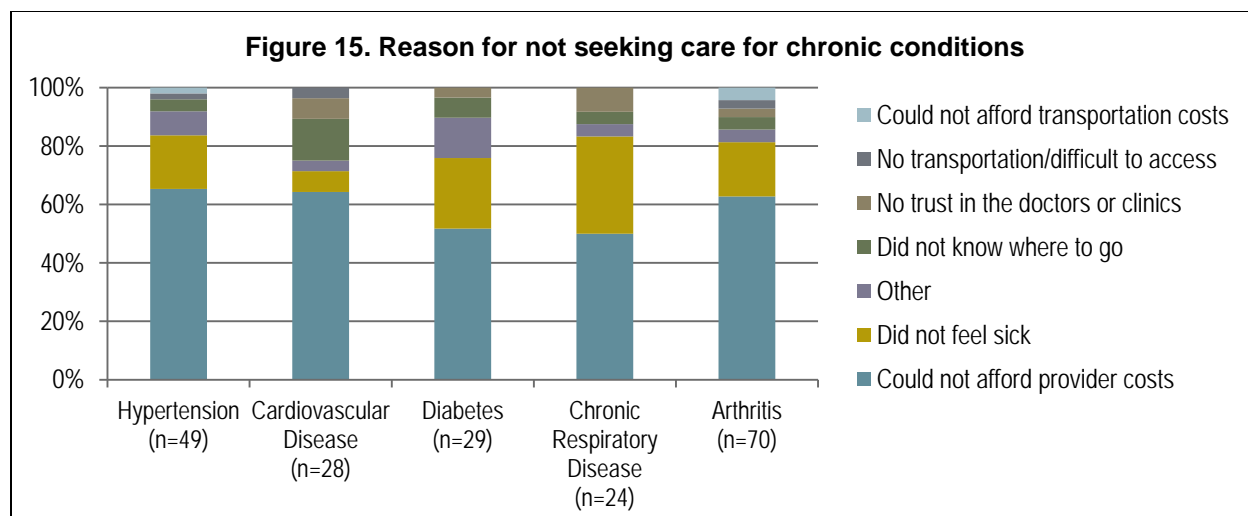


Care-seeking for Chronic Health Conditions

Care-seeking for chronic health conditions was high across all conditions. Of the 1363 index cases with a diagnosis of a chronic health condition, 84.7% (CI: 81.6-87.3) reported receiving care in Jordan. The distribution among care-seeking cases for the last time medical care was received for the condition was as follows: <1 month ago, 46.7% (CI: 42.8-50.7); 1 to less than 3 months ago, 22.8% (CI: 20.2-25.7); 3 to less than 6 months ago, 8.9% (CI: 7.3-10.7); 6 months to less than one year ago, 3.3% (CI: 2.2-5.0) and more than one year ago, 2.9% (CI: 2.0-4.4). Significant differences in care-seeking were observed among regions with highest rates of care seeking in the North (89.0% CI: 85.3-91.8) and the lowest in the Central region (79.5%, CI: 74.7-83.6) ($p=0.004$).

Hypertension

Among index cases of hypertension in survey households, most saw a doctor for hypertension in Jordan (87.7%, CI: 83.8-90.8). Significant differences in care-seeking for hypertension were observed among regions, with a higher percent of those with hypertension seeking care in the South (94.1%, CI: 89.7-99.1) and the lowest care-seeking percentage in the Central Region (83.3%, CI: 76.7-88.3) ($p=0.037$). The most common reason for not seeking care for hypertension was inability to afford provider costs, reported by 65.3% (CI: 61.0-77.3) of the hypertension cases that did not receive care in Jordan. Individuals with hypertension also reported not seeking care because they did not feel sick (18.4%, CI: 9.6-32.3) or because they did not know where to go (4.1%, CI: 1.0-14.9) (Figure 15). Most of the index hypertension cases reported needing care within the past three months (77.7%, CI: 73.3-81.6). Of those receiving care, over half were treated in public facilities (55%, CI: 48.9-61.0); private facilities provided care for 27.9% (CI: 23.1-33.3) and charity/NGO facilities provided care for 17.1% (CI: 12.6-22.8).



Cardiovascular Disease

Among index cases of cardiovascular disease in interviewed households, the majority saw a doctor for the condition in Jordan (85.3%, CI: 79.2-89.8). The most common reason for not seeking care for cardiovascular disease in Jordan was inability to afford provider costs, reported by 64.3% (CI: 44.7-80.1) of these cardiovascular disease cases. Cardiovascular disease cases also reported not seeking care because they did not know where to go (14.3%, CI: 5.3-33.3) (Figure 15). Most cardiovascular disease cases reported needing care within the past three months (62.11%, CI: 54.1-69.5). No significant difference in care-seeking was observed among regions ($p=0.447$).

Diabetes

Among index cases of diabetes in interviewed households, most saw a doctor for the condition in Jordan (87.0%, CI: 81.9-91.2). Significant differences in care-seeking for diabetes were observed among regions with a higher percentage of cases seeking care in the North (93.4%, CI: 88.0-96.5) and a lower care-seeking in the Central Region (81.2%, CI: 71.9-87.9) ($p=0.044$). The most common reason for not seeking care for diabetes, reported by 51.7% (CI: 33.9-69.2) of non-care seekers, was inability to afford provider costs. Diabetes cases also reported not seeking care because they did not feel sick (24.1%, CI: 10.7-45.8) (Figure 15). Most diabetes cases reported needing care within the past three months (77.2%, CI: 70.6-82.7).

Chronic Respiratory Disease

Patients with chronic respiratory disease reported the highest percentage of cases seeking care. A substantial proportion of those diagnosed with chronic respiratory disease, saw a doctor for the condition in Jordan (87.8%, CI: 83.1-91.3). Significant differences in care-seeking for chronic respiratory disease were observed among regions with a higher percent of those seeking care in the North (91.8%, CI: 86.0-95.3) and a lower percent in the Central Region (81.5%, CI: 72.6-68.0) ($p=0.031$). The most common reason for not seeking care was inability to afford provider costs, reported by 50% (CI: 30.8-69.2) of non-care seekers. Chronic respiratory disease cases also reported not seeking care because they did not feel sick (33.3%, CI: 17.5-54.2) (Figure 15). Most of the individuals with chronic respiratory disease reported needing care within the past three months (67.6%, CI: 61.7-73.0).

Arthritis

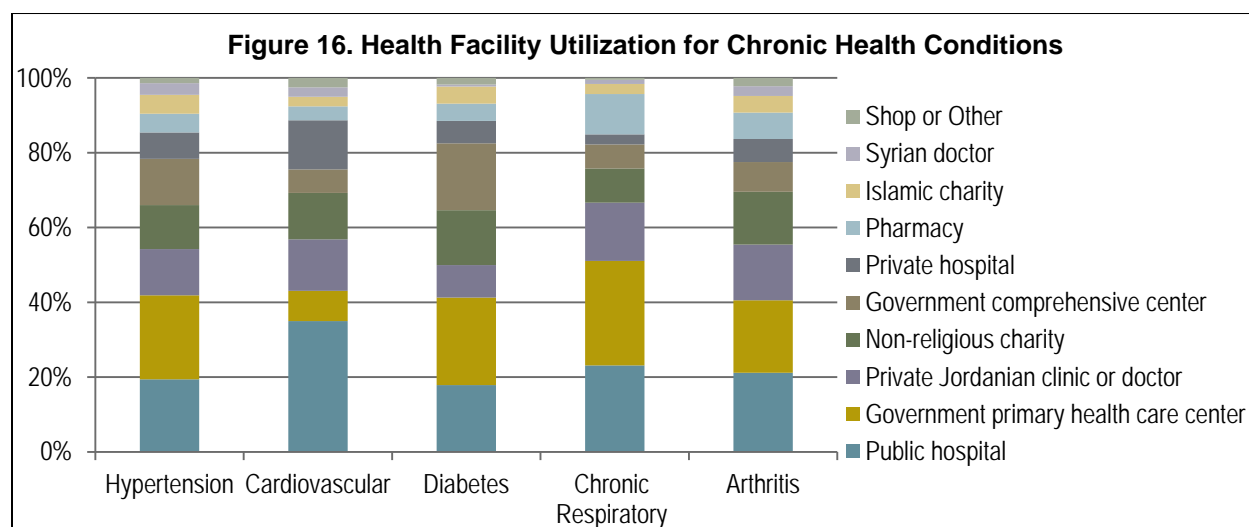
The lowest percentage of cases seeking care was observed in arthritis patients; however, among index cases interviewed, most saw a doctor for arthritis in Jordan (75.8%, CI: 69.8-81.0). The most

common reason for not seeking care for arthritis, reported by 62.9% (CI: 51.8-72.7) of non-care-seeking cases, was inability to afford provider cost. Arthritis cases also reported not seeking care because they did not feel sick (18.6%, CI: 11.6-28.5) (Figure 15). Most of the index arthritis cases reported needing care within the past three months (58.3%, CI: 52.3-64.0). No significant difference in care-seeking was observed among regions ($p=0.174$).

Health Facility Access and Utilization for Chronic Health Conditions

Among the 1154 individuals who sought care for chronic health conditions in Jordan, over half received care in public facilities (53.9%) including public hospitals (22.1%, CI: 18.6-26.0), primary health care centers (20.8%, CI: 16.9-25.3), and comprehensive health centers (10.7%, CI: 8.3-13.6). Private facilities were utilized by 29.6% of patients seeking care for chronic health conditions. Private facilities include private hospitals (6.8%, CI: 4.8-9.4) and private clinics (12.8%, CI: 10.4-15.7). The remaining patients sought care from a number of other sources including shops or other informal providers (1.6%, CI: 0.8-3.2), pharmacies (6.1%, CI: 4.4-8.2), charity/NGO facilities (16.6%, CI: 13.1-20.8), and Syrian doctors (2.1%, CI: 1.3-3.3). Utilization of facilities by chronic condition is presented in Figure 16. No significant differences in perceptions of access to health specialists was observed between households in which any member has a chronic health condition and households with no chronic health conditions ($p=0.392$).

Arthritis patients reported the lowest proportion utilizing public facilities for care (48.5%). Of all chronic conditions, chronic respiratory disease had the highest proportion of cases that utilized public (57.5%) and private (30.7%) care and the lowest to receive care in charity/NGO facilities (11.8%). Among all chronic conditions included in the survey, the lowest proportion of cases utilizing private facilities was observed in diabetes cases (21.6%); conversely, diabetes care at charity/NGO facilities (19.3%) was greatest out of the five conditions.



Hypertension

Of those receiving care for hypertension, just over half (55.0%) were treated in public facilities including public hospitals (19.3%, CI: 14.9-24.6), primary health care centers (22.3%, CI: 17.5-28.1), and comprehensive health centers (12.3%, CI: 9.1-16.3). Another 27.9% sought care in private sector facilities including private hospitals (7.0%, CI: 4.7-10.2) and private clinics (12.3%, CI: 9.2-16.3). Other less frequently sought sources of care for hypertension included shops or other informal providers (1.4%, CI: 0.6-3.2), pharmacies (5.0%, CI: 3.2-7.9), charity/NGO facilities (16.8%, CI: 12.3-

22.4), and Syrian doctors (3.1%, CI: 1.8-5.3). No significant differences in facility type utilization were observed among regions ($p=0.179$).

Cardiovascular Disease

Among cardiovascular disease patients receiving care, 49.4% were treated in public facilities including public hospitals (34.6%, CI: 26.9-43.1), primary health care centers (8.0%, CI: 4.2-14.9), and comprehensive health centers (6.2%, CI: 3.1-11.7). Another 35.6% sought care in private sector facilities including private hospitals (13.0%, CI: 8.4-19.5) and private clinics (13.6%, CI: 8.8-20.4). Other less frequently sought sources of care for cardiovascular disease included shops or other informal providers (2.5%, CI: 0.8-7.8), pharmacies (3.7%, CI: 1.7-8.0), charity/NGO facilities (14.8%, CI: 9.8-21.7), and Syrian doctors (2.5%, CI: 0.9-6.3). No significant differences in facility type were observed among regions ($p=0.120$).

Diabetes

Over half of diabetes care seekers were treated in public facilities (59.2%), which include public hospitals (17.9%, CI: 13.1-23.9), primary health care centers (23.4%, CI: 17.8-30.1), and comprehensive health centers (17.9%, CI: 13.3-23.6). Another 22.0% sought care in private sector facilities, which include private hospitals (6.0%, CI: 3.3-10.6) and private clinics (8.7%, CI: 5.4-13.9). Other less frequently sought sources of care for diabetes included shops or other informal providers (1.8%, CI: 0.6-5.9), pharmacies (4.6%, CI: 2.5-8.1), charity/NGO facilities (19.3%, CI: 14.3-25.5), and Syrian doctors (0.5%, CI: 0.1-3.2). No significant differences were observed by facility type among regions ($p=0.194$).

Chronic Respiratory Disease

Of those receiving care for chronic respiratory disease, 57.5% were treated in public facilities including public hospitals (23.0%, CI: 16.9-30.4), primary health care centers (27.8%, CI: 21.5-35.2), and comprehensive health centers (6.4%, CI: 3.8-10.6). Another 31.0% sought care in private sector facilities including private hospitals (2.7%, CI: 1.1-6.2) and private clinics (15.5%, CI: 11.0-21.4). Other less frequently sought sources of care for chronic respiratory disease included shops or other informal providers (0.5%, CI: 0.1-3.8), pharmacies (10.7%, CI: 6.9-16.2), charity/NGO facilities (11.8%, CI: 7.6-17.7), and Syrian doctors (1.1%, CI: 0.3-4.3). No significant differences were observed by facility type among regions ($p=0.370$).

Arthritis

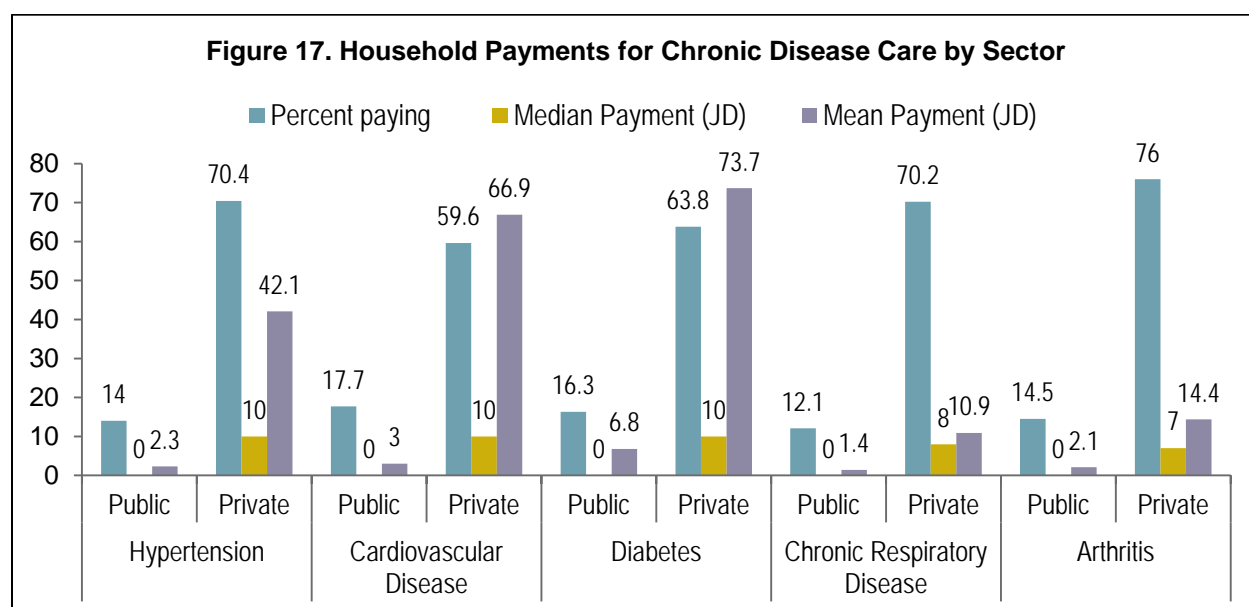
Of those receiving arthritis care, 48.5% were treated at public facilities including public hospitals (21.0%, CI: 16.0-26.9), primary health care centers (19.2%, CI: 13.7-24.7), and comprehensive health centers (7.9%, CI: 4.9-12.3). Another 33.0% sought care in private sector facilities including private hospitals (6.1%, CI: 3.6-10.3) and private clinics (14.8%, CI: 10.7-20.2). Other less frequently sought sources of care for chronic respiratory disease included shops or other informal providers (2.2%, CI: 0.8-6.0), pharmacies (7.0%, CI: 4.3-11.1), charity/NGO facilities (18.3%, CI: 13.4-24.6), and Syrian doctors (2.6%, CI: 1.3-5.7). Significant differences in location of care-seeking were observed among regions, with care-seeking for arthritis in the South concentrated in private clinics (41.7%, CI: 16.6-72.0) and primary health care centers (25.0%, CI: 6.4-62.1) whereas care in the North and Central regions was more evenly distributed among providers.

Spending on Health Services for Chronic Health Conditions

Cost of health care for chronic conditions was measured for the most recent care experience excluding the cost of medications and anything paid on the patient's behalf by the United Nations or other organizations. Among those receiving care for chronic conditions in Jordan, 31.6% (CI: 27.7-35.8)

reported accessing medical care with an out-of-pocket payment. Among all patients receiving care, the average out of pocket cost was 13.3 JD (median= 0 JD). Among patients that paid for care, the average out of pocket cost was 42.0 JD (median= 10 JD). Significant regional differences in the proportion of chronic condition with out-of-pocket payments were observed with the highest percentage paying in the Central region (37.8%, CI: 31.4-44.8) and the lowest percentage paying in the North (26.8%, CI: 22.2-31.9). No significant differences in cost of health services were observed among regions (p=0.589).

Overall spending on health services was similar among the five chronic health conditions queried; however, a higher proportion of patients (37.1%, CI: 30.7-44.0) paid for arthritis care visits than patients with other chronic conditions. Conversely, diabetes had the lowest proportion of care seekers who paid for care (26.1%, CI: 19.8-33.7). The mean cost to households for chronic disease care was the highest for cardiovascular disease (25.1 JD, CI: 0-61.3) and the lowest for chronic respiratory disease (4.4 JD, CI: 3.1-5.7). Differences in health service spending between chronic conditions are presented in Figure 17 and further details are included in Annex Table 18.



Hypertension

Nearly one-third (30.7%, CI: 25.8-36.1) of hypertension care seekers in Jordan had out-of-pocket payment for the most recent provider visit. Out-of-pocket payments were most common in private facilities where 70.4% (CI: 60.5-78.7) of hypertension patients paid for care compared to 14.0% (CI: 10.1-19.1) in public facilities. The mean cost to patients for hypertension care visits was 13.0 JD (CI: 0-29.7) and the median cost was 0 JD, suggestive of the 69.3% (CI: 63.9-74.2) of care seekers who did not pay for care. No significant differences in provider costs for hypertension care were observed among regions (p=0.327) or provider sectors (p=0.197). No significant differences in proportion of patients with out-of-pocket payments (p=0.344) or cost of care were observed among regions (p=0.327).

Cardiovascular Disease

Approximately one-third (32.1%, CI: 24.5-40.8) of cardiovascular disease cases receiving care in Jordan had out-of-pocket payments for their most recent care visit. Out-of-pocket payments for cardiovascular disease care were most common in the Central Region (46.5%, CI: 34.5-58.9) com-

pared to 24% (CI: 14.1-33.5) in the North Region ($p=0.021$). Of the six cases of cardiovascular disease in the South region who saw providers in Jordan, none reported out-of-pocket payments. The highest proportion of patients that reported out-of-pocket payments for cardiovascular disease care was observed in private facilities where 59.6% (CI: 46.5-71.6) of cases had out-of-pocket payments. Charity/NGO facilities had the lowest percentage of out-of-pocket payments (12.5%, CI: 2.9-40.5). Significant differences were also observed in the mean cost to households receiving care for cardiovascular disease ($p=0.008$). Overall, the mean cost to households for cardiovascular disease care was 25.1 JD (CI: 0-61.3). Average out-of-pocket payment for care in the private sector was highest at 66.9 JD (CI: 0-168.4), followed by public sector care (3.0 JD, CI: 1.2-4.8), and care received at charity/NGO facilities (0.3 JD, CI: 0-0.7). The median cost of care for cardiovascular disease was 0 JD due to the large percentage (67.9%) of households reporting no out-of-pocket payment for their latest provider visit.

Diabetes

Approximately one-quarter (26.1%, CI: 19.8-33.7) of diabetes cases had out-of-pocket payments for their most recent care visit. Out-of-pocket payments were most common in private facilities (63.8%, CI: 50.1-75.6) compared to charity/NGO facilities (14.4% CI: 5.7-31.5). The mean cost of diabetes care was 20.1 JD (CI: 0-47.3) and the median cost was 0 JD, reflective of the 73.9% (CI: 66.3-80.2) of care seekers who did not pay for the visit. No significant difference in the cost of diabetes care was observed among regions ($p=0.258$) or provider sectors ($p=0.218$).

Chronic Respiratory Disease

Among chronic respiratory disease patients who received care in Jordan, 32.6% (CI: 26.2-39.8) had out-of-pocket payments for the most recent provider visit. Out-of-pocket payments were most common in private facilities (70.2%, CI: 57.2-80.6) compared to public facilities (12.1%, CI: 7.3-19.7). The mean cost of care was 4.4 JD (CI: 3.1-5.7) and median cost was 0 JD due to the high percentage of care seekers (67.4%, CI: 60.2-73.8) without out-of-pocket payments. There were significant differences among regions in the percent of those receiving care that had out-of-pocket payments for their most recent provider visit ($p=0.024$). Out-of-pocket payments were most common in the Central Region (43.9%, CI: 31.7-57) compared to 26.8% (CI: 19.8-35.2) in the North and 22.2% (CI: 8.8-45.7) in the South. Significant regional differences were also observed in mean cost of care with the highest average cost in the Central Region (6.5 JD, CI: 3.9-9.1) and the lowest average cost observed in the South (1.7 JD, CI: 0.2-3.1). Significant differences in cost of care for chronic respiratory disease were observed among provider sectors; private facilities had the highest average cost (10.9 JD, CI: 7.7-14.1) and public facilities had the lowest (1.4 JD, CI: 0.5-2.2) ($p<0.001$).

Arthritis

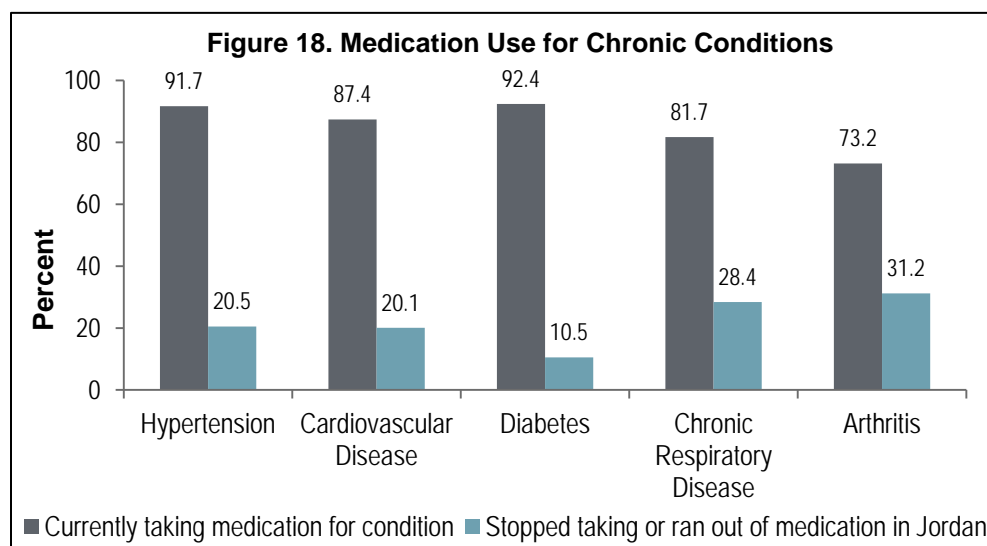
Of the 229 index cases of arthritis who received care in Jordan, 37.1% (CI: 30.7-44.0) had out-of-pocket payments for the most recent provider visit. Out-of-pocket payments were most common in private facilities (76.0%, CI: 64.7-84.5) compared to public facilities (14.5% CI: 9.1-22.4). The mean cost arthritis care was 6.2 JD (CI: 3.3-9.1) and the median cost was 0 JD owing to the high percentage of care seekers that did not pay for care (62.9%, CI: 56.0-69.3). No significant difference was observed among regions in the cost to all households receiving arthritis care ($p=0.422$); however there were significant differences between provider sectors with the highest average costs in private facilities (14.4 JD, CI: 6.6-22.2) and the lowest in public facilities (2.1 JD, CI: 0.4-3.7) ($p=0.013$).

Access to Medicines for Chronic Health Conditions

Among all household index cases of chronic diseases, 88.9% (CI: 86.5-90.9) were prescribed medication for the condition in Jordan or in Syria. Approximately 85.5% (83.2-87.6) of cases reported currently taking medication for their condition. Medication use stopped, or medication ran out, for

longer than two weeks in the past year for 26.5% (CI: 23.4-29.9) of individuals with chronic conditions. Of those who reported stopping or running out of medication, 85.8% (CI: 81.6-89.2) stopped in Jordan and 14.2% (CI: 10.8-18.4) stopped in Syria. The most common reason reported across conditions for stopping medication was inability to afford the cost (59.1%, CI: 52.4-65.4).

Figure 18 provides the distribution of reported reasons for stopping medication across all chronic conditions included in the survey. No significant differences were observed in prescription of medication ($p=0.847$), current medication use ($p=0.915$), or stopping medication use among regions ($p=0.081$).



Of all conditions, those with diabetes displayed the largest proportion of cases prescribed medication (92.8%, CI: 88.3-95.7) and currently taking medication (91.7%, CI: 88.7-93.9). The lowest proportion of cases prescribed medication (82.8%, CI: 77.6-87.0) and currently taking medication (73.2%, CI: 67.8-77.9), though still high, was among arthritis cases. Unlike with medication use, diabetes cases had the lowest proportion stopping medication (14.9%, CI: 11.0-19.7) and arthritis had the highest (37.4%, CI: 31.6-43.6). In all conditions, individuals reporting stopping medication for more than two weeks in the previous year reported stopping medication in Jordan (85.8%, CI: 81.6-89.2) more often than in Syria (14.2%, CI: 10.8-18.4). The most frequent reasons given for stopping medication for chronic conditions were inability to afford the medication (59.1%, CI: 52.4-65.4) and improved symptoms (15.6%, CI: 11.7-20.5).

Hypertension

Of 408 hypertension cases interviewed, medication for hypertension was prescribed in Jordan or in Syria for 90.2% (CI: 86.4-93.0). A similarly high proportion of cases reported currently taking medication for hypertension (91.7%, CI: 88.7-93.9). Almost one-quarter (23.8%, CI: 19.7-28.6) of all hypertension cases reported having to stop taking their hypertension medication for two weeks or longer in the past year. Of those who stopped or ran out of their medication, 87.6% (CI: 79.4-92.9) stopped in Jordan and 12.4% (CI: 7.1-20.6) stopped in Syria. The most common reason reported for stopping hypertension medication was inability to afford the medication (66.0%, CI: 56.2-74.6).

Cardiovascular Disease

Among the cardiovascular disease cases interviewed ($n=190$), 87.9% (CI: 82.2-92.0) were prescribed medication for the condition and 87.4% (CI: 81.5-91.6) reported currently taking medication for cardiovascular disease. Of all cases, 24.7% (CI: 19.0-31.6) reported having to stop taking their medication for longer than two weeks in the past year. Of all patients that stopped cardiovascular disease medication, 85.1% (CI: 71.2-92.9) stopped or ran out in Jordan and 14.9% (CI: 7.1-28.8) in Syria. As with all chronic conditions, the most frequently reported reason for stopping medication for cardiovascular disease was inability to afford the medication (59.6%, CI: 43.0-74.3).

Diabetes

The majority (92.8%, CI: 88.3-95.7) of the 250 diabetes cases interviewed were prescribed medication for the condition and 92.4% (CI: 88.4-95.1) reported currently taking medication. Of all cases, 14.9% (CI: 11.0-19.7) reported having to stop taking their medication for longer than two weeks in the past year. Of diabetes cases having to stop medication, 78.4% (CI: 60.6-89.5) stopped or ran out of their medication in Jordan and 21.6% (CI: 10.5-39.4) stopped medication in Syria. Again, the most common reason for stopping medication for diabetes was the household's inability to afford the medication (62.2%, CI: 44.8-76.9).

Chronic Respiratory Disease

Of 213 chronic respiratory disease cases interviewed, medication for the condition was prescribed in Jordan or in Syria for the condition (91.5%, CI: 86.9-94.7). A slightly lower proportion of cases reported currently taking medication (81.7%, CI: 75.4-86.7). Of all cases, 31.9% (CI: 25.4-39.2) reported having to stop taking their medication for longer than two weeks in the past year. A higher proportion of those stopping medication stopped or ran out of it in Jordan (91.0%, CI: 82.3-95.7) than in Syria (9.0%, CI: 4.3-17.7). The most common reasons for stopping chronic respiratory disease medication were the household's inability to afford the medication (49.3%, CI: 37.9-60.7) and improvement in symptoms (23.9%, CI: 14.5-36.7).

Arthritis

Among the arthritis cases interviewed (n=302), 82.8% (CI: 77.6-87.0) were prescribed medication for the condition and 73.2% (CI: 67.8-77.9) reported currently taking medication, the lowest proportions of any chronic condition. Of all cases, 37.4% (CI: 31.6-43.6) reported stopping their medication for longer than two weeks in the past year, the highest proportion observed in all chronic conditions. Of individuals stopping arthritis medication, 83.8% (CI: 75.8-89.5) stopped or ran out of it in Jordan and 16.2% (CI: 10.5-24.2) in Syria. The most common reason for stopping arthritis medication was the household's inability to afford the medication (57.7%, CI: 47.5-67.2).

Children's Health

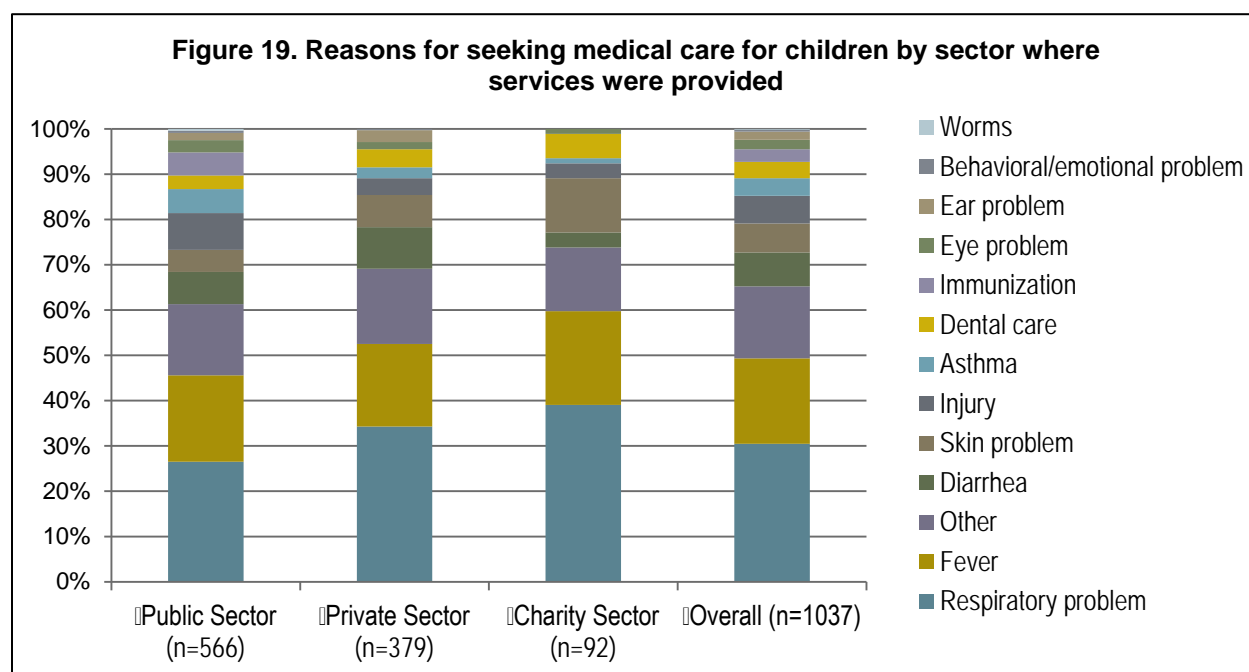
Health Seeking and Service Utilization among Children

The illnesses for which most children under 18 years old were reported to need medical care were respiratory problems (30.6%, CI: 27.6-33.8), fever (18.8%, CI: 16.5-21.4), and diarrhea (7.8%, CI: 6.2-9.7). No significant differences in reasons for needing medical care were observed by region ($p=0.652$). A large percentage of households with children reported needing medical care for a child within the month preceding the survey (68.5%). The distribution among households for the last time medical care was needed for a child was as follows: <2 weeks ago, 41.9% (CI: 38.8-45.1); between 2 weeks and 1 month ago, 26.6% (CI: 24.0-29.3); 1 to less than 3 months ago, 19.6% (CI: 17.3-22.2); 3 to less than 6 months ago, 7.2% (CI: 5.8-8.9); 6 months to less than one year ago, 3.7% (CI: 2.7-5.0) and more than one year ago, 1.1% (CI: 0.6-2.0). Overall, 90.9% (CI: 88.9-92.6) of households reported that medical attention was sought the last time a child needed medical care. No significant differences were observed by region for the last time medical care was needed ($p=0.259$) or whether or not care was sought ($p=0.52$).

Among the 9.0% (CI: 7.3-11.0) of households that did not seek care the last time care was needed for a child, the primary reason was cost: 68.0% (CI: 56.9-77.3) of households reported they could not afford to seek medical services for the child. Other reasons included not being sick enough to seek care (7.8%, CI: 3.6-15.9), provider having inadequate medications or equipment (5.8%, CI: 2.6-12.5), not knowing where to go (3.9%, CI: 1.4-10.3), and lack of transportation (2.9%, CI: 0.9-8.7). No significant differences in reasons for not seeking care were observed by region ($p=0.849$).

Among households for which care was sought for a sick child, approximately half (54.6%) sought care in public sector facilities, including primary health care centers (25.2%, CI: 21.5-29.2), public hospitals (21.0%, CI: 18.3-24.0), and comprehensive health centers (8.4%, CI: 6.6-10.6). Another 24.6% of households sought care in private sector facilities, including private clinics (18.4%, CI: 15.7-21.5), private hospitals (6.2%, CI: 4.6-8.2), shops or other informal providers (1.2%, CI: 0.6-2.1), pharmacies (9.2%, CI: 7.3-11.4), and Syrian doctors (1.7%, CI: 1.1-2.7). Charity/NGO facilities including non-religious charity facilities (6.8%, CI: 4.9-9.2) and Islamic charity facilities (2.1%, CI: 1.3-3.3) were the most recently used source of care for the remaining 8.9% of children receiving care. Differences in sources of child health care by region were statistically significant ($p=0.021$) and are presented in detail in Annex Table 26. In general, a higher proportion of households in the South (67.3%) sought care at public facilities compared to households in the North (56.4%) and Central (51.0%) regions.

The most common reasons reported for the most recent visit to a health facility among children for whom care was sought included respiratory problems (30.5%, CI: 27.4-33.7), fever (18.9%, CI: 16.5-21.6), diarrhea (7.5%, CI: 6.0-9.4), skin problems (6.4%, CI: 4.9-8.2), and injury (6.1%, CI: 4.8-7.7). Differences in the reason for care-seeking were not statistically significant by region ($p=0.524$) but were statistically significant by provider sector ($p<0.001$) as illustrated in Figure 19.

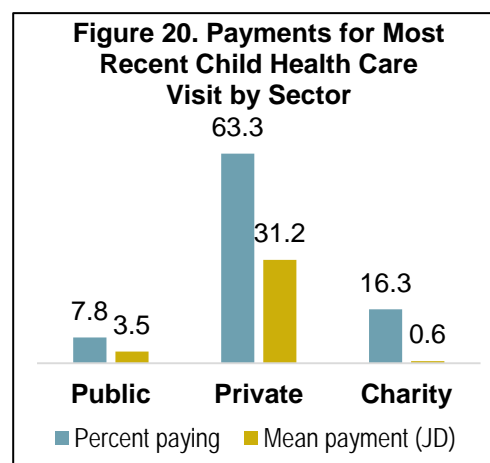


Spending on Child Health

Among children for whom care was sought, most households (70.7%, CI: 67.1-74.0) reported accessing medical care without an out-of-pocket payment. The proportion of child consultations that had out-of-pocket payments varied significantly by both region and provider sector. Out-of-pocket payments were more common among households in the Central region (35%, CI: 30.2-40.2) than in the North region (24%, CI: 19.6-28.9) or South region (20.7%, CI: 12.8-31.8). Regional trends in out-of-pocket payments reflect those of provider sector utilization: the Central region had the lowest percentage of households seeking child health care at private facilities and the highest percent-

age with out-of-pocket payments while the South had the lowest percentage of households seeking care at private facilities and the lowest percentage with out-of-pocket payments. When compared by provider sector, 63.3% (CI: 58.0-68.3) of those seeking care in the private sector had out-of-pocket payments as compared to only 7.8% (CI: 5.5-10.9) in the public sector and 16.3% (CI: 9.9-25.7) that sought care at charity/NGO facilities.

Household expenditures for the most recent child health visit are presented in Figure 20 and in detail in Annex Table 27. The average out-of-pocket cost to the household for the most recent child consultation was 13.4 JD (CI: 6.3-20.5, median=0). No significant differences in the amount of out-of-pocket payments were observed by region ($p=0.84$). Significant differences in payment amount were observed by provider sector. Mean out-of-pocket payments for the most recent child health visit by provider sector for all households were as follows: private sector, 31.2 JD (CI: 12.4-50.0, median=5); public sector, 3.5 JD (CI: 1.2-5.9, median=0); and charity/NGO, 0.6 JD (CI: 0.2-1.0, median=0) ($p<0.001$).



Access to Medicines for Children

Among care seekers who sought care for children, 88.6% (CI: 86.1-90.7) reported being prescribed medication at their most recent visit to a health facility. This varied marginally by sector type: 94.7% (CI: 92.2-96.4) of children who received care at private facilities were prescribed medication, compared to 84.8% (CI: 81.0-88.0) of children who received care at public facilities and 87.0% (CI: 77.9-92.6) at charity/NGO facilities. No significant differences were observed by region ($p=0.623$) with respect to the proportion of children receiving a prescription. Of those prescribed medication 90.6% (CI: 88.6-92.3) were able to obtain all of the prescribed medications) with no significant differences by region ($p=0.733$). Among the 9.4% of households who were not able to obtain all prescribed medications, the most common reasons were out of stock medications public facilities (52.9%, CI: 41.6-63.9) and not being able to afford the medications (37.6%, CI: 27.6-48.9).

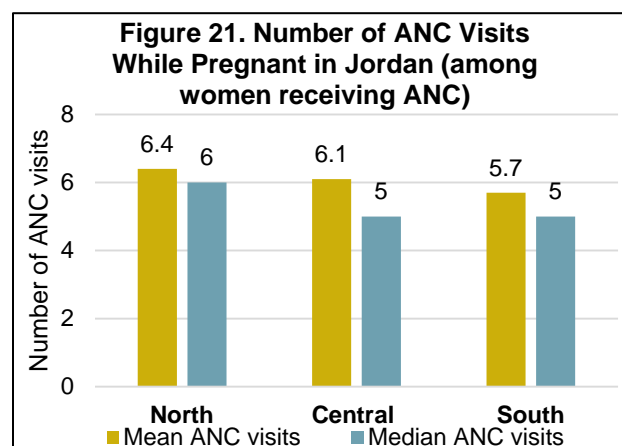
Among those households that were able to obtain all prescribed medications, 57% (CI: 52.5-61.4) of households had to pay an out-of-pocket payment. The average payment was 8.8 JD (CI: 7.5-10.1, median=4). Out-of-pocket payments for medication varied significantly by region ($p<0.001$) with households in the Central region (66.2%, CI: 60.3-71.7) more likely to pay for prescribed medications compared to the South (53.5%, CI: 46.9-60.0) and the North (48.2%, CI: 5.2-8.1). Households in the Central region were also likely to pay more for the prescribed medications than in other regions ($p=0.002$). The mean cost in the Central region was 11.2 JD (CI: 9.1-13.4, median=6.5) compared to 6.7 JD (CI: 5.2-8.1, median=0) in the North and 6.3 JD (CI: 2.7-9.9, median=2) in the South.

Antenatal Care and Deliveries

Antenatal Care

When asked about recent deliveries and antenatal care (ANC), 20.3% (CI: 18.3-22.4) of respondents said a woman in the household had given birth in the past year. Of those women, 87.9% (CI: 83.2-91.4) had delivered in Jordan. Most women who delivered in Jordan (82.2%, CI: 76.6-86.7) received ANC while pregnant in Jordan. Women receiving ANC made an average of 6.2 ANC visits throughout their pregnancy in Jordan (CI: 5.7-6.8, median=5); ANC care seeking by region is summarized in

Figure 21. Among women who received ANC while pregnant in Jordan, 44.1% (CI: 37.2-51.1) had their first ANC visit in the first trimester. ANC was typically first received in the 4th month of pregnancy (mean=4.7 CI: 4.3-5.1, median=4). Women in the Central region (87.2%, CI: 80.0-92.1) and South (93.8%, CI: 71.3-98.9) were more likely to have received ANC while pregnant in Jordan than women in the North (76.3%, CI: 67.0-83.6)($p=0.031$). Women in the Central region also began receiving ANC earlier in their pregnancy than women in other regions (mean= 5.1 months, CI: 4.4-5.8, median=4) ($p=0.037$).

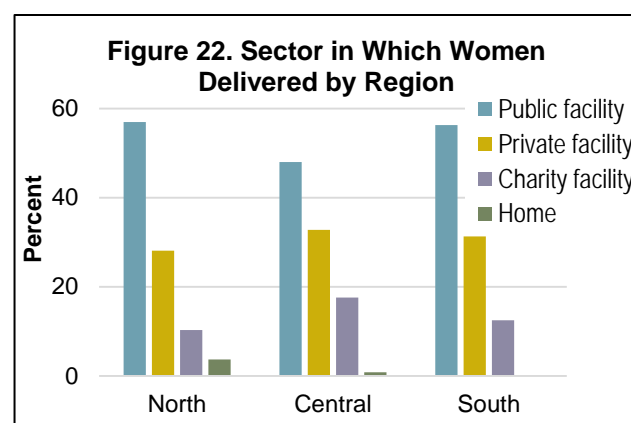


The most common locations for receiving ANC were a private Jordanian clinic or doctor (30.4%, CI: 24.5-37.0), government primary health care center (15.9%, CI: 11.2-21.9), private hospital (14.5%, CI: 10.4-20.0), or public hospital (13.2%, CI: 9.1-18.8). No significant differences in location of ANC care were observed by region ($p=0.8497$). For women who were pregnant but did not receive ANC while in Jordan, the primary reasons given for not receiving ANC were cost (32.6%, CI: 19.4-49.4), not thinking that ANC was important (19.6%, CI: 10.3-33.9), or ANC not being a priority for the household (15.2%, CI: 6.5-31.7). These reasons were not significant across regions ($p=0.956$).

Deliveries

Approximately half of deliveries took place in a public hospital (51.8%, CI: 45.3-58.2) or a private hospital (30.4%, CI: 25.0-36.5); only 2.2% (CI: 0.7-6.5) of births took place at home (Figure 22). The primary reasons for choosing the delivering location were cost (54.8%, CI: 48.8-60.7), proximity to their place of residence (10.4%, CI: 7.1-15.0), and liking the staff or quality of treatment at the facility (10.4%, CI: 7.1-15.0).

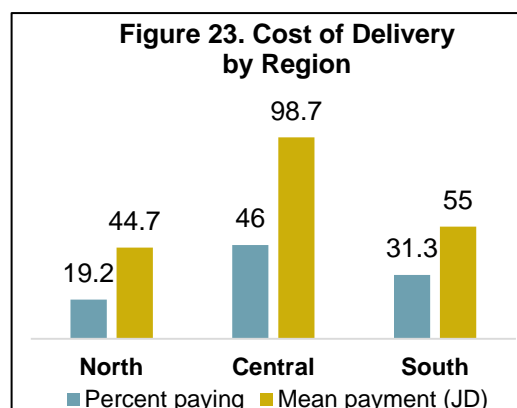
Respondents were more likely to cite cost as the primary reason for choosing the delivery location if the woman gave birth at a charity/NGO (76.3%, 59.9-87.4) or a public facility (61.5%, CI: 53.8-68.6) as opposed to a private facility (33.3%, CI: 23.9-44.3) and this difference was statistically significant ($p<0.001$).



Most households did not pay any out-of-pocket payment for the delivery (67.4%, CI: 61.4-72.9). The average out-of-pocket payment was 70.1 JD (CI: 53.3-86.9, median=0) among all deliveries and 217.6 JD (CI: 188.7-246.5) among households that paid for deliveries. Out-of-pocket payments were highest for women delivering at private facilities, with a mean cost of 131.9 JD (CI: 97.8-166.0, median=85) at private facilities compared to a mean cost of 40.5 JD (CI: 23.8-57.2, median=0) at public facilities and 48.9 JD (CI: 12.6-85.3, median=0) at charity/NGO facilities ($p<0.001$). Among those who had out-of-pocket payments, the average cost at private facilities was 230.8 JD (CI: 190.7-271.0, median=240) at private facilities compared to a mean cost of 206.6 JD (CI: 153.7-259.5, median=150) at public facilities and 186.0 JD (CI: 70.9-301.1, median=120) at charity/NGO facilities

($p=0.997$). Nearly half of households (42.9%, (CI: 32.6-53.8), reported no out-of-pocket payment for delivering at a private facility.

There were regional differences in payment for deliveries (Figure 23). More households paid for a delivery in the Central region (46%, CI: 37.7-54.4) than in the South region (31.3%, CI: 15.5-53.0) or North region (19.2%, CI: 13.4-26.7) ($p=0.02$). These regional differences in payment were apparent despite there being no statistically significant regional differences in the percentage of women delivering in private versus public or charity/NGO locations ($p=0.776$).



Among women who gave birth in Jordan in the past year, 32.2% (27.5-37.3) had a cesarean section. The mean cost of delivery was higher for those with a cesarean section (100.8 JD CI: 64.1-137.5 JD, median=0) than for those without a cesarean section (55.8 JD CI: 39.9-71.7 JD, median=0). Among those that paid for the delivery, the mean cost of delivery was also higher for those with a cesarean section (265.8 JD, CI: 209.3-322.3) than for those without a cesarean section (188.1 JD, CI: 156.9-219.4).

Most women who gave birth received a birth certificate (91.5%, CI: 87.1-94.5). Women were more likely to receive a birth certificate if they delivered at a private facility (98.8%, CI: 91.8-99.8) than if they delivered at a public facility (88.5%, CI: 81.5-93.1) or charity/NGO facility (86.8%, CI: 71.9-94.5), and this difference was statistically significant ($p=0.01$).

Limitations

While every attempt was made to create a robust study design and implement it with care, all assessments have their limitations. With respect to sampling, reliance on UNHCR registration data for sample design and cluster allocation may have resulted in sampling bias if the geographic distribution of registered and unregistered households differs. The within cluster referral process also presents the potential for bias, as respondents may not have always referred the interview team to the nearest household, excluding households with certain characteristics. Referral procedures ensured that included households were referred by different respondents and using small clusters may have helped to attenuate within-cluster similarities and the associated design effect. Replacement sampling, which was done for logistical purposes, also could contribute to bias if there are systematic differences between households in which no one was at home compared with those in which someone was present.

Another potential problem concerns development of the questionnaire content. Numerous individuals and partner organizations provided input on the questionnaire's content. Differing information priorities and the need to have a reasonable interview length resulted in exclusion of some content areas and reduction in the number of questions asked in some sections. Final decisions on content were guided by WHO and UNHCR and aimed to address information gaps concerning health care for self-settled Syrian refugees in Jordan; for example content related to vulnerability, living conditions and nutrition was not included because these topics were the focus of other recent assessments. The exclusion of mental health is another limitation of the study; mental health was excluded for several reasons including challenges in identifying an ideal instrument, the desire to limit the length of the interview, and because it was beyond the initially agreed upon scope of the

assessment. Selection of chronic conditions for inclusion in the survey was vetted by a number of partners; cancer and other conditions with low prevalence rates were excluded from the final survey because the anticipated sample size was too small to draw meaningful conclusions. Humanitarian organizations and the Ministry of Health report providing costly tertiary care for patients with chronic conditions, such as those requiring cancer treatments or dialysis, and that Syrians may be choosing to come to Jordan because of the high quality care that is provided. A major limitation of this study as a population based survey is that was unable to address questions about access to care and the burden on the health system for less prevalent conditions. Future research focusing specifically on populations with these conditions would contribute to a better understanding of access issues for these conditions and the burden of treatment costs for refugees, the humanitarian community and the Government of Jordan. This warrants further study and it is recommended the outcomes, treatment barriers and costs of less prevalent chronic conditions, such as cancer and conditions requiring dialysis, be the subject of future assessments.

Initially, the full Humanitarian Emergency Settings Perceived Needs Scale (HESPER) tool was included in the questionnaire. However, time constraints reduced the tool to a series of questions in which interviewers asked if the household had any serious problems, requested an explanation of the most serious problem faced by the household, and then selected the HESPER category that most closely capturing the problem. This series of questions was also asked for the next most serious problem facing each household. During data collection, supervision by the study team found that many interviewers did not understand the purpose of the “serious problem” questions nor did they know the proper way to code responses. Despite attempts made in the field to train interviewers, the responses to some questions were not included in analysis because they study team felt that the method did not reliably capture the most serious problems as perceived by each household.

Despite real-time data collection, monitoring, and correcting data quality during collection, interviewers’ misunderstanding about questions regarding care-seeking were identified during supervision. Several interviewers understood the identification of index cases for care-seeking questions to be based on the last time a child/adult in the household had a serious problem for which they needed to seek care. Interviewers were re-trained during data collection and this problem was corrected once identified, however, this may have caused bias towards fewer respondents reporting that care needed (and an over-estimation of care-seeking rates).

The questionnaire identified the role of respondents in the household by the options “head of household,” “head of household and caregiver/health decision maker,” or “caregiver/health decision maker.” While these response options were created to provide an option for interviews in which there were two respondents present, inconsistency in the selection of response was observed between interviewers. Many interviewers selected the second option if they were speaking with one person who held both roles in the household. This made calculation of female-headed households less reliable than desired for reporting. In addition, the survey did not include specific information on gender aside from the respondent and head of household; consequently no gender analysis was possible, an important limitation of the study. Low educational attainment was common which is consistent with what is known about Syrian refugees in Jordan. This may have influenced the accuracy of results if respondents did not understand the type of facility, financing, and treatments received as well as the condition for which care was sought. Finally, interviews were conducted by Jordanians which could have resulted in a higher refusal rate, hesitance or influence on the part of Syrian refugees in responding to certain questions than if interviews had been conducted by Syrians. As such, sensitive topics such as income or experiences in Syria may be susceptible to bias as a result of discordant interviewer nationalities.

Discussion and Recommendations

Refugee Background Characteristics and Welfare

This is a very young population, as would be expected in a refugee migration. The proportion of the population aged 17 and under was 53.8%, substantially larger than the estimate of 39.7% for the overall Syrian population by the US Census Bureau's International Program.¹³ The households surveyed reported that only 3.9% of residents were over age 60 years, compared with US Census Bureau estimate of 5.9%. This latter finding is also not too surprising for a refugee population.

The majority of Syrian refugee households interviewed arrived in Jordan during 2013, coming mainly from Dar'a (44.2%) and Homs (23.5%). Almost all refugees in the survey were registered with UNHCR. This is an excellent database to facilitate communications and potentially, health education activities. Most households reported receiving assistance in the form of cash or vouchers from the UN or an NGO, which is reflection of the requirement, by many organizations, that households be registered with UNHCR in order to receive and better coordinate assistance. A smaller proportion (15%) reported receiving food, household items, or other aid from a religious or community group in Jordan.

The survey data indicate that Syrian refugee households in Jordan are under considerable financial stress. There was a substantial gap between the reported mean monthly expenditure of JD 472 and a reported income of JD 228 (the latter excludes humanitarian assistance). Even including the median in-kind and cash assistance (JD144) received, and assumptions about income from work that the households did not report, the picture is still of a fragile household economy. A large portion (68.8%) of households reported selling assets or borrowing money in the past three months to meet basic needs, though this figure differed significantly across expenditure quartiles. It is almost certain that the income and expenditure figures that households reported were not entirely accurate. It is probable that, refugees not being able to legally work resulted in unreported income. The anticipation of further humanitarian assistance if low incomes were reported, probably also biased reporting. It is likely that remittances, pensions and rent from Syria also play a role in maintaining the household economy, though these were not captured in the study.

The largest household expenditure categories were overwhelmingly housing/rent and food. Most households lived in apartments or houses (87.1%) with only 4.2% in informal or temporary structures, explaining the high expenditure on shelter. Continued support for housing costs and improving food security could help stabilize financial security of refugee households.

Health Care Seeking

Most households reported that they were able to access the health care in Jordan that their household members needed. For adults, 84.1% could access needed health care and for children it was 91%. The most common reported barrier to seeking health care was cost. Children were less likely to be taken to a private health facility than adults from the same household. Common reasons for seeking care were respiratory infections, diarrhea and fever. Given that on average 3.8 persons slept in each sleeping room of a dwelling, respiratory infections could be easily spread. The amount

¹³ US Census Bureau, International Program. URL: www.census.gov/population/international/data/idb/region.php?N=%20Results%20&T=15&A=separate&RT=0&Y=2014&R=-1&C=SY accessed 16 October 2014.

of second-hand cigarette smoke likely to be present in the household, could also contribute to childhood respiratory problems. A closer examination of household water quality and domestic sanitary arrangements could add clarity to an understanding of diarrhea among refugee children.

Health Service Access and Utilization

Access and utilization of health services among the Syrian refugee population in Jordan was good. Almost half (44%) of households reported that there was little difficulty in receiving medical care when needed. The access to specialist care was reported to be somewhat more difficult. Utilization data suggests about two visits per person per year to a health facility. Households listed out-of-pocket costs as the major barrier, which presents an interesting contrast with careseekers in the public sector which reported no or very low out-of-pocket payments. This cost seems primarily associated with the purchase of medicines, the mean costs for medicines associated with the most recent adult health facility visit was JD14.2, or about 58% of the cost of the visit. Given the tenuous state of the household economy, it is easy to see how a relatively modest sum could be a barrier to utilization.

Public facilities were used most often as a source of health care. For the last illness among adults, 52.9% sought care in a public facility, and for children this figure was 54.6%. A much smaller proportion of individual cases seeking care did so at private facilities (33.4% for an adult household member and 24.6% for a child). Since arrival in Jordan, only 45.7% of households had used a private source of care. The charity/NGO sector accounted for an even smaller proportion of those receiving care for adult household members (9.8%) and child household members (8.9%).

For hospitalizations 21% of households had someone in the hospital in the past year, a rather surprising figure. Although regional data are not readily available for comparison, this figure is substantially above the OECD figures.¹⁴ Reportedly, a fifth of these hospitalizations were due to injuries. The nature of these injuries warrants further study. It is possible that these injuries were due to an unsafe employment environment, a common occurrence in many refugee situations. Hospitalizations were also predominantly in public sector facilities (68.0%) with only 24.7% of hospitalizations reported in private sector facilities, and very few (7.4%) in NGO hospitals

Among the NCDs, the most common diagnoses reported were hypertension and diabetes, followed by arthritis and cardiovascular disease. Their reported prevalence rose rapidly after age 40. It is likely that cardiovascular disease is considerably under diagnosed among residents of these households, given the prevalence of the first two diagnoses. All of the five conditions queried in this survey have effective prevention strategies available. The prevalence of reported hypertension at over 60% in the 40-59 year group is of great concern if substantiated by clinical assessment. This, with diabetes, portends a major burden of cardiovascular disease in the coming years for this population. If current displacement is protracted, this impending burden could entail substantial medical costs to UNHCR and others, as well as increased utilization of Jordanian referral hospitals by refugees. The observed pattern of refugees not seeking care because of costs, not understanding their disease, and being poorly compliant with treatment, increases the probability of more expensive inpatient and specialist care in future years. Investing now in more aggressive health promotion, could more than pay for itself in future savings from hospital care avoided or postponed. The successful distribution of humanitarian assistance shows this could be done without major difficulty.

¹⁴ OECD Health Data 2006: Statistics and Indicators for 30 Countries. OECD, 2006.

Public health facilities face a heavy burden serving over half (53.9%) of refugees receiving care for chronic health conditions. The remaining 29.6% of refugees receiving care for chronic conditions did so in the private sector and 16.6% in charity or NGO facilities. Disease patterns indicate the importance of continuing support to the public care sector and the Jordanian public health services to adequately meet expanding needs. Although cancers were not specifically queried in the survey, the burden is likely to be heavy, particularly on the tertiary care system. With 59% of Syrian males smoking (and 23% of females), consuming a national per capita 1205 cigarettes per year, the health consequences will place a heavy burden on the tertiary health facilities of Jordan.¹⁵ It had previously been estimated that lung cancer is the second most common cause of cancer deaths in Syria.¹⁶

Spending on Health Services

Households reported low overall expenditures for health services, most certainly because of their high utilization of public care facilities. The mean household spending on health in the month preceding the survey was JD57, with an average of JD32.1 spent on consultation and diagnostic fees and JD 24.9 spent on medications. Among adults in the households receiving care, 39.4% incurred out-of-pocket payment and 29.3% of households paid out-of-pocket consultation costs for children.

Among those receiving care for chronic conditions in Jordan, 31.6% reported an out-of-pocket payment, separate from the costs of medications and other items paid on the patient's behalf by the UN or others. Those using private health facilities had the ability to pay for services. Out of pocket costs were reported by 74.0% of adults and for 63.3% of children receiving care in private facilities. It would be useful to know for planning purposes why these refugees are seeking care in private facilities. Anecdotal evidence suggests that perceived quality of care in the private sector may be higher and that the previous experiences of refugees in Syria—where referral from the public to private sector may be more common—could be influencing these decisions.

To offer more comprehensive and integrated care is a recommendation of this report. This would necessitate expanded support to the Jordanian public health sector, but would improve continuity of care which could improve patient outcomes, especially for chronic conditions. The high expense of comprehensive care has made it difficult for many facilities to offer this and for refugees to access such services. High cost specialized care can pose an even greater financial burden on the public health sector in Jordan. This is particularly true for chronic conditions. Almost half of the surveyed households (43.4%) have at least one member with a chronic condition and that the majority of these (84.7%) need care from facilities in Jordan.

Access to Medicines

The majority of those receiving care for both adult (87.4%) and child (88.6%) health services reported receiving a prescription. Private facilities were more likely to give patients a prescription. Most refugees were able to obtain all prescribed medications following the most recent health consultation. About half of those obtaining medications paid at least some portion of the cost out-of-pocket (58.5% for children and 57.0% for adults). There is speculation that the reason for such payment is patient preference for specific brand of medications, rather than the generics provided

¹⁵ World Bank, 2002. Smoking Prevalence Syrian Arab Republic. URL: <http://siteresources.worldbank.org/INTPH/Resources/Syria.pdf>. Accessed October 10, 2014.

¹⁶ IRIN Syria: new law to curb smoking. URL: <http://siteresources.worldbank.org/INTPH/Resources/Syria.pdf>. Accessed October 10, 2014.

free in essential medicines packages. However, this has not been verified and further investigation into payment for medications is recommended. The most commonly reported reason for not obtaining prescribed medications were stock-outs at public facilities and cost. This indicates a need for additional study of essential medicines at facilities and continued supply chain support for reliable pharmaceutical supply at public facilities.

Most Syrian refugees with chronic health conditions had received medications for the condition in Jordan or in Syria (88.9%) and (85.5%) reported currently taking medication for the condition. However, one-quarter of refugees with chronic health condition diagnoses reported they had stopped taking or run out of their medication for longer than two weeks in the past year. The majority of these cases (85.8%) stopped taking medications in Jordan as compared to 14.2% stopping while in Syria. The most common reason reported across conditions for stopping medication was the cost (59.1%). This high prevalence of medication interruption in Jordan warrants further investigation to explore whether access to medication is because of difficulty identifying other sources when there are public sector stock-outs, preferring brand name over generic medications, or other factors such as lack of education on alternative medications that may be available at a lower cost. Cost of medication, especially medication for chronic health conditions, is a major expense to the health system and the refugees themselves, making further evaluation of this problem worthwhile.

Antenatal Care

Among the 20.3% of households reporting that a woman in the household gave birth in the past year, 87.9% reported that the woman delivered in Jordan. Antenatal care was sought by 82.2% of women who were pregnant in Jordan, most often from a private Jordanian clinic or doctor (30.4%). For women who were pregnant in Jordan but did not receive ANC in Jordan, the primary reasons given were cost (32.6%), not thinking that ANC was important (19.6%), or ANC not being a priority for the household (15.2%). A better understanding of why the public sector was not preferred for ANC services could address underlying issues and potentially improve access. While the number of ANC visits made was adequate at 6.2, the mean time of the first visit was 4.4 months. Clearly, efforts need to be strengthened to ensure the first visit occurs during the first trimester. In the past year 20.3% of women in households had given birth. Since the denominator data is of all women, not just those of childbearing age, it is hard to understand fertility patterns from this information. It does however seem that fertility is high, but probably consistent with regional patterns.

The majority of deliveries occurred in public hospitals (51.8%), again indicating a large burden on the Jordanian public health system. The reason most often reported for selection of delivery location for women who delivered in the public or charity/NGO sectors was cost (61.5% and 76.3% respectively). The majority of households did not have to pay out-of-pocket for the delivery (67.4%). Women delivering in private facilities (98.8%) were more likely to receive a birth certificate than women delivering in a public facility (88.5%) or charity/NGO facility (86.8%). Given the difficulties that can arise when birth certificates are not received, this finding warrants additional action.

Summary

These data show a population of refugees living outside of camps which is under considerable financial stress. While there is fair-to-good access to health services, costs are a substantial barrier to adequate utilization. Somewhat over half of the medical costs incurred by adults are for medicines. Reported diagnoses of NCDs are common, and this will become an increasing burden on the health services in a protracted refugee situation. Effective behavior change methods are available, and

could be promoted widely in the refugee populations. Options to improve the continuity of care for persons with chronic conditions would both improve efficiency as well as patient outcomes.

Among children, utilization of health care services for the most recent illness was very high. Respiratory infections were the most common reason for seeking care, even though the survey was not done in the colder months. The extensive use of private clinics for antenatal services is likely to produce a cost barrier to seeking ANC care. The reasons for not utilizing the public sector for ANC need to be investigated further.

A remaining question is how these findings compare those of refugees in camps. While economic indicators would be different, the reported prevalence of disease and many health seeking behaviors would be similar. As the debate continues on roles of refugee camps in many locations, this information could add valuable data to the discussion.

Annex I: Descriptive Statistics by Region and Provider Sector

Table 1. Cluster Allocation by Region, Governorate, District and Sub-District

Governorate	Number of Clusters	District	Sub-District	% Refugee Population	% Clusters Allocated	% Households Sampled	Clusters Sampled
Northern Region				45.8%	48.0%	46.9%	60
Ajloun	2	Qasabat Ajloun	Ajloun	1.5%	1.6%	1.7%	2
Al Mafraq	17	Al Badiyah Al Shamaliyah	Al Badyeh Al shamalyah (salihia)	0.3%	0.8%	0.8%	1
			Sabha	0.7%	0.8%	0.9%	1
			Um Al-Jimal	0.3%	0.8%	0.8%	1
		Al Badiyah Al Shamaliyah Al Gharbiyah	Al Khaldyah	1.5%	1.6%	1.5%	2
			Hosha	0.5%	0.8%	0.8%	1
			Sama As Sarhan	1.1%	0.8%	0.8%	1
		Qasabat Al Mafraq	Al Mafraq	5.7%	5.6%	5.5%	7
			Bal'ama	2.3%	2.4%	2.3%	3
Irbid	38	Al Koura	Al Koura	1.3%	1.6%	1.5%	2
		Al Mazar Ash Shamali	Al Mazar Ash Shamali	0.9%	1.6%	1.5%	2
		Al Wastiyya	Al Wastiyya	0.5%	0.8%	0.8%	1
		Ar Ramtha	Ar Ramtha	6.7%	6.4%	6.2%	8
		At Tayba	At Tayba	0.7%	0.8%	0.8%	1
		Bani Kinana	Bani Kinana	1.2%	0.8%	0.8%	1
		Bani Obayd	Bani Obayd	3.7%	4.0%	3.9%	5
		Irbid	Qasabat Irbid	14.8%	14.4%	13.9%	18
Jarash	3	Qasabat Jarash	Jarash	2.3%	2.4%	2.3%	3
Central Region				46.3%	47.2%	48.1%	59
Al Balqa	6	Ayn Al Basha	Ayn Al Basha	1.5%	1.6%	1.7%	2
		Deir Alla	Deir Alla	0.4%	0.8%	0.8%	1
		Mahis Wa Al Fuhays	Mahis Wa Al Fuhays	0.3%	0.8%	0.8%	1
		Qasabat As Salt	As Salt	1.1%	1.6%	1.5%	2
Amman	38	Al Jamiah	Al Jamiah	5.0%	4.8%	4.8%	6
		Al Jiza	Al Jiza	0.5%	0.8%	1.1%	1
		Al Quaysmh	Al Quaysmh	3.1%	3.2%	3.1%	4
		Marka	Marka	5.2%	4.8%	4.9%	6
		Naur	Naur	1.1%	0.8%	1.0%	1
		Qasabat Amman	Amman	12.0%	12.0%	12.4%	15
		Sahab	Sahab	2.3%	2.4%	2.6%	3
		Wadi As Sir	Wadi As Sir	1.9%	1.6%	1.6%	2
Az Zarqa	13	Al Hashimiya	Al-Hashimiya	1.0%	0.8%	0.8%	1
		Ar Rusayfa	Ar Rusayfa	1.9%	1.6%	1.5%	2
		Qasabat Al Zarqa	Al Azraq	0.3%	0.8%	0.8%	1
			Al-Dhilail	0.9%	0.8%	0.8%	1
			Az Zarqa	6.0%	6.4%	6.3%	8
Madaba	2	Qasabat Madaba	Madaba	1.7%	1.6%	1.5%	2
Southern Region				3.2%	4.8%	5.0%	6
Al Aqabah	1	Al Quwayra	Al Aqabah	0.5%	0.8%	0.8%	1
Al Karak	2	Al Mazar Al Janoubi	Al Mazar	0.6%	0.8%	0.8%	1
		Qasabat Al Karak	Al Karak	0.9%	0.8%	0.8%	1
At Tafilah	1	Tafilah	At Tafilah	0.4%	0.8%	0.9%	1
Ma'an	2	Qasabat Maan	Al	0.2%	0.8%	0.8%	1
			Ma'an	0.8%	0.8%	0.9%	1

Table 2. Respondent Characteristics

		By Region						regional comparison p value	Survey Total		
		North (n=727)		Central (n=745)		South (n=78)			N	Point	95% CI
		Point	95% CI	Point	95% CI	Point	95% CI				
Sex	Male	40.8%	[36.9, 44.8]	35.8%	[31.2, 40.8]	37.7%	[27.7, 48.8]	0.227	593	38.4%	[35.3, 41.4]
	Female	59.2%	[55.2, 63.1]	64.2%	[59.2, 68.8]	62.3%	[51.2, 72.3]		957	61.7%	[58.6, 64.8]
Age	Median	36.5	[35, 38]	35	[34, 36]	37	[33, 40]	0.018	1550	36	[35, 37]
	Mean	39.22	[38.2, 40.2]	37.29	[36.4, 38.2]	39	[36.8, 41.2]		1550	38.28	[37.6, 39.0]
Highest level of education completed								0.003			
	None	12.4%	[9.4,16.2]	7.0%	[5.5,8.9]	21.8%	[13.1,34.0]		159	10.3%	[8.4, 12.4]
	Primary	27.4%	[24.1,30.9]	34.8%	[31.3,38.4]	32%	[21.2,45.3]		483	31.2%	[28.7, 33.7]
	Preparatory	35.1%	[31.7,38.6]	35.8%	[32.1,39.7]	30.8%	[25.1,37.0]		546	35.2%	[32.8, 37.7]
	Secondary	15.7%	[13.0,18.8]	14.0%	[11.5,16.9]	9.0%	[4.3,17.9]		225	14.5%	[12.7, 16.5]
	Institute/technical degree/diploma	5.0%	[3.5,6.9]	3.9%	[2.6,5.8]	0.4%	[1.1,12.5]		68	4.4%	[3.4, 5.9]
	University or higher	4.5%	[3.1,6.6]	4.6%	[3.0,6.9]	3%	[0.8,7.8]	69	4.5%	[3.4, 5.9]	

Table 3. Household Demographics

		By Region						regional comparison p value	Survey Total		
		North (n=727)		Central (n=745)		South (n=78)			N	Estimate	95 CI
		Point	95% CI	Point	95% CI	Point	95% CI				
Household Size	Median	6	[6, 6.9]	5	[5, 6]	5	[4, 5.6]	< 0.001	1550	6	[6, 6]
	Mean	6.7	[6.5, 7]	5.7	[5.5, 5.9]	5.4	[4.9, 5.9]		1550	6.2	[6, 6.4]
Children < 5 yrs	Median	1	[1, 1]	1	[1, 1]	1	[0.37, 2]	0.005	1550	1	[1, 1]
	Mean	1.36	[1.26, 1.45]	1.14	[1.1, 1.23]	1.19	[0.94, 1.45]		1550	1.25	[1.18, 1.31]
	% of all households w/ child < 5	66.5%	[62.7, 70]	63.1%	[59.1, 66.9]	61%	[52.3, 69.1]		0.279	1001	64.6%
6 - 17 years	Median	2	[2, 2]	2	[2, 2]	1	[1, 2]	< 0.001	1550	2	[2, 2]
	Mean	2.33	[2.18, 2.47]	1.87	[1.75, 1.99]	1.70	[1.38, 2.02]		1550	2.07	[1.97, 2.18]
	% of all households w/ child 6-17	90.1%	[87.3, 92.4]	89.5%	[86.8, 91.8]	85.7%	[81.2, 98.3]		0.384	1389	89.6%
18 - 39 years	Median	2	[2, 2]	2	[2, 2]	2	[1.4, 2]	< 0.001	1550	2	[2, 2]
	Mean	2.07	[1.95, 2.2]	1.86	[1.88, 1.95]	1.6	[1.43, 1.76]		1550	1.95	[1.87, 2.02]
40 - 59 years	Median	0	[0, 1]	0	[0, 1]	0	[0, 1]	0.888	1550	0	[0, 1]
	Mean	0.66	[0.6, 0.73]	0.68	[0.62, 0.74]	0.65	[0.51, 0.79]		1550	0.67	[0.63, 0.71]
Over 60 years	Median	0	[0, 0]	0	[0, 0]	0	[0, 0]	0.001	1550	0	[0, 0]
	Mean	0.29	[0.25, 0.33]	0.19	[0.16, 0.22]	0.25	[0.16, 0.34]		1550	0.24	[0.21, 0.27]
	% of all households w/ adult > 60	23.4%	[20.3, 26.7]	16.1%	[13.6, 19]	20.8%	[14, 30]		0.002	306	19.7%
% of households w/ non-Syrians		0.4%	[0.1, 1.3]	1.5%	[0.9, 2.5]	1.3%	[0.2, 7.4]	0.082	15	1%	[0.6, 1.6]
Median number of non-Syrians*		1	1	2	1	1	1	0.022	15	1	1
Mean number of non-Syrians*		2.67	[-0.35, 5.69]	2.73	[1.55, 3.91]	1	[1, 1]		15	2.6	[1.52, 3.68]
Highest level of education completed - Household Head								0.285			
None		12.2%	[9.3, 15.9]	7.3%	[5.7, 9.2]	20.8%	[12.4, 32.7]		159	10.3%	[8.5, 12.4]
Primary		28.3%	[25.1, 31.8]	35.7%	[32, 39.6]	33.8%	[23.9, 45.3]		498	31.2%	[29.6, 34.7]
Preparatory		34.9%	[31.7, 38.2]	35.8%	[32.2, 39.6]	28.6%	[21.5, 36.9]		543	35%	[32.7, 37.5]
Secondary		15.4%	[12.9, 18.2]	12.5%	[10.4, 14.9]	9.1%	[3.5, 21.4]		212	13.7%	[12, 15.5]
Institute/technical degree/diploma		4.7%	[3.3, 6.5]	3.8%	[2.5, 5.6]	5.2%	[2.1, 12.4]		66	4.3%	[3.3, 5.5]
University or higher		4.5%	[3.1, 6.6]	4.8%	[3.3, 7.1]	2.6%	[0.8, 7.9]	71	4.6%	[3.5, 6]	

* among households reporting at least one person living in household with nationality other than Syrian

Table 4. Living Conditions

	By Region			regional comparison p value	Survey Total	
	North (n=727)	Central (n=745)	South (n=78)		Point Estimate	95 CI
	Point	Point	Point		N	
	95% CI	95% CI	95% CI			
Residence Type						
Apartment or house	88.3% [84.2, 91.5]	85.8% [80, 90.1]	88.3% [75.4, 94.9]	0.854	1350	87.1% [83.8, 89.8]
Tent, shack, or temporary structure	3.3% [1.4, 7.5]	2.3% [0.4, 12.1]	0% [0, 0]		41	2.7% [1.1, 6.2]
Addition to house	6.9% [5.1, 9.3]	9.7% [7, 13.2]	11.7% [5.1, 24.6]		131	8.5% [6.8, 10.5]
Unfinished building or construction site	1.2% [0.5, 2.8]	1.9% [1.1, 3.3]	0% [0, 0]		23	1.5% [0.9, 2.4]
Public building or communal shelter	0.1% [0, 1]	0.1% [0, 1]	0% [0, 0]		2	0.1% [0, 0.5]
Other	0.1% [0, 1]	0.3% [0, 1.9]	0% [0, 0]		3	0.2% [0, 0.8]
Residence Arrangement						
Rent	94.5% [90.8, 96.8]	97.2% [90.6, 99.2]	100% [1, 1]	0.738	1489	96.1% [93.2, 97.7]
Pay to occupy land	0.3% [0, 2]	0.3% [0, 1.9]	0% [0, 0]		4	0.3% [0, 1]
Stay in exchange for work	0.7% [0.2, 2.2]	0.7% [0.2, 1.8]	0% [0, 0]		10	0.7% [0.3, 1.4]
Stay without permission (squat)	0% [0, 0]	0.7% [0, 4.7]	0% [0, 0]		5	0% [0, 2.3]
Hosted (no payment)	4.1% [2.2, 7.5]	1.1% [0.4, 2.8]	0% [0, 0]		38	2.5% [1.4, 4.2]
Own	0.3% [0, 1.1]	0.1% [0, 1]	0% [0, 0]		3	0.2% [0, 0.6]
Crowding (people per sleeping room)						
Median	3.5 [3.4, 3.5]	3.0 [3, 3.5]	3.0 [2.5, 3.5]	< 0.001	1543	3.5 [3, 3.5]
Mean	3.91 [3.73, 4.08]	3.66 [3.49, 3.83]	3.19 [2.92, 3.47]		1543	3.75 [3.63, 3.87]
% of all households w/ 5+ per room	26.2% [22.0, 30.9]	24.9% [21.1, 29.1]	16.7% [9.0, 28.7]		387	25.1% [22.3, 28.1]
% of households w/ non-Syrian members						
	0.4% [0.1, 1.3]	1.5% [0.9, 2.5]	1.3% [0.2, 7.4]	0.082	15	1% [0.6, 1.6]
Median number of non-Syrians	1	2	1			1
Mean number of non-Syrians	2.67 [-0.35, 5.69]	2.73 [1.55, 3.91]	1 [1, 1]	0.022	15	2.6 [1.52, 3.68]

* among households reporting at least one person living in household with nationality other than Syrian

Table 5: Arrival Timeframe Location of Origin in Syria

	By Region						regional comparison p value	Survey Total		
	North (n=727)		Central (n=7450)		South (n=78)			N	Percent	95% CI
	Percent	95% CI	Percent	95% CI	Percent	95% CI				
Year of arrival in Jordan										
2011	7.2	[5.6,9.1]	8.1	[6.1,10.5]	11.5	[7.0,18.4]	0.021	121	7.8	[6.5,9.3]
2012	40.3	[35.9,44.8]	33.0	[29.2,37.1]	33.3	[23.2,45.2]		565	36.5	[33.5,39.5]
2013	47.5	[42.7,52.3]	49.4	[45.1,53.7]	48.7	[35.8,61.8]		751	48.5	[45.3,51.6]
2014	5.1	[3.3,7.7]	9.5	[7.2,12.5]	6.4	[4.3,9.5]		113	7.3	[5.8,9.1]
Governorate of Origin in Syria										
Al-Hasakeh	0		0.7	[0.1,3.3]	0		< 0.001	5	0.3	[0.1,1.6]
Aleppo	4.4	[2.6,7.4]	11.7	[8.1,16.5]	16.7	[6.4,37.0]		132	8.5	[6.3,11.4]
Damascus	5.4	[3.3,8.5]	16.5	[13.2,20.4]	9	[2.5,27.8]		169	10.9	[8.8,13.5]
Dar'a	68	[59.5,75.4]	23.5	[17.8,30.3]	20.5	[3.6,64.2]		685	44.2	[37.9,50.7]
Deir ez-Zor	0.6	[0.1,2.6]	0.1	[0.0,1.0]	0			5	0.3	[0.1,1.2]
Hama	1.4	[0.5,3.6]	5.4	[2.6,10.9]	0			50	3.2	[1.7,6.0]
Homs	15.1	[10.1,22.1]	29.4	[22.9,36.8]	44.9	[20.9,71.5]		364	23.5	[19.0,28.6]
Idlib	0.1	[0.0,1.0]	1.6	[0.8,3.1]	0			13	0.8	[0.4,1.6]
Latakia	0.3	[0.0,2.0]	0.9	[0.3,2.7]	0			9	0.6	[0.2,1.5]
Quneitra	0		0.4	[0.1,1.7]	0			3	0.2	[0.0,0.8]
Ar-Raqqa	0.1	[0.0,1.0]	2.1	[0.8,5.9]	2.6	[0.4,14.8]		19	1.2	[0.5,3.0]
Rural Damascus	4.4	[2.0,9.2]	7.5	[5.0,11.1]	6.4	[2.3,16.8]		93	6.0	[4.2,8.6]
As-Suwayda	0.3	[0.0,2.0]	0.1	[0.0,1.0]	0			3	0.2	[0.0,0.8]
Tartus	0	[0, 0]	0	[0, 0]	0	[0, 0]		0	0.0	[0, 0]
Area within Syrian governorate of origin										
Capital city	5.1	[3.5,7.2]	10.5	[8.1,13.5]	9	[3.5,21.2]	0.037	122	7.9	[6.4,9.7]
Other main city	38.8	[33.4,44.5]	40.7	[34.4,47.3]	38.5	[20.0,61.0]		615	39.7	[35.6,43.9]
Small village/town	34.5	[29.9,39.5]	22	[18.1,26.5]	32.1	[12.0,61.9]		440	28.4	[25.0,32.0]
Rural or remote area	21.6	[17.7,26.0]	26.8	[22.2,32.1]	20.5	[13.7,29.6]		373	24.1	[21.1,27.4]

Table 6. Violence in Syria

	By Region						regional comparison p value	Survey Total (n=1550)		
	North (n=727)		Central (n=745)		South (n=78)			N	Percent	95% CI
	Percent	95% CI	Percent	95% CI	Percent	95% CI				
Households with family member that experienced a violent event in Syria*	78.4	[73.9, 82.3]	74.4	[70.6, 79.7]	87	[76.7, 93.2]	0.189	1200	77.4	[74.3, 80.3]
Households experiencing specific violent event in Syria*										
Destruction of home	77.6	[73.6, 81.2]	71.7	[68.1, 75]	79.2	[62.1, 89.9]	0.057	1160	74.8	[72.2, 77.4]
Conflict related injury	34.1	[29.9, 38.5]	34.8	[31.1, 38.7]	36.4	[28.7, 44.8]	0.124	535	34.5	[31.8, 37.3]
Conflict related death	28.2	[23.6, 33.2]	23	[18.6, 28]	19.5	[9.8, 34.9]	0.519	391	25.2	[22.1, 28.7]
Kidnapped or missing family member	11.7	[9.2, 14.7]	16.4	[12.9, 20.6]	19.5	[13, 28.2]	0.136	222	14.3	[12.2, 16.8]
Imprisonment	36.8	[32.2, 41.6]	34	[29.3, 38.9]	29.9	[18.3, 44.7]	0.072	544	35.1	[31.9, 38.4]
Other violent event	10	[7.5, 13.2]	12.9	[10, 16.4]	20.8	[14.1, 29.5]	<0.001	185	11.9	[10, 14.2]

Table 7. Household Income and Expenditures (Jordanian Dinar)

	By Region						Regional comparison p value	Survey Total			
	North (n=727)		Central (n=745)		South (n=78)			N	Median	Mean	95 CI
	Mean	95 CI	Mean	95 CI	Mean	95 CI					
Expenditures (past month)											
Total Expenditures	490 [455,524]		461 [430,492]		414.5 [394,434]		< 0.001	1550	416	472 [450,494]	
Expenditures by Quartile											
Top quartile	812 [743,881]		803 [735,872]		705 [581,829]		0.316	387	695	805 [757,852]	
3rd quartile	487 [481,494]		481 [475,487]		490 [471,509]		0.311	387	481	484 [480,489]	
2nd quartile	366 [361,370]		361 [356,366]		354 [343,366]		0.135	388	365	363 [359,366]	
Bottom quartile	234 [222,247]		241 [231,251]		234 [212,256]		0.682	388	250	238 [230,245]	
Expenditures by category											
Housing/rent	151 [140,162]		145 [134,156]		109 [99,119]		< 0.001	1550	150	146 [138,154]	
Electricity	15 [14,16]		17 [16,18]		17 [14,20]		0.081	1550	15	16 [15,17]	
Fuel (cooking/heating)	16 [16,17]		16 [16,17]		17 [15,19]		0.933	1550	15	16 [16,17]	
Water	13 [12,14]		11 [10,12]		9 [7,11]		0.001	1550	10	12 [11,13]	
Food	155 [142,168]		124 [113,134]		132 [118,145]		0.001	1550	100	139 [130,147]	
Transportation	32 [29,34]		39 [35,43]		31 [25,38]		0.008	1550	25	35 [33,38]	
Health	46 [30,62]		48 [37,59]		32 [20,43]		0.126	1550	20	46 [37,55]	
Household items	17 [15,20]		21 [16,26]		15 [12,18]		0.199	1550	10	19 [16,21]	
Education	10 [5,15]		11 [5,16]		4 [1,6]		0.015	1550	0	10 [7,14]	
Clothes	20 [17,24]		16 [13,20]		24 [14,34]		0.196	1550	0	19 [16,21]	
Other large expenses	15 [7,23]		14 [8,20]		25.6 [16,35]		0.1186	1550	0	15 [10,20]	
Income (past month)*											
Total Household Income	223.4 [116,331]		240.9 [180,302]		157 [46,268]		0.432	1550	100	228 [170,287]	
Income by Quartile											
Top quartile	1067 [462,1671]		590.1 [436,745]		439.8 [380,499]		0.032	375	300	734 [513,955]	
3rd quartile	166 [161,171]		169.9 [166,174]		170.3 [159,182]		0.455	361	160	168 [165,171]	
2nd quartile	80.6 [75,86]		81.9 [76,88]		93.6 [88,99]		0.003	223	100	82 [78,86]	
Bottom quartile	0 [0, 0]		0 [0, 0]		0 [0, 0]		.	591	0	0 [0,0]	
Households that sold or borrowed money in the past 3 months (%)	71.5 [66.9,75.7] (n=520)		65.6 [61.3,69.7] (n=489)		73.1 [65.4,79.6] (n=57)		0.572	1,066	—	69 [65.7,71.7]	

*excluding humanitarian assistance

Table 8. UNHCR Registration

	By Region						Regional comparison p value	Survey Total (n=1550)		
	North (n=727)		Central (n=745)		South (n=78)			N	Percent	95 CI
	Percent	95 CI	Percent	95 CI	Percent	95 CI				
Households with all members currently registered with UNHCR*	95.3	[93.5,96.7]	94.5	[92.0,96.2]	97.4	[92.3,99.2]	0.445	1,473	95	[93.6,96.1]
Households with members previously registered with UNHCR**	40	[16.2,69.7]	0		0		0.068	2	20	[6.6,47.0]
Primary reason for not having current valid UNHCR registration for entire household**	n=34		n=41		n=2		0.156		n=77	
Lack of time	23.5	[11.1,43.1]	9.8	[3.7,23.2]	0			12	15.6	[8.6,26.6]
Do not know how	5.9	[1.7,18.4]	9.8	[4.2,21.1]	0			6	7.8	[3.9,15.0]
Not enough benefits/not worth the time	20.6	[10.1,37.4]	2.4	[0.3,15.5]	50	[5.7,94.3]		9	11.7	[5.9,21.9]
Did not know about UNHCR	0		2.4	[0.4,13.5]	0			1	1.3	[0.2,8.1]
Too far away	5.9	[1.4,21.4]	4.9	[1.3,16.8]	0			4	5.2	[2.0,13.0]
Other	44.1	[28.5,61.0]	70.7	[51.7,84.5]	50	[5.7,94.3]		45	58.4	[45.7,70.2]
Households that want to register with UNHCR***	64.7	[47.3,78.9]	70.7	[54.8,82.8]	50	[5.7,94.3]	0.576	52	67.5	[56.2,77.1]

* as a percent of all households; includes households waiting for registration appointment

** as a percent of households not currently registered nor waiting for registration

Table 9. Household Access to Health Care

		By Region						Regional comparison p value	Survey Total		
		North		Central		South			Point	95 CI	N
		Point	95 CI	Point	95 CI	Point	95 CI		Point	95 CI	N
Government Health Facilities		n=640		n=613		n=71					
Households that ever used a government facility in Jordan (%)		88 [85.1,90.5]		82.3 [78.3,85.6]		91 [80.0,96.2]		0.393	85.4 [83.0,87.5]		1324
Households that are registered at the government health facility where care is most often sought		73.3 [68.2,77.8]		75 [70.1,79.4]		84.5 [73.2,91.6]		0.389	74.7 [71.3,77.8]		989
Number of visits to government facility*	Median	4 [4,5]		4 [4,4]		6 [4,10]		0.062	4 [4,5]		1324
	Mean	6.2 [5.7,6.8]		5.6 [5.0,6.2]		7.8 [5.9,9.8]			6 [5.6,6.5]		
Mode of transport to government facility**	Walk	37.7 [32.5,43.1]		36.9 [30.1,44.2]		52.1 [39.4,64.6]		0.667	38.1 [33.9,42.4]		504
	Public transit	57.7 [51.4,63.7]		60.4 [52.9,67.4]		43.7 [31.6,56.6]			58.2 [53.5,62.7]		770
	Drive	4.5 [2.9,7.0]		2.8 [1.4,5.4]		4.2 [0.7,22.5]			3.7 [2.5,5.4]		49
Time to government facility (minutes)**	Median	15 [15,20]		15 [15,15]		15 [15,15]		< 0.001	15 [15,15]		1324
	Mean	23.7 [21.6,25.9]		24.2 [22.1,26.3]		17.7 [15.5,19.9]			23.6 [22.2,25.1]		1324
Private Health Facilities		n=322		n=344		n=34			n=700		
Households that ever used a private facility in Jordan (%)		44.3 [40.0,48.6]		46.2 [42.2,50.2]		43.6 [30.5,57.6]		0.808	45.2 [42.3,48.1]		700
Number of visits to private facility*	Median	3 [2,3]		3 [2,3]		3 [2,4.7]		0.817	3 [3,3]		700
	Mean	4.1 [3.5,4.7]		3.9 [3.4,4.4]		3.8 [2.8,4.7]			4 [3.6,4.4]		700
Mode of transport to private facility**	Walk	16.5 [12.3,21.7]		19.8 [14.5,26.4]		14.7 [4.2,40.4]		0.721	18 [14.5,22.1]		126
	Public transit	78 [72.2,82.8]		76.5 [69.3,82.4]		76.5 [56.5,89.1]			77.1 [72.8,81.0]		540
	Drive	5.6 [3.3,9.2]		3.8 [1.9,7.3]		8.8 [1.5,37.7]			4.9 [3.2,7.3]		34
Time to private facility (minutes)**	Median	30 [20,30]		30 [20,30]		30 [15,30]		0.068	30 [20,30]		700
	Mean	35 [31.1,39.0]		30.2 [26.9,33.6]		43.3 [29.1,57.5]			33.1 [30.5,35.7]		700

* total visits made by the household to facilities in the public/private sector within the past 6 months (among those who ever sought care in the sector while in Jordan)

** at the public/private facility where care is most often sought (among those who sought care only)

Table 10. Household Health Expenditures in the Past Month (Jordan Dinar)

	By Region						Regional comparison p value	Survey Total			
	North (n=727)		Central (n=725)		South (n=78)			Median	Mean	95 CI	N
	Mean	95 CI	Mean	95 CI	Mean	95 CI					
Household Spending on Health in the Past Month											
Consultation/ Diagnostic Fees	31.9	[16.5,47.3]	33.6	[23.3,43.9]	19.0	[12.4,25.5]	0.038	17	32.1	[23.3,40.9]	1550
Medications	24.0	[20.3,27.7]	25.9	[23.2,28.5]	24.6	[15.7,33.4]	0.722	20	24.9	[22.7,27.1]	1550
Total Health Spending	56.0	[38.1,73.8]	59.5	[47.4,71.5]	43.5	[28.9,58.2]	0.247	40	57.0	[46.8,67.3]	1550
Health Spending by Household Spending Quartile											
Top quartile	116	[53.6,178.4]	134.9	[90.8,179.0]	69.8	[32.7,107.0]	0.077	50	123.0	[84.8,161.2]	387
3rd quartile	49.5	[41.8,57.2]	46.7	[36.5,57.0]	62.9	[38.6,87.1]	0.483	34	49.0	[42.8,55.3]	387
2nd quartile	28.3	[22.2,34.4]	38.8	[29.2,48.4]	38.8	[2.6,75.1]	0.179	22	34.1	[28.2,40.1]	388
Bottom quartile	19.5	[15.4,23.6]	25.3	[18.9,31.7]	13.4	[4.8,22.0]	0.089	12	22.0	[18.2,25.9]	388

* quartiles based on total household expenditures in the month preceding the survey

Table 11. Health Care Seeking for Adults in Jordan

	By Region						Regional Comparison p value	Survey Total		
	North		Central		South			N	%	95 CI
	%	95 CI	%	95 CI	%	95 CI				
Most Recent Reason for Needing Health Services for an Adult in the Household (while in Jordan)*										
Injury	8.0	[6.0,10.7]	10.7	[8.0,14.1]	5.2	[2.4,10.9]	0.077	95	9.1	[7.4,11.1]
Infection or communicable disease**	23.5	[20.2,27.1]	18.9	[15.5,22.8]	20.7	[17.7,24.0]		221	21.2	[18.9,23.7]
Chronic/non-communicable disease	24.3	[20.5,28.5]	20.1	[16.6,24.2]	17.2	[12.7,22.9]		229	22.0	[19.4,24.8]
Dental care	9.0	[6.6,12.2]	8.0	[5.8,11.0]	5.2	[2.1,12.1]		87	8.3	[6.7,10.3]
Skin problem	4.6	[3.0,6.9]	3.5	[2.3,5.2]	0.0			40	3.8	[2.8,5.2]
Emotional or mental health	1.2	[0.5,2.9]	1.2	[0.5,3.0]	5.2	[2.1,12.1]		15	1.4	[0.8,2.5]
Gastrointestinal	3.8	[2.5,5.8]	5.1	[3.2,8.1]	12.1	[6.2,22.2]		51	4.9	[3.6,6.6]
Renal	4.0	[2.4,6.6]	4.5	[3.0,6.8]	3.4	[0.6,17.7]		44	4.2	[3.1,5.8]
Eye problem	2.0	[1.1,3.5]	2.3	[1.2,4.1]	1.7	[0.3,10.3]		22	2.1	[1.4,3.2]
Obstetric/ Gynecological	5.4	[3.8,7.7]	9.7	[7.3,12.7]	3.4	[1.2,9.2]		76	7.3	[5.8,9.1]
Joint Pain	4.4	[2.8,6.9]	4.5	[2.9,7.0]	6.9	[3.0,15.1]		48	4.6	[3.4,6.2]
Other	9.6	[7.4,12.5]	11.5	[8.8,15.0]	19.0	[12.5,27.7]		115	11.0	[9.2,13.2]
Received attention last time care was needed*	n=565		n=577		n=70		0.192	n=1212		
Yes	88.1 [84.6,91.0]		84.4 [80.6,87.6]		82.9 [72.3,89.9]			1043	86.1	[83.6,88.2]
No	11.9 [9.0,15.4]		15.6 [12.4,19.4]		17.1 [10.1,27.7]			169	13.9	[11.8,16.4]
Last time care was needed*	n=565		n=577		n=70		0.192	n=1212		
Less than two weeks ago	41.8 [37.7,46.0]		33.1 [29.0,37.4]		44.3 [32.2,57.1]			458	37.8	[34.8,40.8]
2 weeks to less than 1 month ago	24.6 [21.1,28.4]		23.2 [19.7,27.2]		22.9 [16.5,30.7]			289	23.8	[21.4,26.4]
1 month to less than 3 months ago	18.6 [16.0,21.5]		25.3 [21.5,29.5]		22.9 [17.1,29.8]			267	22.0	[19.7,24.5]
3 months to less than 6 months ago	9.2 [7.0,12.1]		9.5 [7.4,12.2]		8.6 [4.2,16.6]			113	9.3	[7.8,11.1]
6 months to less than 1 year ago	3.9 [2.6,5.8]		6.4 [4.7,8.7]		0.0			59	4.9	[3.8,6.3]
More than 1 year ago	1.9 [1.1,3.5]		2.4 [1.4,4.1]		1.4 [0.2,9.0]			26	2.1	[1.4,3.2]
Location of most recent care in Jordan**	n=498		n=487		n=58		0.073	n=1043		
Government primary health care center	20.5 [15.5,26.6]		19.9 [14.8,26.3]		34.5 [17.6,56.5]			219	21.0	[17.3,25.2]
Government comprehensive center	7.0 [5.0,9.8]		8.2 [5.9,11.3]		6.9 [2.5,17.3]			79	7.6	[6.0,9.5]
Pharmacy	6.4 [4.2,9.6]		4.5 [2.9,6.9]		3.4 [1.1,10.4]			56	5.4	[4.0,7.2]
Private Jordanian clinic or doctor	20.1 [16.6,24.1]		24.0 [19.5,29.3]		20.7 [12.0,33.2]			229	22.0	[19.1,25.1]
Public hospital	25.3 [21.5,29.6]		19.7 [15.7,24.5]		29.3 [19.9,40.8]			239	22.9	[20.1,26.0]
Private hospital	5.2 [3.7,7.3]		14.2 [11.1,18.0]		3.4 [1.0,11.0]			97	9.3	[7.5,11.5]
Syrian doctor	1.4 [0.7,2.8]		2.3 [1.2,4.1]		0.0			18	1.7	[1.1,2.7]
Islamic charity	4.0 [2.6,6.2]		1.4 [0.7,2.9]		0.0			27	2.6	[1.8,3.8]
Non-religious charity	9.6 [6.4,14.2]		5.3 [3.7,7.7]		1.7 [0.3,10.6]			75	7.2	[5.3,9.6]
Shop or Other	0.2 [0.0,1.4]		0.4 [0.1,1.6]		0.0			3	0.3	[0.1,0.9]
Reason for deciding not to seek care***	n=67		n=90		n=12		0.188	n=169		
Could not afford provider costs	61.2 [47.3,73.5]		66.7 [56.7,75.3]		66.7 [42.4,84.4]			109	64.5	[56.7,71.6]
No transportation/difficult to access	4.5 [1.5,12.8]		3.3 [1.1,9.6]		8.3 [1.1,41.8]			7	4.1	[2.0,8.3]
Could not afford transportation costs	1.5 [0.2,10.1]		1.1 [0.2,7.4]		8.3 [1.4,37.1]			3	1.8	[0.6,5.3]
Provider's equipment or drugs are inadequate	7.5 [3.3,15.9]		4.4 [1.8,10.7]		0.0			9	5.3	[2.9,9.6]
Disliked treatment on previous visit(s)	1.5 [0.2,10.4]		4.4 [1.7,11.0]		0.0			5	3.0	[1.2,6.9]
Could not take time off work/other commitments	0.0		0.0		8.3 [1.4,37.1]			1	0.6	[0.1,4.2]
Did not know where to go	7.5 [3.3,16.1]		5.6 [2.5,11.8]		0.0			10	5.9	[3.3,10.3]
Not sick enough to seek care	7.5 [3.0,17.5]		6.7 [3.0,14.0]		0.0			11	6.5	[3.6,11.6]
Appointment scheduled/still waiting	4.5 [1.4,13.0]		6.7 [3.0,14.1]		0.0			9	5.3	[2.8,9.9]
Other	4.5 [1.4,13.0]		1.1 [0.2,7.2]		8.3 [1.7,32.0]			5	3.0	[1.3,6.8]

* as percent of household index cases where it was reported that care was needed

** as percent of household index cases that received care the last time it was needed

*** as percent of household index cases that did not seek care last time it was needed

Table 12. Access to Medical Care for Adult Health in Jordan

		By Region							Regional comparison p value	By Sector							Sector comparison p value	Survey Total		
		North		Central		South		Public		Private		Charity		%	95 CI	N				
		Percent	95 CI	Percent	95 CI	Percent	95 CI	Percent		95 CI	Percent	95 CI	Percent					95 CI		
Reason for most recent careseeking*		n=498		n=487		n=58			n=537		n=403		n=102			n=1042				
Injury		8.0 [6.0,10.7]		10.7 [8.0,14.1]		5.2 [2.4,10.9]		0.077	9.7 [7.5,12.4]		7.9 [5.6,11.1]		10.8 [6.2,18.2]		< 0.001	9.1 [7.4,11.1]		95		
Infection or communicable disease		23.5 [20.2,27.1]		18.9 [15.5,22.8]		20.7 [17.7,24.0]			22.5 [19.1,26.4]		20.8 [17.2,25.1]		15.7 [9.1,25.8]			21.2 [18.9,23.7]		221		
Chronic/non-communicable disease		24.3 [20.5,28.5]		20.1 [16.6,24.2]		17.2 [12.7,22.9]			25.7 [22.1,29.7]		15.1 [11.9,19.1]		29.4 [21.3,39.0]			22 [19.4,24.8]		229		
Dental care		9 [6.6,12.2]		8.0 [5.8,11.0]		5.2 [2.1,12.1]			7.1 [5.1,9.8]		11.7 [8.9,15.1]		2.0 [0.5,7.7]			8.3 [6.7,10.3]		87		
Skin problem		4.6 [3.0,6.9]		3.5 [2.3,5.2]		0.0			4.1 [2.7,6.1]		3.0 [1.7,5.3]		5.9 [2.6,12.6]			3.8 [2.8,5.2]		40		
Emotional or mental health		1.2 [0.5,2.9]		1.2 [0.5,3.0]		5.2 [2.1,12.1]			1.5 [0.8,2.9]		1.2 [0.5,2.9]		1.0 [0.1,6.5]			1.3 [0.8,2.4]		14		
Gastrointestinal		3.8 [2.5,5.8]		5.1 [3.2,8.1]		12.1 [6.2,22.2]			5.0 [3.4,7.4]		5.2 [3.3,8.0]		2.9 [1.0,8.7]			11 [9.2,13.2]		115		
Renal		4.0 [2.4,6.6]		4.5 [3.0,6.8]		3.4 [0.6,17.7]			3.7 [2.4,5.8]		4.7 [2.9,7.5]		4.9 [2.1,11.0]			4.9 [3.6,6.6]		51		
Eye problem		2.0 [1.1,3.5]		2.3 [1.2,4.1]		1.7 [0.3,10.3]			0.9 [0.4,2.2]		3.7 [2.2,6.2]		2.0 [0.5,7.7]			4.2 [3.1,5.8]		44		
Obstetric/ Gynecological		5.4 [3.8,7.7]		9.7 [7.3,12.7]		3.4 [1.2,9.2]			5.2 [3.7,7.4]		10.4 [7.8,13.8]		5.9 [2.7,12.2]			2.1 [1.4,3.2]		22		
Joint Pain		4.4 [2.8,6.9]		4.5 [2.9,7.0]		6.9 [3.0,15.1]			4.3 [2.7,6.8]		4.2 [2.7,6.5]		7.8 [4.2,14.2]			7.3 [5.8,9.1]		76		
Other		9.6 [7.4,12.5]		11.5 [8.8,15.0]		19.0 [12.5,27.7]			10.2 [7.8,13.4]		11.9 [9.2,15.3]		11.8 [7.0,19.0]			4.6 [3.4,6.2]		48		
Paid for provider visit*		n=498		n=487		n=58			n=537		n=403		n=102			n=1042				
Yes		32.7 [29.0,36.7]		46.8 [41.3,52.4]		31.0 [23.6,39.6]		0.001	16.4 [13.2,20.1]		74.4 [69.2,79.0]		20.6 [12.5,32.1]		< 0.001	39.3 [35.9,42.7]		409		
No		66.9 [62.8,70.7]		52.8 [47.2,58.3]		69.0 [60.4,76.4]			83.4 [79.7,86.6]		24.8 [20.3,30.0]		79.4 [67.9,87.5]			60.4 [56.9,63.8]		629		
Don't know		0.4 [0.1,1.6]		0.4 [0.1,1.6]		0.0			0.2 [0.0,1.4]		0.7 [0.2,2.3]		0.0			0.4 [0.1,1.0]		4		
Cost to household for visit (Jordanian Dinar)*	Median	0.0		0.0		0.0		—	0.0		10.0 [7,10]		0.0		—	0.0		1042		
	Mean	23 [0.6,45.3]		27.3 [13.3,41.4]		11.5 [4.3,18.6]		0.113	11.5 [-0.3,23.3]		46.8 [18.1,75.6]		3.4 [-1.6,8.3]		0.008	24.4 [11.8,36.9]				
Cost to household for visit (Jordanian Dinar)**	Median	10.0 [10,15]		15.0 [10,15]		10.0 [5.6,47.7]		—	13.0 [2,20]		12.0 [10,15]		2.0 [1,5]		—	10.0 [10,15]		409		
	Mean	70.1 [2.1,138.1]		58.4 [29.2,87.6]		37 [17.7,56.3]		0.369	70.3 [1.5,139.2]		62.9 [24.7,101.1]		16.4 [-6.9,39.6]		0.001	62.1 [30.5,93.8]				

* among household index cases that received care

** among household index cases that paid for visit

Table 13. Access to Medication for Adult's Health Problems in Jordan*

		By Region						Regional Comparison p value	Survey Total		
		North		Central		South			Percent	95% CI	N
		Percent	95% CI	Percent	95% CI	Percent	95% CI				
Prescribed medication for adult health problem during most recent health facility visit*		n=498		n=487		n=58			n=1043		
		86.1	[81.9,89.5]	89.3	[86.8,91.4]	82.8	[66.4,92.1]	0.274	87.4	[85.0,89.5] 912	
By Facility Type	Public facility**	83.7	[78.0,88.1]	88.0	[83.9,91.2]	78.0	[56.6,90.7]	0.263	85.1	[81.5,88.1] 457	
	Private facility**	89.8	[84.7,93.3]	92.8	[88.3,95.6]	93.8	[74.1,98.7]	0.47	91.6	[88.5,93.9] 369	
	Charity facility**	88.2	[77.3,94.3]	75.8	[58.5,87.4]	100.0		0.259	84.3	[75.5,90.4] 86	
Able to obtain all medications prescribed during most recent provider visit***		90.7	[87.4,93.2]	88.3	[84.5,91.2]	95.8	[87.3,98.7]	0.165	89.8	[87.5,91.7] 819	
Reason for not obtaining medication prescribed****		n=40		n=51		n=2			n=93		
Household could not afford the medication		2.5	[0.3,16.4]	2.0	[0.3,12.7]	0.0		0.875	39.8	[30.3,50.1] 37	
Did not know where to get the medication		57.5	[41.7,71.9]	45.1	[32.5,58.3]	100.0			2.2	[0.5,8.3] 2	
Medication was out of stock at public facility		0.0		2.0	[0.3,13.2]	0.0			51.6	[41.6,61.5] 48	
Medication was out of stock at private pharmacy		0.0		2.0	[0.3,13.2]	0.0			1.1	[0.1,7.5] 1	
Symptoms improved/began to feel better		0.0		0.0		0.0			0.0	0	
Household chose a different treatment		0.0		0.0		0.0			0.0	0	
Household decided medicines were not needed		0.0		2.0	[0.3,13.2]	0.0			1.1	[0.1,7.5] 1	
Purchasing medication was not a priority		0.0		2.0	[0.3,13.2]	0.0			1.1	[0.1,7.5] 1	
Too far to travel to obtain medication		0.0		2.0	[0.3,12.3]	0.0			1.1	[0.2,7.2] 1	
Other		2.5	[0.3,16.4]	2.0	[0.3,12.7]	0.0			2.2	[0.5,8.3] 2	
Paid for medication*****		n=389		n=384		n=46			n=819		
	Percent	51.7	[46.3,57.0]	66.7	[59.8,72.9]	47.8	[29.3,67.0]	0.132	58.5	[54.1,62.8] 479	
Cost to household for medication (Jordanian Dinar)	Median	2.0	[0,5]	8.0	[5,10]	0.0	[0,8.3]	—	5.0	[4,7] 819	
	Mean	12.3	[8.4,16.2]	15.8	[12.8,18.8]	16.9	[-0.1,33.9]	0.37	14.2	[11.7,16.8]	
Cost to household for medication (Jordanian Dinar)*****	Median	15.0	[10,15]	15.0	[12.8,20]	15.0	[9.9,25]	—	15.0	[12.5,15] 479	
	Mean	23.9	[16.5,31.2]	23.7	[20.1,27.2]	35.4	[6.1,64.7]	0.737	24.3	[20.4,28.2]	

* as a percent of all household index cases that received care

** as a percent of household index cases that received care at this facility type

*** among household index cases prescribed medication

**** as percent of household index cases prescribed medication but did not obtain the medication

***** among household index cases prescribed medication that obtained the medication

***** among household index cases who paid for medication

Table 14. Frequency of Hospitalizations in Jordan

	By Region						Regional Comparison p value	Survey Total		
	North		Central		South			Point	95% CI	N
	Point	95% CI	Point	95% CI	Point	95% CI				
Households with any hospitalizations in the past year (percent)	n=727		n=745		n=78			n=1550		
	20.4 [17.1,24.1]		21.6 [18.7,24.9]		24.4 [14.5,38.0]		0.847	21.2 [18.9,23.6]		328
Number of hospitalizations in Jordan in the past six months	Median	1 —	1 —	1 —			—	1 —		1550
	Mean	1.9 [1.5,2.2]	2.1 [1.7,2.5]	2.1 [0.8,3.4]			0.69	2 [1.7,2.3]		
Location of most recent hospitalization in Jordan*	n=148		n=161		n=19			n=328		
Public hospital	77.7 [70.6,83.5]		56.5 [47.5,65.1]		89.5 [71.4,96.7]		0.006	68	[61.7,73.7]	223
Private hospital	18.9 [13.6,25.7]		31.7 [23.9,40.7]		10.5 [3.3,28.6]			24.7	[19.7,30.4]	81
NGO hospital	3.4 [1.5,7.5]		11.8 [7.5,18.0]		0.0			7.3	[4.9,10.9]	24
Islamic Charity hospital	0.0		0.0		0.0			0.0		0
Other	0.0		0.0		0.0			0.0		0

* as a percent of households with hospitalization in Jordan in the past six months

Table 15. Hospitalizations in Jordan*

		By Region						Regional comparison p value	By Sector						Sector comparison p value	Survey Total (n=328)		
		North (n=148)		Central (n=161)		South (n=19)			Public (n=223)		Private (n=81)		Charity (n=24)			%	95 CI	N
		Point	95 CI	Point	95 CI	Point	95 CI		Point	95 CI	Point	95 CI	Point	95 CI				
Reason for most recent hospitalization (%)																		
Cardiovascular		13.5	[8.7,20.5]	14.3	[9.8,20.3]	10.5	[4.8,21.5]	0.333	14.8	[10.7,20.2]	12.3	[7.1,20.7]	8.3	[2.2,27.3]	0.438	13.7	[10.4,17.8]	45
Digestive		8.1	[4.5,14.2]	6.8	[3.7,12.2]	0.0			5.8	[3.3,10.2]	8.6	[4.3,16.8]	12.5	[3.9,33.2]		7.0	[4.6,10.6]	23
Respiratory		16.2	[10.5,24.2]	7.5	[4.4,12.3]	21.1	[11.9,34.5]		14.8	[10.3,20.8]	4.9	[1.8,12.6]	12.5	[3.9,33.2]		12.2	[8.9,16.6]	40
Genitourinary		8.1	[4.6,13.8]	6.2	[3.4,11.0]	5.3	[1.0,24.3]		7.2	[4.4,11.5]	7.4	[3.2,16.3]	4.2	[0.6,23.4]		7.0	[4.7,10.3]	23
Injury		22.3	[16.2,29.9]	19.3	[14.0,25.9]	21.1	[7.9,45.4]		20.2	[15.4,26.0]	19.8	[12.0,30.8]	29.2	[15.2,48.6]		20.7	[16.7,25.5]	68
Infection or other acute illness		5.4	[2.3,11.9]	8.7	[5.4,13.7]	5.3	[1.1,21.8]		7.6	[4.6,12.4]	7.4	[3.5,15.2]	0.0			7.0	[4.6,10.5]	23
Cancer/neoplasm		2.7	[1.0,7.0]	3.1	[1.3,7.3]	10.5	[2.8,32.7]		2.7	[1.2,5.9]	6.2	[2.5,14.5]	0.0			3.4	[1.9,6.0]	11
Other		23.6	[17.5,31.1]	34.2	[26.5,42.8]	26.3	[12.1,48.1]		26.9	[21.4,33.2]	33.3	[23.0,45.5]	33.3	[18.3,52.8]		29.0	[23.9,34.6]	95
Reason for selecting hospital (%)																		
Affordable cost		37.2	[28.8,46.4]	45.3	[37.6,53.3]	47.4	[33.2,62.0]	0.243	42.2	[35.7,48.9]	32.1	[22.5,43.4]	70.8	[48.8,86.1]	<0.001	41.8	[36.2,47.5]	137
Referred by doctor		21.6	[15.3,29.6]	8.1	[4.4,14.5]	5.3	[0.7,29.1]		16.1	[11.4,22.4]	11.1	[5.5,21.1]	4.2	[0.6,25.1]		14.0	[10.3,18.8]	46
Close to place of residence		8.8	[5.1,14.7]	10.6	[6.4,16.9]	5.3	[1.1,21.8]		10.8	[7.2,15.8]	7.4	[3.1,16.9]	4.2	[0.6,25.1]		9.5	[6.6,13.3]	31
Not aware of other facilities		1.4	[0.3,5.1]	3.1	[1.1,8.4]	0.0			1.8	[0.7,4.7]	3.7	[1.2,10.9]	0.0			2.1	[0.9,4.8]	7
Like staff/treatment quality		4.1	[1.6,9.9]	5.0	[2.6,9.2]	5.3	[0.7,29.1]		1.3	[0.4,4.1]	13.6	[7.8,22.5]	4.2	[0.6,25.1]		4.6	[2.7,7.6]	15
Emergency		25.0	[18.3,33.2]	24.8	[19.1,31.7]	36.8	[21.2,55.8]		27.4	[21.8,33.8]	23.5	[14.7,35.3]	16.7	[6.2,37.9]		25.6	[21.1,30.7]	84
Other		2.0	[0.7,5.9]	3.1	[1.3,7.1]	0.0			0.4	[0.1,3.2]	8.6	[4.2,17.1]	0.0			2.4	[1.2,4.7]	8
Hospitalization Length	Median	3	—	2	—	2	—	—	2	—	2	—	3	—	—	2	—	328
(days)	Mean	6.6	[4.2,9.1]	5.4	[4.0,6.9]	3.2	[1.5,4.8]	0.04	5.1	[3.7,6.5]	7.4	[3.7,11.1]	7.5	[3.4,11.5]	0.339	5.9	[4.5,7.2]	
Paid for hospitalization (%)*																		
Yes		14.9	[9.8,21.9]	31.1	[24.2,38.9]	5.3	[0.7,29.1]	0.007	15.7	[11.1,21.8]	40.7	[30.1,52.3]	20.8	[9.0,41.2]	0.001	22.3	[17.6,27.7]	73
No		84.5	[77.2,89.7]	67.7	[59.8,74.7]	94.7	[70.9,99.3]		83.0	[76.5,87.9]	59.3	[47.7,69.9]	79.2	[58.8,91.0]		76.8	[71.3,81.6]	252
Don't know		0.7	[0.1,4.6]	1.2	[0.3,4.8]	0.0			1.3	[0.4,4.1]	0.0		0.0			0.9	[0.3,2.8]	3
Cost to household for visit	Median	0	—	0	—	0	—	—	0	—	0	—	0	—	—	0	—	328
(Jordanian Dinar)	Mean	158.3	[3.5,313.2]	151.2	[59.1,243.2]	10.5	[-9.4,30.5]	0.004	47.3	[5.4,89.3]	421.3	[112.8,729.9]	137.0	[-107.1,381.1]	0.053	146.3	[62.5,230.0]	
Cost to household for visit	Median	158.5	—	150	—	200	—	—	100	—	250	—	50	—	—	150	—	73
(Jordanian Dinar)**	Mean	1065.2	[146.5,1983.9]	486.8	[220.9,752.7]	200.0	[200,200]	0.027	301.7	[54.8,548.5]	1034.2	[363.2,1705.2]	657.6	[-385.0,1700.2]	0.147	657.2	[311.5,1002.9]	

* as percent of households with a hospitalization in Jordan in the past six months

** among households that paid for hospitalization

Table 16. Prevalence of Chronic Conditions

	Hypertension			Cardiovascular Disease			Diabetes			Chronic Respiratory Disease			Arthritis			Any Chronic Condition		
	Point	95 CI	N	Point	95 CI	N	Point	95 CI	N	Point	95 CI	N	Point	95 CI	N	Point	95 CI	N
Households where any member(s) have condition (%)	26.3%	[24.0,28.8]	408	12.3%	[10.6,14.2]	190	16.1%	[14.4,18.0]	250	13.7%	[12.0,15.7]	213	19.5%	[17.3,21.9]	302	50.3%	[47.3,53.4]	780
Individuals with condition (mean)*																		
Overall	1.18	[1.13,1.22]	408	1.07	[1.01,1.13]	190	1.12	[1.07,1.17]	250	1.31	[1.18,1.44]	213	1.10	[1.04,1.16]	302	2.02	[1.92,2.12]	780
By age																		
0 - 17 years	0.01	[0.001,0.03]	408	0.11	[0.03,0.18]	190	0.03	[0.01,0.05]	250	0.71	[0.54,0.89]	213	0.06	[0.02,0.10]	302	0.26	[0.20,0.32]	780
18 - 39 years	0.15	[0.11,0.19]	408	0.13	[0.08,0.18]	190	0.10	[0.07,0.14]	250	0.31	[0.24,0.38]	213	0.25	[0.20,0.30]	302	0.32	[0.28,0.37]	780
40 - 59 years	0.54	[0.49,0.59]	408	0.41	[0.34,0.48]	190	0.50	[0.43,0.57]	250	0.18	[0.12,0.24]	213	0.51	[0.45,0.57]	302	0.79	[0.72,0.86]	780
60+ years	0.48	[0.42,0.54]	408	0.42	[0.35,0.50]	190	0.48	[0.41,0.55]	250	0.10	[0.06,0.15]	213	0.28	[0.22,0.34]	302	0.64	[0.56,0.73]	780

*among households reporting member(s) with the condition only

Table 17. Age-Specific Chronic Disease Prevalence Rates

	Prevalence Rate Age Group																Adult Prevalence*			
	0-17 years				18-39 years				40-59 years				60+ years							
	%	95 CI	N		%	95 CI	N		%	95 CI	N		%	95 CI	N		%	95 CI	N	
Hypertension	0.12%	0.01%	0.22%	24	6.88%	5.01%	8.76%	139	66.75%	39.95%	93.54%	437	80.91%	75.83%	85.99%	268	9.72%	8.81%	10.63%	3277
Cardiovascular Disease	0.39%	0.10%	0.67%	124	6.23%	3.70%	8.77%	64	41.94%	35.87%	48.00%	115	67.80%	59.50%	76.09%	99	3.74%	3.17%	4.30%	1289
Diabetes	0.16%	0.05%	0.26%	23	4.55%	2.81%	6.28%	64	49.43%	41.77%	57.09%	216	77.07%	70.11%	84.03%	160	5.33%	4.63%	6.03%	1970
Chronic Respiratory Disease	2.95%	2.12%	3.79%	700	17.48%	12.47%	22.48%	145	24.22%	17.48%	30.96%	58	38.60%	25.42%	51.77%	27	3.10%	2.44%	3.75%	790
Arthritis	0.35%	0.12%	0.58%	71	11.81%	9.06%	14.56%	159	48.13%	43.41%	52.84%	242	73.05%	46.80%	99.30%	134	6.79%	5.93%	7.65%	2187

*Individuals over 17 years old

Table 18. Health Care Seeking for Chronic Health Conditions in Jordan

	By Region			Regional Comparison p value	Survey Total		
	North % 95 CI	Central % 95 CI	South % 95 CI		N	%	95 CI
Saw a doctor for chronic health condition in Jordan*	n=689	n=615	n=59		n=1363		
Yes	89.0 [85.3,91.8]	79.5 [74.7,83.6]	88.1 [69.5,96.0]	0.004	1154	84.7	[81.6,87.3]
Last time care was needed							
Less than one month ago	52.5 [46.8,58.2]	39.7 [34.5,45.1]	52.5 [38.5,66.2]	0.009	637	46.7	[42.8,50.7]
1 month to less than 3 months ago	21.9 [17.8,26.6]	23.6 [20.3,27.2]	25.4 [19.0,33.1]		311	22.8	[20.2,25.7]
3 months to less than 7 months ago	10.4 [8.1,13.4]	7.2 [5.3,9.5]	8.5 [5.0,13.9]		121	8.9	[7.3,10.7]
7 months to less than 1 year ago	2.5 [1.5,4.1]	4.4 [2.4,8.0]	1.7 [0.3,10.3]		45	3.3	[2.5,5.0]
More than 1 year ago	1.6 [0.8,3.1]	4.7 [2.9,7.6]	0.0		40	2.9	[2.0,4.4]
Location of most recent care in Jordan**	n=613	n=489	n=52		n=1154		
Government primary health care center	19.1 [14.3,25.1]	22.5 [16.6,29.7]	25.0 [7.9,56.4]	0.013	240	20.8	[16.9,25.3]
Government comprehensive center	8.3 [5.8,11.8]	13.1 [9.1,18.4]	15.4 [4.7,40.2]		123	10.7	[8.3,13.6]
Pharmacy	5.1 [3.2,7.9]	7.4 [4.7,11.3]	5.8 [1.6,18.3]		70	6.1	[4.4,8.2]
Private Jordanian clinic or doctor	11.3 [8.4,14.9]	13.9 [10.0,18.9]	21.2 [12.2,34.1]		148	12.8	[10.4,15.7]
Public hospital	26.6 [21.3,32.6]	16.4 [12.7,20.8]	23.1 [12.2,39.2]		255	22.1	[18.6,26.0]
Private hospital	4.9 [3.1,7.6]	9.8 [6.2,15.2]	0.0		78	6.8	[4.8,9.4]
Syrian doctor	2.1 [1.1,3.9]	2.2 [1.1,4.4]	0.0		24	2.1	[1.3,3.3]
Islamic charity	6.5 [4.0,10.4]	1.4 [0.4,4.9]	0.0		47	4.1	[2.6,6.4]
Non-religious charity	15.7 [11.4,21.1]	8.8 [5.9,12.8]	7.7 [2.2,23.2]		143	12.4	[9.6,15.8]
Shop or Other	0.3 [0.1,1.3]	3.3 [1.6,6.6]	1.9 [0.3,11.2]		19	1.6	[0.8,3.2]
Paid Provider for Visit	26.8 [22.2,31.9]	37.8 [31.4,44.8]	30.8 [19.7,44.6]	0.011	365	31.6	[27.7,35.8]
Cost to household for care (Jordanian Dinar)	Median 0 [0,0] Mean 13.8 [-0.1,27.8]	Median 0 [0,0] Mean 13.2 [0.9,25.6]	Median 0 [0,0] Mean 7.4 [0.4,14.5]	— 0.589	1154	0	[0,0] 13.3 [4.2,22.4]
Cost to household for care (Jordanian Dinar)***	Median 10 [10,10] Mean 51.7 [0.9,102.6]	Median 10 [10,10] Mean 35.0 [2.4,67.6]	Median 10 [7,12.4] Mean 24.2 [-1.5,49.9]	— 0.616	365	10	[10,10] 42.0 [13.6,70.5]
Payment for arthritis care by facility**							
Public Facilities	Median 0 — Mean 1.2 [0.7,1.6] % of households that paid for provider visit**** 11.8 [8.1,16.9]	Median 0 — Mean 5.0 [0.1,9.9] % of households that paid for provider visit**** 18.5 [13.5,24.9]	Median 0 — Mean 8.3 [-3.3,20.0] % of households that paid for provider visit**** 15.2 [5.1,37.2]	— 0.148 0.183	618 91	0 3.1 14.7	[0,0] [1.0,5.3] [11.6,18.5]
Private Facilities	Median 10 — Mean 55.3 [-1.0,111.5] % of households that paid for provider visit**** 69.7 [60.9,77.2]	Median 6 — Mean 28.0 [4.6,60.6] % of households that paid for provider visit**** 67.0 [56.4,76.2]	Median 7 — Mean 7.5 [5.7,9.3] % of households that paid for provider visit**** 73.3 [58.7,84.2]	— 0.121 0.730	339 232	7 38.7 68.4	[0,89-10] [8.8,68.7] [61.7,74.5]
Charity Facilities	Median 0 — Mean 0.6 [0.1,1.1] % of households that paid for provider visit**** 16.9 [8.1,32.0]	Median 0 — Mean 2.8 [-0.4,6.0] % of households that paid for provider visit**** 28.0 [12.5,51.4]	Median 0 — Mean 0.0 [0.0,0.0] % of households that paid for provider visit**** 0.0	— 0.018 0.494	190 37	0 1.2 19.5	[0,0] [0.2,2.1] [11.1,31.8]
Reason for deciding not to seek care****							
Could not afford provider costs	53.5 [41.2,65.4]	63.9 [52.9,73.7]	71.4 [25.9,94.7]	0.288	121	60.5	[52.3,68.1]
No transportation/difficult to access	1.4 [0.2,9.5]	1.6 [0.4,6.5]	14.3 [1.9,58.8]		4	2.0	[0.7,5.3]
Could not afford transportation costs	4.2 [1.4,11.7]	0.8 [0.1,5.5]	0.0		4	2.0	[0.8,5.1]
Did not know where to go	5.6 [2.0,14.6]	6.6 [2.2,17.8]	0.0		12	6.0	[2.7,12.7]
No trust in the doctors or clinics	8.5 [4.1,16.5]	0.8 [0.1,5.6]	0.0		7	3.5	[1.7,7.1]
Did not feel sick	18.3 [10.2,30.6]	20.5 [12.7,31.3]	14.3 [1.4,66.5]		39	19.5	[13.6,27.2]
Other	8.5 [3.4,19.3]	5.7 [2.9,11.2]	0.0		13	6.5	[3.7,11.1]
Medicines							
Prescribed medication for chronic condition in Jordan or in Syria*****	89.7 [86.1,92.4]	88.0 [84.3,90.8]	89.8 [76.3,96.0]	0.847	1212	88.9	[86.5,90.9]
Currently taking medication for chronic condition*****	85.6 [82.5,88.3]	85.9 [82.1,88.9]	81.4 [67.0,90.4]	0.915	1166	85.5	[83.2,87.6]
Stopped taking medication for >2 wks in past year*****	23.4 [19.7,27.6]	29.8 [24.6,35.5]	28.8 [20.4,39.0]	0.081	359	26.5	[23.4,29.9]
Stopped taking or ran out while in Syria*****	17.5 [12.7,23.6]	11.5 [7.2,18.0]	11.8 [4.0,29.8]		51	14.2	[10.8,18.4]
Stopped or ran out in Jordan*****	82.5 [76.4,87.3]	88.5 [82.0,92.8]	88.2 [70.2,96.0]		308	85.8	[81.6,89.2]
Reason for stopping/running out of medication*****	n=160	n=182	n=17		n=359		
Doctor told to stop	1.2 [0.3,4.9]	1.1 [0.3,4.4]	0.0	0.176	4	1.1	[0.4,3.0]
Household could not afford the medication	52.5 [44.8,60.0]	65.9 [55.0,75.4]	47.1 [18.3,77.9]		212	59.1	[52.4,65.4]
Did not know where to get the medication	3.1 [1.4,7.0]	6.6 [3.1,13.5]	0.0		17	4.7	[2.6,8.5]
Could not find a pharmacy with my medicine	5.0 [2.5,9.7]	3.8 [1.2,12.0]	5.9 [0.8,32.6]		16	4.5	[2.4,8.3]
Symptoms improved/felt better so I stopped	20 [13.9,27.9]	12.1 [7.4,19.1]	11.8 [3.6,32.4]		56	15.6	[11.7,20.5]
Too far to travel to obtain medication	5.0 [2.6,9.5]	3.3 [1.4,7.6]	17.6 [5.4,44.6]		17	4.7	[2.9,7.7]
Did not like what was available	5.6 [3.1,10.1]	1.6 [0.5,5.1]	11.8 [3.6,32.4]		14	3.9	[2.3,6.4]
Other	7.5 [4.1,13.3]	5.5 [2.6,11.4]	5.9 [1.0,26.9]		23	6.4	[4.0,10.0]

* as a percent of total number of index cases reporting diagnosis of any chronic condition

**** as a percent of households with any chronic condition reporting no care sought in Jordan

** as a percent of those seeking care in Jordan for any chronic condition

***** as a percent of those diagnosed with a chronic condition

*** among index cases of any chronic condition that paid for care

***** as a percent of those who stopped medication

Table 19. Health Care Seeking for Hypertension in Jordan

	By Region						Regional Comparison p value	Survey Total			
	North		Central		South			N	%	95 CI	
	%	95 CI	%	95 CI	%	95 CI					
Saw a doctor for hypertension in Jordan*	n=199		n=192		n=17			n=408			
Yes	91.5	[86.6,94.7]	83.3	[76.7,88.3]	94.1	[69.7,99.1]	0.037	358	87.7	[83.8,90.8]	
No	8.5	[5.3,13.4]	16.7	[11.7,23.3]	5.9	[0.9,30.3]		50	12.3	[9.2,16.2]	
Reason for deciding not to seek care***	n=16		n=32		n=1			n=49			
Could not afford provider costs	50.0	[28.3,71.7]	71.9	[54.1,84.7]	100.0		0.463	32	65.3	[51.0,77.3]	
No transportation/difficult to access	0.0		3.1	[0.4,19.9]	0.0			1	2.0	[0.3,13.5]	
Could not afford transportation costs	6.2	[1.0,31.3]	0.0		0.0			1	2.0	[0.3,13.1]	
Did not know where to go	0.0		6.2	[1.6,21.8]	0.0			2	4.1	[1.0,14.9]	
No trust in the doctors or clinics	0.0		0.0		0.0			0	0.0		
Did not feel sick	25.0	[9.4,51.8]	15.6	[6.5,33.2]	0.0			9	18.4	[9.6,32.3]	
Other	18.8	[6.0,45.6]	3.1	[0.4,18.8]	0.0			4	8.2	[3.1,20.0]	
Last time care was needed	n=199		n=192		n=17			n=408			
Less than one month ago	64.3	[57.6,70.5]	46.4	[38.8,54.1]	82.4	[50.4,95.5]	0.085	231	56.6	[51.2,61.9]	
1 month to less than 3 months ago	18.1	[13.1,24.4]	25.5	[19.6,32.5]	5.9	[0.9,30.3]		86	21.1	[17.2,25.6]	
3 months to less than 7 months ago	7.0	[4.3,11.3]	5.2	[2.6,10.1]	5.9	[0.9,30.3]		25	6.1	[4.1,9.0]	
7 months to less than 1 year ago	1.5	[0.5,4.6]	3.1	[1.0,9.0]	0.0			9	2.2	[1.0,5.0]	
More than 1 year ago	0.5	[0.1,3.5]	3.1	[1.4,6.6]	0.0			7	1.7	[0.8,3.5]	
Location of most recent care in Jordan**	n=182		n=160		n=16			n=358			
Government primary health care center	23.1	[16.6,31.2]	20.6	[13.8,29.6]	31.2	[8.8,68.2]	0.179	80	22.3	[17.5,28.1]	
Government comprehensive center	8.8	[5.7,13.2]	15.6	[10.3,22.9]	18.8	[4.8,51.2]		44	12.3	[9.1,16.3]	
Pharmacy	4.9	[2.5,9.7]	5.0	[2.6,9.3]	6.2	[1.0,31.5]		18	5.0	[3.2,7.9]	
Private Jordanian clinic or doctor	10.4	[6.7,15.9]	14.4	[9.5,21.2]	12.5	[4.9,28.4]		44	12.3	[9.2,16.3]	
Public hospital	21.4	[15.0,29.7]	16.2	[10.9,23.5]	25.0	[7.8,56.6]		69	19.3	[14.9,24.6]	
Private hospital	4.9	[2.7,8.9]	10.0	[6.0,16.2]	0.0			25	7.0	[4.7,10.2]	
Syrian doctor	2.7	[1.2,6.2]	3.8	[1.8,7.6]	0.0			11	3.1	[1.8,5.3]	
Islamic charity	8.2	[4.7,14.1]	1.9	[0.4,7.5]	0.0			18	5.0	[2.9,8.5]	
Non-religious charity	15.4	[10.3,22.3]	8.1	[4.3,14.8]	6.2	[1.0,31.5]		42	11.7	[8.4,16.2]	
Shop or Other	0.0		3.1	[1.4,6.8]	0.0			5	1.4	[0.6,3.2]	
Paid Provider for Visit**	n=182		n=160		n=16			n=358			
Yes	27.5	[21.3,34.7]	34.4	[26.7,42.9]	31.2	[16.2,51.7]	0.344	110	30.7	[25.8,36.1]	
No	72.5	[65.3,78.7]	65.6	[57.1,73.3]	68.8	[48.3,83.8]		248	69.3	[63.9,74.2]	
Cost to household for care (Jordanian Dinar)											
Overall	Median	0	0	0	0	[0,8.4]	—	358	0		
	Mean	19.8	[-12.9,52.6]	4.7	[2.5,6.8]	18.6	[-4.2,41.4]	0.327	13.0	[-3.7,29.7]	
Among cases that paid for care	Median	10	[5,12]	10	[5,10]	15	[7,250]	—	110	10	[7.6,10]
	Mean	72.2	[-46.4,190.8]	13.6	[7.9,19.2]	59.6	[-10.5,129.7]	0.283	42.3	[-11.9,96.5]	
Payment for hypertension care by facility											
Public Facilities	Median	0	0	0	0		—	193	0	[0,0]	
	Mean	0.8	[0.2,1.3]	1.2	[0.4,2.1]	21.4	[-8.6,51.4]	0.256	2.3	[-0.3,4.8]	
	% of households that paid for provider visit****	12.4	[7.5,19.8]	15.5	[9.5,24.1]	16.7	[6.3,37.3]	0.716	27	14.0	[10.1,19.1]
Private Facilities	Median	10	5	15			—	98	10	[3,10]	
	Mean	83.4	[-57.8,224.6]	10.9	[4.9,16.9]	13.7	[10.7,16.7]	0.453	42.1	[-18.6,102.7]	
	% of households that paid for provider visit****	73.8	[58.0,85.2]	66.0	[52.6,77.3]	100.0		0.376	69	70.4	[60.5,78.7]
Charity Facilities	Median	0	0	0			—	60	0	[0,0]	
	Mean	0.8	[0.1,1.4]	0.4	[-0.1,1.0]	0.0	[0.0,0.0]	0.033	0.7	[0.2,1.2]	
	% of households that paid for provider visit****	16.3	[6.9,33.7]	18.8	[6.6,43.0]	0.0		0.883	10	16.7	[8.5,30.0]

* as a percent of total number of index cases reporting diagnosis of hypertension

*** as a percent of households with hypertension reporting no care sought in Jordan

** as a percent of those seeking care in Jordan for hypertension

**** as a percent of those seeking care in Jordan in this sector for hypertension

Table 20. Health Care Seeking for Cardiovascular Disease in Jordan

		By Region				Regional Comparison p value	Survey Total			
		North		Central			South		N	%
		%	95 CI	%	95 CI	%	95 CI			
Saw a doctor for cardiovascular disease in Jordan*		n=97		n=87		n=6			n=190	
Yes		87.6	[78.8,93.1]	81.6	[72.3,88.3]	100.0		0.447	162	85.3 [79.2,89.8]
No		12.4	[6.9,21.2]	18.4	[11.7,27.7]	0.0			28	14.7 [10.2,20.8]
Reason for deciding not to seek care***		n=12		n=16		n=0			n=28	
Could not afford provider costs		58.3	[32.6,80.2]	68.8	[40.8,87.5]	—	—	0.475	18	64.3 [44.7,80.1]
No transportation/difficult to access		0.0		6.2	[0.8,34.7]	—	—		1	3.6 [0.5,22.1]
Could not afford transportation costs		0.0		0.0		—	—		0	0.0
Did not know where to go		16.7	[4.0,48.9]	12.5	[3.0,40.0]	—	—		4	14.3 [5.3,33.3]
No trust in the doctors or clinics		16.7	[4.7,44.9]	0.0		—	—		2	7.1 [1.8,24.1]
Did not feel sick		8.3	[1.1,42.4]	6.2	[0.8,34.7]	—	—		2	7.1 [1.7,25.1]
Other		0.0		6.2	[0.8,34.7]	—	—		1	3.6 [0.5,22.1]
Last time care was needed		n=97		n=87		n=6			n=190	
Less than one month ago		38.1	[28.2,49.2]	35.6	[26.4,46.0]	66.7	[23.8,92.8]	0.209	72	37.9 [30.8,45.5]
1 month to less than 3 months ago		23.7	[17.2,31.8]	24.1	[15.8,35.1]	33.3	[7.2,76.2]		46	24.2 [18.8,30.6]
3 months to less than 7 months ago		17.5	[11.6,25.6]	4.6	[1.8,11.5]	0.0			21	11.1 [7.4,16.2]
7 months to less than 1 year ago		5.2	[2.3,11.3]	9.2	[4.5,17.9]	0.0			13	6.8 [4.0,11.5]
More than 1 year ago		3.1	[1.0,8.9]	8.0	[3.4,17.9]	0.0			10	5.3 [2.6,10.3]
Location of most recent care in Jordan**		n=85		n=71		n=6			n=162	
Government primary health care center		2.4	[0.3,15.3]	15.5	[8.0,28.0]	0.0		0.12	13	8.0 [4.2,14.9]
Government comprehensive center		4.7	[1.7,12.1]	5.6	[1.7,17.0]	33.3	[10.9,67.1]		10	6.2 [3.1,11.7]
Pharmacy		3.5	[1.1,10.6]	4.2	[1.4,12.2]	0.0			6	3.7 [1.7,8.0]
Private Jordanian clinic or doctor		11.8	[6.5,20.5]	15.5	[7.8,28.4]	16.7	[4.3,46.9]		22	13.6 [8.8,20.4]
Public hospital		45.9	[35.5,56.7]	21.1	[12.3,33.9]	33.3	[19.8,50.2]		56	34.6 [26.9,43.1]
Private hospital		10.6	[5.2,20.4]	16.9	[9.9,27.3]	0.0			21	13.0 [8.4,19.5]
Syrian doctor		3.5	[1.2,9.9]	1.4	[0.2,9.7]	0.0			4	2.5 [0.9,6.3]
Islamic charity		2.4	[0.6,9.3]	2.8	[0.7,10.4]	0.0			4	2.5 [0.9,6.5]
Non-religious charity		14.1	[7.6,24.7]	9.9	[5.0,18.4]	16.7	[2.6,60.3]		20	12.3 [7.9,18.8]
Shop or Other		1.2	[0.2,7.5]	4.2	[1.0,16.3]	0.0			4	2.5 [0.8,7.8]
Paid Provider for Visit**		n=85		n=71		n=6			n=162	
Yes		22.4	[14.1,33.5]	46.5	[34.5,58.9]	0.0		0.021	52	32.1 [24.5,40.8]
No		77.6	[66.5,85.9]	53.5	[41.1,65.5]	100.0			110	67.9 [59.2,75.5]
Cost to household for care (Jordanian Dinar)										
Overall	Median	0		0	[0,5]	0		—	162	0
	Mean	5.6	[1.5,9.8]	50.5	[-30.5,131.5]	0	[0.0,0.0]	0.015		25.1 [-11.1,61.3]
Among cases that paid for care	Median	20	[15,25]	10	[10,18.3]	—	—	—	52	15 [10,20]
	Mean	25.3	[13.9,36.6]	108.7	[-70.5,288.0]	—	—	0.367		78.2 [-35.4,191.9]
Payment for cardiovascular disease care by facility										
Public Facilities	Median	0	—	0	—	0	—	—	79	0 [0,0]
	Mean	2.3	[0.0,4.7]	4.5	[1.4,7.6]	0.0	[0.0,0.0]	0.004		3.0 [1.2,4.8]
	% of households that paid for provider visit****	13.3	[5.6,28.5]	26.7	[14.7,43.4]	0.0		0.269		14
Private Facilities	Median	2.5	—	10	—	0	—	—	57	10 [0,13.9]
	Mean	14.4	[3.0,25.8]	114.7	[-74.1,303.5]	0.0	[0.0,0.0]	0.032		66.9 [-34.5,168.4]
	% of households that paid for provider visit****	50.0	[32.1,67.9]	70.0	[52.0,83.4]	0.0		0.14		34
Charity Facilities	Median	0	—	0	—	0	—	—	24	0 [0,0]
	Mean	0.0	[0.0,0.0]	0.8	[-0.2,1.8]	0.0	[0.0,0.0]	—		0.3 [-0.1,0.7]
	% of households that paid for provider visit****	0.0		33.3	[8.5,73.0]	0.0		0.084		3

* as a percent of total number of index cases reporting diagnosis of cardiovascular disease *** as a percent of households with cardiovascular disease reporting no care sought in Jordan

** as a percent of those seeking care in Jordan for cardiovascular disease

**** as a percent of those seeking care in Jordan in this sector for cardiovascular disease

Table 21. Health Care Seeking for Diabetes in Jordan

	By Region						Regional Comparison p value	Survey Total		
	North		Central		South			N	%	95 CI
	%	95 CI	%	95 CI	%	95 CI				
Saw a doctor for diabetes in Jordan*	n=122		n=117		n=11			n=250		
Yes	93.4	[88.0,96.5]	81.2	[71.9,87.9]	81.8	[38.4,97.0]	0.044	218	87.2	[81.8,91.2]
No	6.6	[3.5,12.0]	18.8	[12.1,28.1]	18.2	[3.0,61.6]		32	12.8	[8.8,18.2]
Reason for deciding not to seek care***	n=8		n=19		n=2			n=29		
Could not afford provider costs	37.5	[12.3,71.9]	52.6	[31.8,72.6]	100.0		0.628	15	51.7	[33.9,69.2]
No transportation/difficult to access	0.0		0.0		0.0			0	0.0	
Could not afford transportation costs	0.0		0.0		0.0			0	0.0	
Did not know where to go	0.0		10.5	[2.8,32.8]	0.0			2	6.9	[1.8,23.4]
No trust in the doctors or clinics	12.5	[1.7,54.5]	0.0		0.0			1	3.4	[0.5,21.4]
Did not feel sick	25.0	[6.2,62.8]	26.3	[9.6,54.5]	0.0			7	24.1	[10.7,45.8]
Other	25.0	[6.2,62.8]	10.5	[2.8,32.8]	0.0			4	13.8	[5.3,31.4]
Last time care was needed	n=122		n=117		n=11			n=250		
Less than one month ago	61.5	[52.6,69.6]	45.3	[36.2,54.7]	63.6	[41.8,81.0]	0.417	135	54.0	[47.7,60.1]
1 month to less than 3 months ago	24.6	[18.0,32.6]	23.1	[17.1,30.4]	9.1	[1.7,37.2]		58	23.2	[18.7,28.4]
3 months to less than 7 months ago	3.3	[1.0,10.1]	5.1	[2.4,10.7]	9.1	[1.3,42.7]		11	4.4	[2.4,8.0]
7 months to less than 1 year ago	2.5	[0.8,7.3]	3.4	[0.9,12.5]	0.0			7	2.8	[1.1,6.8]
More than 1 year ago	1.6	[0.2,10.6]	4.3	[1.8,9.8]	0.0			7	2.8	[1.2,6.3]
Location of most recent care in Jordan**	n=114		n=95		n=9			n=218		
Government primary health care center	21.1	[14.1,30.3]	25.3	[16.8,36.1]	33.3	[8.5,73.0]	0.194	51	23.4	[17.8,30.1]
Government comprehensive center	12.3	[7.2,20.1]	24.2	[17.1,33.1]	22.2	[7.1,51.6]		39	17.9	[13.3,23.6]
Pharmacy	6.1	[3.1,11.9]	3.2	[1.0,9.1]	0.0			10	4.6	[2.5,8.1]
Private Jordanian clinic or doctor	9.6	[5.3,16.8]	6.3	[2.5,14.8]	22.2	[4.2,65.3]		19	8.7	[5.4,13.9]
Public hospital	21.9	[15.0,30.9]	13.7	[7.7,23.1]	11.1	[1.7,46.9]		39	17.9	[13.1,23.9]
Private hospital	2.6	[0.7,9.9]	10.5	[5.4,19.5]	0.0			13	6.0	[3.3,10.6]
Syrian doctor	0.9	[0.1,5.8]	0.0		0.0			1	0.5	[0.1,3.2]
Islamic charity	7.0	[3.3,14.4]	2.1	[0.5,7.9]	0.0			10	4.6	[2.4,8.7]
Non-religious charity	18.4	[11.7,27.7]	10.5	[5.5,19.1]	11.1	[1.7,46.9]		32	14.7	[10.2,20.6]
Shop or Other	0.0		4.2	[1.3,12.7]	0.0			4	1.8	[0.6,5.9]
Paid Provider for Visit**	n=114		n=95		n=9			n=218		
Yes	21.9	[14.7,31.5]	30.5	[20.0,43.5]	33.3	[12.6,63.3]	0.364	57	26.1	[19.8,33.7]
No	78.1	[68.5,85.3]	69.5	[56.5,80.0]	66.7	[36.7,87.4]		161	73.9	[66.3,80.2]
Cost to household for care (Jordanian Dinar)										
Overall	Median	0	0	0	0	[0.9,5]	—	218	0	
	Mean	29.1	11.1	2.6	2.6	[0.3,4.8]	0.258		20.1	[-7.1,47.3]
Among cases that paid for care	Median	10	10	10	10	[3,10]	—	57	10	[10,15]
	Mean	132.6	36.2	7.7	7.7	[3.9,11.5]	0.224		77.0	[-25.9,179.8]
Payment for diabetes care by facility										
Public Facilities	Median	0	0	0	0	—	—	129	0	[0,0]
	Mean	1.0	13.5	2.2	2.2	[-0.8,5.1]	0.362		6.8	[-2.5,16.2]
% of households that paid for provider visit****		11.1	20.0	33.3	33.3	[8.2,73.7]	0.235	21	16.3	[10.4,24.6]
Private Facilities	Median	10	7	5	5	—	—	47	10	0.26,10]
	Mean	147.2	9.3	5.0	5.0	[5.0,5.0]	0.124		73.7	[-46.1,193.5]
% of households that paid for provider visit****		68.2	60.9	50.0	50.0	[50.0,50.0]	0.513	30	63.8	[50.1,75.6]
Charity Facilities	Median	0	0	0	0	—	—	42	0	[0,0]
	Mean	0.5	2.2	0.0	0.0	[0.0,0.0]	0.227		1.0	[-0.1,2.0]
% of households that paid for provider visit****		10.3	25.0	0.0	0.0		0.498	6	14.3	[5.7,31.5]

* as a percent of total number of index cases reporting diagnosis of diabetes

*** as a percent of households with diabetes reporting no care sought in Jordan

** as a percent of those seeking care in Jordan for diabetes

**** as a percent of those seeking care in Jordan in this sector for diabetes

Table 22. Health Care Seeking for Chronic Respiratory Disease in Jordan

	By Region						Regional Comparison p value	Survey Total		
	North		Central		South			N	%	95 CI
	%	95 CI	%	95 CI	%	95 CI				
Saw a doctor for Chronic Respiratory Disease in Jordan*	n=122		n=81		n=10			n=213		
Yes	91.8	[86.0,95.3]	81.5	[72.6,88.0]	90.0	[66.7,97.6]	0.031	187	87.8	[83.1,91.3]
No	8.2	[4.7,14.0]	18.5	[12.0,27.4]	10.0	[2.4,33.3]		26	12.2	[8.7,16.9]
Reason for deciding not to seek care***	n=9		n=14		n=1			n=24		
Could not afford provider costs	44.4	[17.4,75.2]	57.1	[31.3,79.6]	0.0		0.51	12	50.0	[30.8,69.2]
No transportation/difficult to access	0.0		0.0		0.0			0	0.0	
Could not afford transportation costs	0.0		0.0		0.0			0	0.0	
Did not know where to go	11.1	[1.5,50.7]	0.0		0.0			1	4.2	[0.6,24.9]
No trust in the doctors or clinics	11.1	[1.5,50.7]	7.1	[1.0,37.7]	0.0			2	8.3	[2.1,28.3]
Did not feel sick	22.2	[5.5,58.4]	35.7	[15.5,62.7]	100.0			8	33.3	[17.5,54.2]
Other	11.1	[1.5,50.7]	0.0		0.0			1	4.2	[0.6,24.9]
Last time care was needed	n=122		n=81		n=10			n=213		
Less than one month ago	47.5	[38.0,57.3]	34.6	[26.5,43.7]	20.0	[5.3,52.6]	0.174	88	41.3	[34.6,48.3]
1 month to less than 3 months ago	23.8	[17.0,32.2]	25.9	[17.8,36.2]	60.0	[40.0,77.1]		56	26.3	[20.8,32.7]
3 months to less than 7 months ago	16.4	[11.3,23.2]	12.3	[6.6,21.8]	10.0	[1.1,51.9]		31	14.6	[10.6,19.7]
7 months to less than 1 year ago	1.6	[0.4,6.6]	6.2	[2.8,13.1]	0.0			7	3.3	[1.6,6.7]
More than 1 year ago	2.5	[0.8,7.3]	2.5	[0.6,9.4]	0.0			5	2.3	[1.0,5.5]
Location of most recent care in Jordan**	n=122		n=66		n=9			n=187		
Government primary health care center	26.8	[19.3,35.9]	30.3	[19.1,44.5]	22.2	[6.7,53.1]	0.37	52	27.8	[21.5,35.2]
Government comprehensive center	8.9	[5.2,14.9]	3.0	[0.8,11.3]	0.0			12	6.4	[3.8,10.6]
Pharmacy	6.2	[3.1,12.4]	16.7	[9.2,28.4]	22.2	[6.7,53.1]		20	10.7	[6.9,16.2]
Private Jordanian clinic or doctor	12.5	[7.9,19.2]	21.2	[12.5,33.7]	11.1	[2.3,40.3]		29	15.5	[11.0,21.4]
Public hospital	24.1	[15.9,34.7]	19.7	[11.4,31.9]	33.3	[20.5,49.2]		43	23.0	[16.9,30.4]
Private hospital	2.7	[0.9,8.0]	3.0	[0.8,10.8]	0.0			5	2.7	[1.1,6.2]
Syrian doctor	0.9	[0.1,6.3]	1.5	[0.2,10.1]	0.0			2	1.1	[0.3,4.3]
Islamic charity	4.5	[1.7,11.4]	0.0		0.0			5	2.7	[1.0,7.1]
Non-religious charity	12.5	[8.0,19.0]	3.0	[0.8,11.1]	11.1	[1.3,54.2]		17	9.1	[5.9,13.7]
Shop or Other	0.0		1.5	[0.2,10.1]	0.0			1	0.5	[0.1,3.8]
Paid Provider for Visit**	n=112		n=66		n=9			n=187		
Yes	26.8	[19.8,35.2]	43.9	[31.7,57.0]	22.2	[8.8,45.7]	0.024	61	32.6	[26.2,39.8]
No	73.2	[64.8,80.2]	56.1	[43.0,68.3]	77.8	[54.3,91.2]		126	67.4	[60.2,73.8]
Cost to household for care (Jordanian Dinar)										
Overall	Median	0	0	[0.4,5]	0	[0.4,6]	—	187	0	
	Mean	3.4	6.5	[3.9,9.1]	1.7	[0.2,3.1]	0.007		4.4	[3.1,5.7]
Among cases that paid for care	Median	10	10	[8,18.6]	7.5	[5,10]	—	61	10	[8.6,12]
	Mean	12.6	14.7	[10.3,19.1]	7.5	[4.0,11.0]	0.038		13.4	[10.5,16.4]
Payment for Chronic Respiratory Disease care by facility										
Public Facilities	Median	0	0	—	0	—	—	107	0	[0,0]
	Mean	1.0	2.1	[0.3,3.9]	1.0	[-0.9,2.9]	0.561		1.4	[0.5,2.2]
% of households that paid for provider visit****		7.5	20.0	[9.7,36.8]	20.0	[2.4,72.0]	0.166	13	12.1	[7.3,19.7]
Private Facilities	Median	10	8	—	0	—	—	57	8	[5,10]
	Mean	11.4	11.2	[6.6,15.8]	3.3	[-2.1,8.7]	0.062		10.9	[7.7,14.1]
% of households that paid for provider visit****		76.0	69.0	[50.3,83.0]	33.3	[4.2,85.1]	0.302	40	70.2	[57.2,80.6]
Charity Facilities	Median	0	14.5	—	0	—	—	22	0	[0,1.1]
	Mean	0.7	14.5	[-0.3,29.3]	0.0	[0.0,0.0]	0.041		2.0	[-0.3,4.2]
% of households that paid for provider visit****		26.3	100.0		0.0	0.085		7	31.8	[15.5,54.3]

* as a percent of total number of index cases reporting diagnosis of Chronic Respiratory Disease *** as a percent of households with Chronic Respiratory Disease reporting no care sought in Jordan

** as a percent of those seeking care in Jordan for Chronic Respiratory Disease

**** as a percent of those seeking care in Jordan in this sector for Chronic Respiratory Disease

Table 23. Health Care Seeking for Arthritis in Jordan

	By Region						Survey Total		
	North		Central		South		Regional Comparison		
	%	95 CI	%	95 CI	%	95 CI	p value	N	% 95 CI
Saw a doctor for arthritis in Jordan*	n=149		n=138		n=15			n=302	
Yes	80.5	[72.0,86.9]	70.3	[61.3,78.0]	80.0	[50.5,94.0]	0.174	229	75.8 [69.8,81.0]
No	19.5	[13.1,28.0]	29.7	[22.0,38.7]	20.0	[6.0,49.5]		73	24.2 [19.0,30.2]
Reason for deciding not to seek care***	n=26		n=41		n=3			n=70	
Could not afford provider costs	61.5	[44.3,76.3]	63.4	[48.0,76.5]	66.7	[32.9,89.1]	0.108	44	62.9 [51.8,72.7]
No transportation/difficult to access	3.8	[0.6,22.3]	0.0		33.3	[10.9,67.1]		2	2.9 [0.7,10.7]
Could not afford transportation costs	7.7	[1.9,26.0]	2.4	[0.3,15.4]	0.0			3	4.3 [1.4,12.5]
Did not know where to go	3.8	[0.5,23.7]	4.9	[1.2,18.3]	0.0			3	4.3 [1.3,12.9]
No trust in the doctors or clinics	7.7	[2.1,24.8]	0.0		0.0			2	2.9 [0.7,10.7]
Did not feel sick	15.4	[5.8,35.1]	22.0	[13.1,34.5]	0.0			13	18.6 [11.6,28.5]
Other	0.0		7.3	[2.5,19.8]	0.0			3	4.3 [1.4,12.3]
Last time care was needed	n=149		n=138		n=15			n=302	
Less than one month ago	43.0	[33.5,52.9]	31.2	[23.5,40.0]	26.7	[13.0,47.0]	0.209	111	36.8 [30.7,43.3]
1 month to less than 3 months ago	22.1	[15.7,30.3]	19.6	[14.3,26.2]	33.3	[12.5,63.7]		65	21.5 [17.1,26.7]
3 months to less than 7 months ago	11.4	[7.2,17.5]	10.1	[6.1,16.4]	13.3	[4.3,34.6]		33	10.9 [7.9,14.9]
7 months to less than 1 year ago	2.7	[0.9,8.1]	2.9	[1.1,7.3]	6.7	[1.1,32.2]		9	3.0 [1.5,5.9]
More than 1 year ago	1.3	[0.4,5.0]	6.5	[3.4,12.3]	0.0			11	3.6 [2.0,6.6]
Location of most recent care in Jordan**	n=120		n=97		n=12			n=229	
Government primary health care center	15.8	[9.6,24.9]	22.7	[15.7,31.6]	25.0	[6.4,62.1]	0.039	44	19.2 [14.3,25.3]
Government comprehensive center	5.8	[2.7,12.0]	10.3	[5.4,18.8]	8.3	[1.5,35.6]		18	7.9 [4.9,12.3]
Pharmacy	4.2	[1.9,8.9]	11.3	[6.3,19.4]	0.0			16	7.0 [4.3,11.1]
Private Jordanian clinic or doctor	12.5	[7.5,20.0]	14.4	[9.0,22.3]	41.7	[16.6,72.0]		34	14.8 [10.7,20.2]
Public hospital	27.5	[20.0,36.6]	13.4	[8.4,20.7]	16.7	[5.4,41.3]		48	21.0 [16.0,26.9]
Private hospital	5.0	[2.4,10.3]	8.2	[3.9,16.6]	0.0			14	6.1 [3.6,10.3]
Syrian doctor	2.5	[0.8,7.4]	3.1	[1.0,9.3]	0.0			6	2.6 [1.2,5.7]
Islamic charity	8.3	[4.3,15.5]	0.0		0.0			10	4.4 [2.2,8.3]
Non-religious charity	17.5	[11.2,26.2]	11.3	[6.7,18.5]	0.0			32	14.0 [9.9,19.4]
Shop or Other	0.8	[0.1,5.9]	3.1	[0.7,12.3]	8.3	[1.5,35.6]		5	2.2 [0.8,6.0]
Paid Provider for Visit**	n=120		n=97		n=12			n=229	
Yes	33.3	[24.2,43.9]	40.2	[31.6,49.5]	50.0	[28.2,71.8]	0.329	85	37.1 [30.7,44.0]
No	66.7	[56.1,75.8]	59.8	[50.5,68.4]	50.0	[28.2,71.8]		144	62.9 [56.0,69.3]
Cost to household for care (Jordanian Dinar)									
Overall	Median	0	0	[0,0.7]	2.5	[0,7]	—	229	0
	Mean	5.9	6.8	[3.8,9.9]	4.2	[1.8,6.7]	0.422		6.2 [3.3,9.1]
Among cases that paid for care	Median	7.5	10	[5.9,17.3]	7.5	[5.2,14.5]	—	85	10 [6,10]
	Mean	17.6	17.0	[10.8,23.2]	8.5	[5.7,11.3]	0.036		16.7 [9.6,23.8]
Payment for arthritis care by facility									
Public Facilities	Median	0 —	0 —	0 —	—	—	0.008	110	0 [0,0]
	Mean	1.3	3.4	[0.4,7.2]	0.0	[0.0,0.0]			2.1 [0.4,3.7]
% of households that paid for provider visit****		15.3	15.6	[7.5,29.5]	0.0		0.63	16	14.5 [9.1,22.4]
Private Facilities	Median	10 —	5 —	7 —	—	—	0.375	75	7 [5,10]
	Mean	20.3	10.7	[5.8,15.7]	8.5	[5.7,11.3]			14.4 [6.6,22.2]
% of households that paid for provider visit****		76.7	71.8	[55.1,84.1]	100.0		0.356	57	76.0 [64.7,84.5]
Charity Facilities	Median	0 —	0 —	0 —	—	—	0.279	42	0 [0,0]
	Mean	0.7	6.5	[3.8,16.7]	—	—			2.2 [-0.6,5.0]
% of households that paid for provider visit****		25.8	27.3	[8.9,59.0]	0.0		0.632	11	26.2 [13.8,43.9]

* as a percent of total number of index cases reporting diagnosis of arthritis

*** as a percent of households with arthritis reporting no care sought in Jordan

** as a percent of those seeking care in Jordan for arthritis

**** as a percent of those seeking care in Jordan in this sector for arthritis

Table 24. Access to Medication for Chronic Conditions*

	Hypertension			Cardiovascular Disease			Diabetes			Chronic Respiratory Disease			Arthritis		
	Point	95 CI	N	Point	95 CI	N	Point	95 CI	N	Point	95 CI	N	Point	95 CI	N
	n=408			n=190			n=250			n=213			n=302		
Prescribed medication for chronic condition in Jordan or in Syria**	90.2	[86.4,93.0]	368	87.9	[82.2,92.0]	167	92.8	[88.3,95.7]	232	91.5	[86.9,94.7]	195	82.8	[77.6,87.0]	250
Currently taking medication for chronic condition**	91.7	[88.7,93.9]	374	87.4	[81.5,91.6]	166	92.4	[88.4,95.1]	231	81.7	[75.4,86.7]	174	73.2	[67.8,77.9]	221
Stopped taking medication for >2 wks in past year**	23.8	[19.7,28.6]	97	24.7	[19.0,31.5]	47	14.9	[11.0,19.7]	37	31.9	[25.4,39.2]	67	37.4	[31.6,43.6]	111
	n=97			n=47			n=37			n=67			n=111		
Stopped taking or ran out while in Syria***	12.4	[7.1,20.6]	12	14.9	[7.1,28.8]	7	21.6	[10.5,39.4]	8	9.0	[4.3,17.7]	6	16.2	[10.5,24.2]	18
Stopped or ran out in Jordan***	87.6	[79.4,92.9]	85	85.1	[71.2,92.9]	40	78.4	[60.6,89.5]	29	91.0	[82.3,95.7]	61	83.8	[75.8,89.5]	93
Reason for stopping/running out of medication***	n=97			n=47			n=37			n=67			n=111		
Doctor told to stop	1.0	[0.1,7.2]	1	2.1	[0.3,14.1]	1	0		0	0.0		0	1.8	[0.4,7.2]	2
Household could not afford the medication	66.0	[56.2,74.6]	64	59.6	[43.0,74.3]	28	62.2	[44.8,76.9]	23	49.3	[37.9,60.7]	33	57.7	[47.5,67.2]	64
Did not know where to get the medication	6.2	[2.6,14.2]	6	6.4	[1.5,23.9]	3	2.7	[0.4,17.3]	1	6.0	[2.3,14.5]	4	2.7	[0.9,7.9]	3
Could not find a pharmacy with my medicine	3.1	[0.7,12.3]	3	8.5	[2.5,25.0]	4	5.4	[1.3,19.6]	2	4.5	[1.4,13.2]	3	3.6	[1.4,9.1]	4
Symptoms improved/felt better so I stopped	7.2	[3.5,14.4]	7	10.6	[4.7,22.3]	5	13.5	[5.6,29.2]	5	23.9	[14.5,36.7]	16	20.7	[14.4,28.9]	23
Too far to travel to obtain medication	3.1	[1.0,8.9]	3	2.1	[0.3,14.1]	1	8.1	[2.7,22.2]	3	10.4	[5.2,20.0]	7	2.7	[0.9,7.8]	3
Did not like what was available	4.1	[1.6,10.5]	4	6.4	[2.0,18.2]	3	0.0		0	3.0	[0.7,11.3]	2	4.5	[1.9,10.2]	5
Other	9.3	[4.9,16.9]	9	4.3	[1.0,16.0]	2	8.1	[1.9,28.9]	3	3.0	[0.8,10.9]	2	6.3	[3.1,12.5]	7

* among household index cases with chronic condition

** as a percent of those diagnosed with chronic condition

*** as a percent of those who stopped taking medication for >2 weeks in past year

Table 25. Children's Healthcare Needs in Jordan

	By Region						Regional comparison p value	Survey Total (n=1141)		
	North (n=544)		Central (n=535)		South (n=62)			% 95 CI	N	
	%	95 CI	%	95 CI	%	95 CI				
Most Recent Reason for Needing Health Services for a Child in the Household (while in Jordan)*										
Fever	16.4	[13.0,20.3]	20.7	[17.5,24.4]	24.2	[19.2,29.9]	0.652	18.8	[16.5,21.4]	215
Diarrhea	7.2	[5.2,9.9]	8.6	[6.3,11.7]	6.5	[2.6,15.2]		7.8	[6.2,9.7]	89
Respiratory problem	31.8	[27.0,37.0]	29.9	[26.1,34.1]	25.8	[18.6,34.6]		30.6	[27.6,33.8]	349
Asthma	4.6	[3.0,7.1]	3.4	[2.1,5.2]	4.8	[1.4,15.5]		4.0	[3.0,5.5]	46
Immunization	3.3	[1.9,5.7]	1.9	[0.9,3.7]	3.2	[1.0,9.5]		2.6	[1.7,3.9]	30
Injury	6.1	[4.4,8.4]	6.4	[4.6,8.7]	1.6	[0.3,8.9]		6.0	[4.7,7.5]	68
Dental care	4.4	[3.0,6.5]	3.6	[2.3,5.5]	1.6	[0.3,9.5]		3.9	[2.9,5.1]	44
Behavioral/emotional problem	0.6	[0.2,1.7]	0.2	[0.0,1.3]	0.0			0.4	[0.1,0.9]	4
Eye problem	2.2	[1.1,4.2]	1.9	[1.1,3.3]	1.6	[0.3,9.2]		2.0	[1.3,3.1]	23
Ear problem	1.1	[0.5,2.4]	2.4	[1.5,3.9]	0.0			1.7	[1.1,2.5]	19
Skin problem	6.8	[4.8,9.6]	4.9	[3.2,7.2]	9.7	[3.9,22.0]		6.0	[4.7,7.8]	69
Worms	0.0		0.4	[0.1,1.5]	0.0			0.2	[0.0,0.7]	2
Other	15.6	[12.4,19.4]	15.9	[12.9,19.5]	21.0	[14.7,29.0]		16.0	[13.9,18.5]	183

*Includes all health problems regardless of whether care was sought

Table 26. Health Care Seeking for Children in Jordan

	By Region						Regional Comparison p value	Survey Total		
	North		Central		South			% 95 CI	95 CI	N
	%	95 CI	%	95 CI	%	95 CI				
Received attention last time care was needed*	n=544		n=535		n=62			n=1141		
Yes	92.8	[89.9,95.0]	88.6	[85.5,91.1]	93.5	[84.8,97.4]	0.52	90.9	[88.9,92.6]	1037
No	7.0	[4.9,9.9]	11.4	[8.9,14.5]	6.5	[2.6,15.2]		9.0	[7.3,11.0]	103
Don't know	0.2	[0.0,1.3]	0.0		0.0			0.1	[0.0,0.6]	1
Last time care was needed*	n=544		n=535		n=62			n=1141		
Less than two weeks ago	45.8	[40.9,50.7]	38.3	[34.2,42.6]	38.7	[30.1,48.1]	0.259	41.9	[38.8,45.1]	478
2 weeks to less than 1 month ago	24.8	[21.2,28.8]	27.9	[24.0,32.1]	30.6	[26.1,35.6]		26.6	[24.0,29.3]	303
1 month to less than 3 months ago	18.9	[15.5,22.9]	20.4	[16.8,24.4]	19.4	[15.9,23.4]		19.6	[17.3,22.2]	224
3 months to less than 6 months ago	6.3	[4.6,8.4]	8.6	[6.4,11.5]	3.2	[1.0,10.0]		7.2	[5.8,8.9]	82
6 months to less than 1 year ago	3.1	[2.0,4.8]	3.7	[2.4,5.8]	8.1	[3.5,17.4]		3.7	[2.7,5.0]	42
More than 1 year ago	1.1	[0.4,2.7]	1.1	[0.5,2.7]	0.0			1.1	[0.6,2.0]	12
Location of most recent care in Jordan**	n=505		n=474		n=58			n=1037		
Government primary health care center	25.3	[20.0,31.5]	23.8	[19.0,29.5]	34.5	[17.9,55.9]	0.021	25.2	[21.5,29.2]	261
Government comprehensive center	7.9	[5.6,11.1]	9.1	[6.5,12.6]	6.9	[2.7,16.6]		8.4	[6.6,10.6]	87
Pharmacy	7.5	[5.3,10.7]	10.8	[8.0,14.3]	10.3	[3.5,27.0]		9.2	[7.3,11.4]	95
Private Jordanian clinic or doctor	16.2	[13.0,20.2]	21.3	[17.1,26.3]	13.8	[5.7,29.9]		18.4	[15.7,21.5]	191
Public hospital	23.2	[19.4,27.4]	18.1	[14.6,22.3]	25.9	[13.3,44.1]		21.0	[18.3,24.0]	218
Private hospital	4.6	[3.0,7.0]	8.2	[5.7,11.7]	3.4	[0.5,20.5]		6.2	[4.6,8.2]	64
Syrian doctor	0.8	[0.2,2.6]	2.7	[1.4,5.4]	0.0			1.6	[0.9,3.0]	17
Islamic charity	3.2	[1.8,5.4]	1.3	[0.6,2.7]	0.0			2.1	[1.3,3.3]	22
Non-religious charity	10.7	[7.5,15.1]	3.2	[2.0,5.0]	1.7	[0.3,9.5]		6.8	[4.9,9.2]	70
Shop or Other	0.6	[0.2,1.8]	1.5	[0.7,3.0]	3.4	[0.6,17.6]		1.2	[0.6,2.1]	12
Reason for deciding not to seek care***	n=38		n=61		n=4			n=103		
Could not afford provider costs	60.5	[41.9,76.6]	73.8	[60.5,83.8]	50.0	[8.1,91.9]	0.849	68	[56.9,77.3]	70
No transportation/difficult to access	2.6	[0.4,15.6]	3.3	[0.8,12.4]	0.0			2.9	[0.9,8.7]	3
Could not afford transportation costs	2.6	[0.4,15.6]	1.6	[0.2,11.2]	0.0			1.9	[0.5,7.6]	2
Provider's skills are inadequate	7.9	[2.6,21.6]	3.3	[0.8,12.1]	25.0	[2.7,79.9]		5.8	[2.6,12.5]	6
Provider's equipment or drugs are inadequate	5.3	[1.4,18.3]	0.0		0.0			1.9	[0.5,7.6]	2
Disliked treatment on previous visit(s)	2.6	[0.4,17.2]	1.6	[0.2,10.8]	0.0			1.9	[0.5,7.7]	2
Did not know where to go	2.6	[0.4,17.2]	4.9	[1.5,14.7]	0.0			3.9	[1.4,10.3]	4
Not sick enough to seek care	7.9	[1.9,27.7]	6.6	[2.5,16.1]	25.0	[2.7,79.9]		7.8	[3.6,15.9]	8
Other	7.9	[2.7,21.0]	4.9	[1.1,19.2]	0.0			5.8	[2.3,14.0]	6

* as percent of household index cases where it was reported that care was needed

** as percent of household index cases that received care the last time it was needed

*** as percent of household index cases that did not seek care last time it was needed

Table 27. Access to Medical Care for Children's Health in Jordan

	By Region						Regional comparison p value	By Sector						Sector comparison p value	Survey Total		
	North		Central		South			Public		Private		Charity			Percent	95 CI	N
	Percent	95 CI	Percent	95 CI	Percent	95 CI		Percent	95 CI	Percent	95 CI	Percent	95 CI				
Received medical attention the last time care was needed*	n=544		n=535		n=62										n=1141		
Yes	92.8	[89.9,95.0]	88.6	[85.5,91.1]	93.5	[84.8,97.4]	0.52	—	—	—	—	—	—	—	90.9	[88.9,92.6]	1037
No	7.0	[4.9,9.9]	11.4	[8.9,14.5]	6.5	[2.6,15.2]		—	—	—	—	—	—	—	9.0	[7.3,11.0]	103
Don't know	0.2	[0.0,1.3]	0.0		0.0			—	—	—	—	—	—	—	0.1	[0.0,0.6]	1
Reason for most recent careseeking**	n=505		n=474		n=58			n=566		n=379		n=92			n=1037		
Fever	15.8	[12.4,20.1]	21.5	[18.2,25.3]	24.1	[20.9,27.7]	0.524	19.1	[16.1,22.5]	18.2	[14.4,22.7]	20.7	[12.7,31.7]	<0.001	18.9	[16.5,21.6]	196
Diarrhea	7.3	[5.2,10.2]	8.0	[5.8,10.9]	5.2	[2.2,11.7]		7.1	[5.1,9.6]	9.2	[6.8,12.5]	3.3	[1.0,10.0]		7.5	[6.0,9.4]	78
Respiratory problem	32.3	[27.3,37.7]	29.1	[25.3,33.3]	25.9	[18.7,34.6]		26.5	[23.2,30.1]	34.3	[29.3,39.7]	39.1	[28.8,50.5]		30.5	[27.4,33.7]	316
Asthma	4.4	[2.7,6.9]	3.4	[2.0,5.5]	3.4	[1.1,10.6]		5.3	[3.7,7.5]	2.4	[1.2,4.8]	1.1	[0.2,7.3]		3.9	[2.8,5.4]	40
Immunization	3.4	[1.9,6.0]	2.1	[1.1,4.2]	3.4	[1.2,9.7]		5.1	[3.4,7.6]	0.0		0.0			2.8	[1.8,4.2]	29
Injury	6.1	[4.4,8.6]	6.5	[4.6,9.2]	1.7	[0.3,9.5]		8.1	[6.1,10.8]	3.7	[2.3,6.0]	3.3	[1.1,9.4]		6.1	[4.8,7.7]	63
Dental care	4.8	[3.2,6.9]	2.5	[1.4,4.6]	1.7	[0.3,9.9]		3.0	[1.8,4.9]	4.0	[2.3,6.8]	5.4	[2.4,11.8]		3.6	[2.6,4.9]	37
Behavioral/emotional problem	0.6	[0.2,1.8]	0.2	[0.0,1.5]	0.0			0.5	[0.2,1.6]	0.3	[0.0,1.9]	0.0			0.4	[0.1,1.0]	4
Eye problem	2.4	[1.2,4.5]	1.9	[1.0,3.5]	1.7	[0.3,10.2]		2.7	[1.5,4.7]	1.6	[0.7,3.4]	1.1	[0.1,7.5]		2.1	[1.4,3.3]	22
Ear problem	1.2	[0.5,2.5]	2.7	[1.7,4.4]	0.0			1.6	[0.8,3.0]	2.6	[1.4,4.8]	0.0			1.8	[1.2,2.8]	19
Skin problem	6.9	[4.9,9.7]	5.3	[3.5,8.0]	10.3	[4.2,23.2]		4.9	[3.3,7.4]	7.1	[4.9,10.2]	12	[7.2,19.1]		6.4	[4.9,8.2]	66
Worms	0.0		0.4	[0.1,1.7]	0.0			0.4	[0.1,1.4]	0.0		0.0			0.2	[0.0,0.8]	2
Other	14.9	[11.8,18.6]	16.2	[12.9,20.3]	22.4	[16.0,30.4]		15.7	[12.8,19.2]	16.6	[13.4,20.4]	14.1	[8.1,23.5]		15.9	[13.6,18.5]	165
Paid for provider visit**	n=505		n=474		n=58			n=566		n=379		n=92			n=1037		
Yes	24.0	[19.6,28.9]	35.0	[30.2,40.2]	20.7	[12.8,31.8]	<0.001	7.8	[5.5,10.9]	63.3	[58.0,68.3]	16.3	[9.9,25.7]	<0.001	28.8	[25.5,32.4]	299
No	75.6	[70.6,80.1]	64.8	[59.6,69.6]	75.9	[65.1,84.1]		91.7	[88.6,94.0]	36.7	[31.7,42.0]	81.5	[71.3,88.7]		70.7	[67.1,74.0]	733
Don't know	0.4	[0.1,1.6]	0.2	[0.0,1.5]	3.4	[1.0,11.7]		0.5	[0.2,1.6]	0.0		2.2	[0.5,8.3]		0.5	[0.2,1.2]	5
Cost to household for visit (Jordanian Dinar)**	Median	0	0		0		—	0		5		0		—	0		1037
	Mean	11.3	[-0.8,23.3]	15.6	[7.4,23.8]	14	[-6.3,34.3]	0.84	3.5	[1.2,5.9]	31.2	[12.4,50.0]	0.6	[0.2,1.0]	13.4	[6.3,20.5]	
Cost to household for visit (Jordanian Dinar)***	Median	10	10		15			15		10		20			10.0		299
	Mean	47	[-1.8,95.7]	44.6	[20.9,68.3]	67.8	[-24.6,160.1]	0.891	45.6	[21.4,69.8]	49.3	[19.8,78.8]	3.6	[1.6,5.6]	20.7	[13.4,28.0]	

* as percent of household index cases that needed care

** among household index cases that received care

*** among household index cases who paid for visit

Table 28. Access to Medication for Children's Health Problems in Jordan*

	By Region						Regional Comparison p value	Survey Total			
	North		Central		South			Percent	95% CI	N	
	Percent	95% CI	Percent	95% CI	Percent	95% CI					
Prescribed medication for child health problem during most recent health facility visit*	n=505		n=474		n=58			n=1037			
	86.7	[82.5,90.1]	90.9	[87.9,93.3]	86.2	[75.8,92.6]	0.623	88.6	[86.1,90.7]	919	
By Facility Type	Public facility**	82.1	[75.6,87.1]	88.0	[83.5,91.4]	84.6	[69.1,93.1]	0.208	84.8	[81.0,88.0]	480
	Private facility**	94.7	[90.1,97.2]	95.3	[92.0,97.2]	88.9	[64.5,97.2]	0.472	94.7	[92.2,96.4]	359
	Charity facility**	88.6	[78.5,94.3]	81.0	[57.0,93.2]	100.0	87	0.819	87.0	[77.9,92.6]	80
Able to obtain all medications prescribed during most recent provider visit***	90.4	[87.7,92.6]	91.4	[88.0,93.9]	86.0	[78.4,91.2]	0.733	90.6	[88.6,92.3]	833	
Reason for not obtaining medication prescribed****	n=41		n=37		n=7			n=85			
Household could not afford the medication	31.7	[19.1,47.7]	43.2	[28.1,59.8]	42.9	[9.9,83.6]	0.948	37.6	[27.6,48.9]	32	
Did not know where to get the medication	0.0		0.0		0.0			0.0		0	
Medication was out of stock at public facility	56.1	[39.2,71.7]	48.6	[33.4,64.2]	57.1	[16.4,90.1]		52.9	[41.6,63.9]	45	
Medication was out of stock at private pharmacy	4.9	[1.3,17.0]	2.7	[0.4,17.5]	0.0			3.5	[1.1,10.4]	3	
Symptoms improved/began to feel better	0.0		0.0		0.0			0.0		0	
Household chose a different treatment	0.0		2.7	[0.4,17.5]	0.0			1.2	[0.2,8.1]	1	
Household decided medicines were not needed	2.4	[0.3,15.9]	0.0		0.0			1.2	[0.2,8.1]	1	
Purchasing medication was not a priority	2.4	[0.3,15.9]	0.0		0.0			1.2	[0.2,8.1]	1	
Too far to travel to obtain medication	0.0		0.0		0.0			0.0		0	
Other	2.4	[0.3,15.2]	2.7	[0.4,16.7]	0.0			2.4	[0.6,8.9]	2	
Paid for medication***	n=396		n=394		n=43			n=833			
Percent	45.7	[39.5,52.0]	64.2	[58.1,69.9]	51.2	[41.7,60.5]	< 0.001	54.7	[50.3,59.1]	456	
Cost to household for medication (Jordanian Dinar)	Median	0	6.5		2		—	4		833	
	Mean	6.7	[5.2,8.1]	11.2	[9.1,13.4]	6.3	[2.7,9.9]	0.002	8.8	[7.5,10.1]	833
Cost to household for medication (Jordanian Dinar)*****	Median	10	10		8.5		0.138	10		456	
	Mean	14.6	[12.5,16.6]	17.5	[14.7,20.3]	12.3		[6.4,18.2]	16.1		[14.3,17.9]

* as percent of all household index cases that received care

** as percent of household index cases that received care at this facility type

*** among household index cases prescribed medication that obtained the medication

**** as percent of household index cases prescribed medication but did not obtain the medication

***** among household index cases who paid for medication

Table 29. EPI Card Availability and Difficulties Obtaining Vaccinations

	By Region						Regional Comparison p value	Survey Total		
	North		Central		South			Percent	95 CI	N
	Percent	95 CI	Percent	95 CI	Percent	95 CI				
Households with a child aged 12-23 months	n=727		n=745		n=78			n=1550		
	24.9	[21.8,28.3]	23.2	[19.7,27.1]	28.2	[21.7,35.8]	0.48	24.3	[22.0,26.7]	376
EPI card available	n=181		n=173		n=22			n=376		
Yes, seen	55.8	[47.7,63.6]	53.2	[46.0,60.2]	63.6	[53.4,72.8]	0.606	55.1	[49.9,60.1]	207
Yes, not seen	19.3	[14.1,26.0]	19.1	[13.2,26.7]	22.7	[14.9,33.0]		19.4	[15.5,24.0]	73
No	23.8	[17.7,31.0]	24.3	[19.2,30.3]	13.6	[4.4,35.1]		23.4	[19.5,27.9]	88
Don't know	1.1	[0.3,4.3]	3.5	[1.6,7.3]	0.0			2.1	[1.1,4.2]	8
Difficulties obtaining vaccinations*	n=181		n=173		n=22			n=376		
No difficulties	63.5	[55.6,70.8]	68.8	[60.6,76.0]	72.7	[40.7,91.2]	0.803	66.5	[60.9,71.6]	250
Did not know where/when to take child for immunization	12.7	[7.8,20.0]	6.9	[3.9,12.1]	4.5	[0.9,20.1]		9.6	[6.6,13.7]	36
Place for immunization is too far away	5.0	[2.7,9.0]	5.2	[2.7,9.9]	4.5	[0.9,20.1]		5.1	[3.3,7.7]	19
Times that immunizations are available are inconvenient	2.8	[1.2,6.3]	1.2	[0.3,4.6]	0.0			1.9	[0.9,3.8]	7
Vaccine was not available at facility	1.7	[0.5,5.0]	2.9	[1.2,6.5]	4.5	[0.6,25.8]		2.4	[1.3,4.5]	9
Long wait time	3.9	[1.8,7.9]	4.6	[2.4,8.6]	4.5	[0.6,27.7]		4.3	[2.7,6.8]	16
Child was brought to facility but not given a vaccination (possibly because of illness)	2.8	[1.2,6.4]	3.5	[1.6,7.2]	4.5	[0.9,20.1]		3.2	[1.9,5.4]	12
Unaware of need for vaccination or multiple doses	1.1	[0.3,4.3]	1.2	[0.3,4.4]	0.0			1.1	[0.4,2.8]	4
Fear of side reactions to immunization or that immunization will make child sick	0.6	[0.1,3.8]	1.7	[0.6,5.1]	0.0			1.1	[0.4,2.8]	4
Caretaker could not take child to health facility (for example, because they are too busy or sick)	3.3	[1.5,7.1]	0.6	[0.1,3.9]	0.0			1.9	[0.9,3.8]	7
Plan to take child in future/postponed until another time	2.8	[1.2,6.2]	3.5	[1.6,7.3]	4.5	[0.9,20.1]		3.2	[1.9,5.4]	12

* among all index cases of children 12-23 months in households

Table 30. Vaccinations

			By Region						Regional Comparison p value	Survey Total		
			North (with card n=101) (all children n=181)		Central (with card n=92) (all children n=173)		South (with card n=14) (all children n=22)			(with card n=207) (all children n=376)		
			Percent	95 CI	Percent	95 CI	Percent	95 CI		Percent	95 CI	N
BCG												
	Card only / children 12-23 months with card		91.1	[84.1,95.2]	94.6	[87.9,97.7]	100.0		0.443	93.2	[89.0,95.9]	193
	Card only / all children 12-23 months		50.8	[43.7,57.9]	50.3	[42.8,57.8]	63.6	[53.4,72.8]	0.311	51.3	[46.4,56.3]	193
	Card and recall / all children 12-23 months		80.7	[74.6,85.6]	85.5	[80.3,89.6]	86.4	[64.8,95.6]	0.397	83.2	[79.4,86.5]	313
Measles*												
	Card only / children 12-23 months with card		68.3	[59.1,76.3]	62.0	[51.5,71.4]	85.7	[65.0,95.1]	0.124	66.7	[60.1,72.6]	138
	Card only / all children 12-23 months		38.1	[31.3,45.4]	32.9	[25.8,41.0]	54.5	[40.0,68.3]	0.081	36.7	[31.8,41.9]	138
	Card and recall / all children 12-23 months		60.8	[53.0,68.0]	63.0	[55.3,70.1]	81.8	[65.3,91.5]	0.122	63.0	[57.8,68.0]	237
Polio												
Polio 0	Card only / children 12-23 months with card		26.7	[18.9,36.4]	41.3	[30.0,53.6]	35.7	[15.9,61.9]	0.123	33.8	[26.9,41.5]	70
	Card only / all children 12-23 months		14.9	[10.5,20.8]	22	[15.9,29.6]	22.7	[9.6,44.9]	0.223	18.6	[14.8,23.2]	70
	Card and recall / all children 12-23 months		29.8	[23.4,37.2]	32.9	[25.3,41.6]	31.8	[17.5,50.6]	0.808	31.4	[26.5,36.7]	118
Polio 1	Card only / children 12-23 months with card		80.2	[70.0,87.5]	79.3	[69.7,86.5]	85.7	[65.0,95.1]	0.821	80.2	[73.8,85.3]	166
	Card only / all children 12-23 months		44.8	[37.6,52.1]	42.2	[34.5,50.2]	54.5	[40.0,68.3]	0.44	44.1	[39.1,49.4]	166
	Card and recall / all children 12-23 months		54.1	[46.8,61.3]	48.6	[40.6,56.5]	63.6	[48.7,76.3]	0.229	52.1	[46.9,57.3]	196
Polio 2	Card only / children 12-23 months with card		74.3	[64.6,82.0]	72.8	[62.3,81.3]	42.9	[19.6,69.8]	0.061	71.5	[64.6,77.5]	148
	Card only / all children 12-23 months		41.4	[34.8,48.4]	38.7	[31.0,47.0]	27.3	[11.7,51.5]	0.471	39.4	[34.3,44.6]	148
	Card and recall / all children 12-23 months		50.3	[42.9,57.7]	43.9	[36.1,52.1]	36.4	[17.9,60.0]	0.353	46.5	[41.2,52.0]	175
Polio 3	Card only / children 12-23 months with card		55.4	[45.3,65.1]	48.9	[39.0,58.9]	35.7	[13.3,66.7]	0.379	51.2	[44.2,58.2]	106
	Card only / all children 12-23 months		30.9	[24.6,38.1]	26	[20.1,33.0]	22.7	[8.1,49.5]	0.549	28.2	[23.8,33.1]	106
	Card and recall / all children 12-23 months		35.9	[28.9,43.6]	30.1	[23.5,37.6]	27.3	[13.6,47.1]	0.413	32.7	[27.9,37.9]	123
DPT**												
DPT 1	Card only / children 12-23 months with card		91.1	[79.9,96.3]	88	[78.7,93.6]	85.7	[61.5,95.8]	0.730	89.4	[83.2,93.5]	185
	Card only / all children 12-23 months		50.8	[42.9,58.7]	46.8	[39.4,54.4]	54.5	[37.7,70.4]	0.613	49.2	[43.9,54.5]	185
	Card and recall / all children 12-23 months		64.1	[56.0,71.5]	69.9	[62.9,76.2]	77.3	[52.6,91.3]	0.355	67.6	[62.3,72.4]	254
DPT 2	Card only / children 12-23 months with card		86.1	[73.2,93.4]	80.4	[70.2,87.8]	64.3	[45.2,79.7]	0.161	82.1	[74.8,87.7]	170
	Card only / all children 12-23 months		48.1	[40.1,56.2]	42.8	[35.4,50.5]	40.9	[26.5,57.1]	0.498	45.2	[39.9,50.6]	170
	Card and recall / all children 12-23 months		59.7	[51.0,67.8]	61.3	[53.4,68.6]	63.6	[43.8,79.7]	0.911	60.6	[55.0,66.0]	228
DPT 3	Card only / children 12-23 months with card		75.2	[63.7,84.0]	67.4	[56.9,76.4]	64.3	[45.2,79.7]	0.367	71.0	[63.8,77.3]	147
	Card only / all children 12-23 months		42	[34.3,50.1]	35.8	[28.7,43.6]	40.9	[26.5,57.1]	0.434	39.1	[33.9,44.5]	147
	Card and recall / all children 12-23 months		50.8	[42.1,59.5]	46.8	[38.6,55.2]	54.5	[31.7,75.6]	0.724	49.2	[43.3,55.1]	185
Fully immunized***												
	Card only / children 12-23 months with card		43.6	[33.1,54.6]	34.8	[24.9,46.1]	28.6	[11.4,55.4]	0.362	38.6	[31.6,46.2]	80
	Card only / all children 12-23 months		24.3	[18.4,31.4]	18.5	[13.0,25.7]	18.2	[6.6,41.0]	0.423	21.3	[17.2,26.1]	80
	Card and recall / all children 12-23 months		27.6	[20.9,35.5]	22.0	[15.7,29.8]	18.2	[6.6,41.0]	0.423	24.5	[19.9,29.7]	92

* measles vaccination on its own or as MMR

** DPT/DaPT on its own or in combination with Hib+IPV/HBV

*** children with all of BCG, measles, polio 1, 2, 3, DPT 1, 2, 3

Table 31. Vitamin A Recall

	By Region						Regional Comparison p value	Survey Total		
	North		Central		South			Percent	95 CI	N
	Percent	95 CI	Percent	95 CI	Percent	95 CI				
Vitamin A (recall)	n=181		n=173		n=22			n=376		
Yes	59.1	[52.3,65.6]	54.9	[47.7,62.0]	40.9	[23.5,60.9]	0.304	56.1	[51.2,60.9]	211
No	26.0	[20.6,32.2]	26.0	[19.8,33.4]	45.5	[24.2,68.6]		27.1	[22.8,32.0]	102
Don't know	14.9	[10.6,20.5]	19.1	[13.9,25.6]	13.6	[3.5,40.7]		16.8	[13.3,20.8]	63

* vitamin A drops given in last 12 months (caregiver recall) among all children 12-23 months

Table 32. ANC for Women Who Delivered in Jordan in the Past Year

		By Region						Regional Comparison p value	Survey Total		
		North		Central		South			Point	95% CI	N
		Point	95% CI	Point	95% CI	Point	95% CI				
Households with a delivery in the past year		n=727		n=745		n=78		0.661	n=1550		
		21.9	[19.0,25.1]	18.4	[15.8,21.3]	23.1	[14.3,35.1]		20.3	[18.3,22.4]	314
Households with a delivery in the past year in Jordan		n=159		n=137		n=18		0.198	n=314		
		84.9	[76.5,90.7]	91.2	[86.0,94.6]	88.9	[71.4,96.3]		87.9	[83.2,91.4]	276
Households with a woman who received ANC while pregnant in Jordan*		n=135		n=125		n=16		0.031	n=276		
		76.3	[67.0,83.6]	87.2	[80.0,92.1]	93.8	[71.3,98.9]		82.2	[76.6,86.7]	227
Month of pregnancy in which the first ANC visit took place**	Median	4	—	4	—	3	—	0.037	4	—	227
	Mean	4.4	[3.8,5.1]	5.1	[4.4,5.8]	3.5	[2.5,4.5]		4.7	[4.3,5.1]	
Number of ANC visits during pregnancy**	Median	6	—	5	—	5	—	0.707	5	—	227
	Mean	6.4	[5.7,7.2]	6.1	[5.3,6.8]	5.7	[3.9,7.6]		6.2	[5.7,6.8]	
Place of ANC care**		n=103		n=109		n=15		0.057	n=227		
Government primary health care center		19.4	[12.2,29.5]	12.8	[7.5,21.1]	13.3	[2.2,50.7]		15.9	[11.2,21.9]	36
Government comprehensive center		2.9	[0.9,8.7]	15.6	[10.0,23.5]	6.7	[0.9,36.4]		9.3	[6.0,14.0]	21
Private Jordanian clinic or doctor		31.1	[23.1,40.4]	31.2	[22.4,41.5]	20.0	[5.7,51.0]		30.4	[24.5,37.0]	69
Public hospital		7.8	[3.9,15.0]	15.6	[9.8,23.8]	33.3	[11.5,65.9]		13.2	[9.1,18.8]	30
Private hospital		14.6	[8.8,23.1]	12.8	[7.6,20.9]	26.7	[9.9,54.5]		14.5	[10.4,20.0]	33
Syrian doctor		1.9	[0.5,7.4]	2.8	[0.9,8.1]	0.0			2.2	[0.9,5.2]	5
Islamic charity		9.7	[5.3,17.2]	4.6	[1.9,10.4]	0.0			6.6	[4.0,10.8]	15
Non-religious charity		12.6	[6.8,22.1]	4.6	[2.0,10.4]	0.0		7.9	[4.7,13.0]	18	
Reason for no ANC care***		n=29		n=16		n=1		0.956	n=46		
Cost/too expensive		31	[15.4,52.7]	31.3	[12.3,59.5]	100			32.6	[19.4,49.4]	15
Poor quality/dislike services		6.9	[1.8,22.6]	0.0		0			4.3	[1.1,15.6]	2
Did not know where to go		10.3	[3.3,27.8]	6.3	[0.8,36.3]	0			8.7	[3.2,21.4]	4
Did not think it was important		20.7	[9.3,40.0]	18.8	[6.2,44.7]	0			19.6	[10.3,33.9]	9
Household decided it was not a priority		10.3	[3.2,28.8]	25.0	[7.5,57.8]	0			15.2	[6.5,31.7]	7
Other		13.8	[4.4,35.9]	12.5	[3.2,38.3]	0			13.0	[5.4,28.3]	6
No reason		6.9	[1.6,24.7]	6.3	[0.8,36.3]	0		6.5	[2.0,19.1]	3	

* among households with a woman who delivered in the past year in Jordan

** among households with a woman who delivered in the past year in Jordan and received ANC

*** among households with a woman who delivered in the past year in Jordan and did not receive ANC

Table 33. Deliveries in Jordan in the past year

		By Region							By Sector							Survey Total		
		North (n=148)		Central (n=161)		South (n=19)		Regional comparison p value	Public (n=223)		Private (n=81)		Charity (n=24)		Sector comparison p value	(n=328)		
		Point	95 CI	Point	95 CI	Point	95 CI		Point	95 CI	Point	95 CI	Point	95 CI		%	95 CI	N
Place of delivery*		n=135		n=125		n=16		0.776	n=148		n=84		n=38		n=276			
Public health centre		0		2.4	[0.8,7.1]	0.0			—	—	—	—	—	—	—	1.1	[0.3,3.3]	3
Public hospital		57.0	[47.4,66.2]	45.6	[36.5,55.0]	56.3	[35.0,75.4]		—	—	—	—	—	—	—	51.8	[45.3,58.2]	143
Private hospital		28.1	[20.5,37.3]	32.8	[24.9,41.8]	31.3	[13.9,56.2]		—	—	—	—	—	—	—	30.4	[25.0,36.5]	84
NGO hospital		8.1	[4.6,13.9]	14.4	[9.5,21.3]	12.5	[4.7,29.2]		—	—	—	—	—	—	—	11.2	[8.1,15.3]	31
Islamic Charity hospital		2.2	[0.5,9.0]	3.2	[1.2,8.4]	0.0			—	—	—	—	—	—	—	2.5	[1.1,5.8]	7
At home, with skilled birth attendant		3.0	[0.9,9.2]	0.8	[0.1,5.4]	0.0			—	—	—	—	—	—	—	1.8	[0.6,5.0]	5
At home, without skilled birth attendant		0.7	[0.1,5.1]	0.0		0.0			—	—	—	—	—	—	—	0.4	[0.1,2.6]	1
Other		0.7	[0.1,5.2]	0.8	[0.1,5.4]	0.0			—	—	—	—	—	—	—	0.7	[0.2,2.9]	2
Reason for delivery at this place**		n=130		n=124		n=16		0.897	n=148		n=84		n=38		n=270			
Affordable cost		53.1	[43.7,62.2]	56.5	[48.1,64.5]	56.3	[35.0,75.4]		61.5	[53.8,68.6]	33.3	[23.9,44.3]	76.3	[59.9,87.4]	54.8	[48.8,60.7]	148	
Close to place of residence		10.0	[5.8,16.8]	10.5	[5.8,18.3]	12.5	[3.6,35.1]		16.9	[11.7,23.7]	3.6	[1.1,10.7]	0.0		10.4	[7.1,15.0]	28	
Not aware of other facilities		6.2	[3.0,12.3]	5.6	[2.5,12.1]	0.0			4.7	[2.0,10.6]	8.3	[4.2,16.0]	2.6	[0.4,17.0]	5.6	[3.2,9.4]	15	
Like staff/treatment quality		13.1	[8.6,19.4]	6.5	[3.2,12.7]	18.8	[2.8,64.7]		4.1	[1.7,9.5]	20.2	[12.9,30.3]	13.2	[5.5,28.1]	10.4	[7.1,15.0]	28	
Emergency or high risk birth		9.2	[5.4,15.4]	8.9	[5.1,15.0]	6.3	[1.1,28.7]		8.8	[5.3,14.3]	13.1	[7.4,22.2]	0.0		8.9	[6.1,12.8]	24	
Other		7.7	[4.4,13.2]	10.5	[6.0,17.7]	6.3	[1.1,28.7]		3.4	[1.4,7.8]	20.2	[13.2,29.8]	5.3	[1.3,19.2]	8.9	[6.0,12.9]	24	
No reason		0.8	[0.1,5.4]	1.6	[0.4,6.2]	0.0			0.7	[0.1,4.7]	1.2	[0.2,8.2]	2.6	[0.4,17.0]	1.1	[0.4,3.4]	3	
Paid for delivery (%)**		n=130		n=124		n=16		0.02	n=148		n=84		n=38		n=270			
Yes		19.2	[13.4,26.7]	46.0	[37.7,54.4]	31.3	[15.5,53.0]		19.6	[13.8,27.1]	57.1	[46.2,67.4]	26.3	[15.1,41.7]	32.2	[26.6,38.4]	87	
No		80.0	[72.7,85.8]	54.0	[45.6,62.3]	68.8	[47.0,84.5]		80.4	[72.9,86.2]	42.9	[32.6,53.8]	71.1	[56.2,82.4]	67.4	[61.4,72.9]	182	
Don't know		0.8	[0.1,5.2]	0		0			0		0		2.6	[0.4,16.2]	0.4	[0.1,2.6]	1	
Cost of delivery among all deliveries (Jordanian Dinars)**	Median	0	—	0	—	0	—	—	0	—	85	—	0	—	—	0	—	270
	Mean	44.7	[26.0,63.4]	98.7	[71.5,125.9]	55.0	[7.3,102.7]	0.007	40.5	[23.8,57.2]	131.9	[97.8,166.0]	48.9	[12.6,85.3]	<0.001	70.1	[53.3,86.9]	
Deliveries involving a cesarean section**	Percent	28.5	[22.4,35.4]	36.3	[29.0,44.3]	31.3	[16.8,50.6]	0.653	33.1	[26.7,40.2]	29.8	[21.9,39.1]	34.2	[21.3,50.0]	0.157	32.2	[27.5,37.3]	87
Delivery cost among those receiving a cesarean section (Jordanian Dinars)***	Median	0	—	0	—	0	—	—	0	—	140	—	0	—	—	0	—	87
	Mean	57.7	[15.4,100.1]	138.6	[82.9,194.2]	80.0	[75.8,235.8]	0.085	70.5	[28.1,112.9]	177.0	[106.5,247.5]	68.5	[6.6,143.5]	0.031	100.8	[64.1,137.5]	
Newborn children receiving a birth certificate**	Percent	93.8	[88.4,96.8]	88.7	[80.6,93.7]	93.8	[71.3,98.9]	0.569	88.5	[81.5,93.1]	98.8	[91.8,99.8]	86.8	[71.9,94.5]	0.01	91.5	[87.1,94.5]	247

* among households with a woman who delivered in the past year in Jordan

** among deliveries at a health facility

*** among deliveries involving a cesarean section at a health facility