

**Title:**

Health needs and service use of newly arrived Syrian refugees in Toronto

**Authors:**

**Anna Oda** RN MN, Research Analyst at Centre for Addiction and Mental Health (CAMH)

**Andrew Tuck** MA, Research coordinator at Centre for Addiction and Mental Health (CAMH)

**Branka Agic** PhD, Manager of Health Equity department at the Centre for Addiction and Mental Health (CAMH) and Assistant professor at the University of Toronto- Dala Lana School of Public Health

**Michaela Hynie** PhD, Associate professor at York University- Department of Psychology

**Brenda Roche** PhD, Research director at the Wellesley Institute

**Kwame McKenzie** MD MRCPsych (UK), Centre for Addiction and Mental Health (CAMH) and CEO of the Wellesley Institute

**Corresponding author:**

Anna Oda RN MN, Centre for Addiction and Mental Health (CAMH)

[anna.oda@camh.ca](mailto:anna.oda@camh.ca)

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**Declaration of author:**

No competing interests

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**Abstract**

**Background:** Canada welcomed 33,723 Syrian refugees between November 2015 and 2016. This paper reports the results of a rapid assessment of health needs and service use of newly arrived Syrian refugees to Toronto. Because differences exist in state responsibility for resettlement and support, this study also disaggregates needs and service use between government assisted and privately sponsored refugees.

**Methods:** A cross-sectional study was conducted in Toronto, Canada of 400 Syrian refugees. The study collected socio-demographic information, health and mental health status, and service use and unmet needs.

**Results:** The sample of Syrian refugees reported high perceived physical and mental health. Over 90% of the sample had seen a doctor in the first six months of arrival and 75% had a family doctor they saw regularly. However, despite seeing healthcare providers since arrival, almost half of all respondents reported unmet health needs. These needs were mostly unmet because of barriers to accessing care such as wait times or costs. There were significant differences in a number of demographic characteristics between GARs and PSRs as well as differences in health needs and healthcare use.

**Interpretation:** This group was made to feel welcome and received extensive support upon arrival as evidenced by the fact that 90% had seen a doctor. The local response could explain their high self-perceived physical and mental health during the first year of resettlement. Newly arrived Syrian refugees are already starting to report unmet health needs which requires more comprehensive care and management beyond the initial support upon resettlement.

**Introduction**

The Syrian refugee migration is one of the largest humanitarian crises in recent history. It is estimated that almost 4.9 of the 21 million refugees worldwide are from Syria<sup>1</sup>. Since November 2015, Canada has welcomed 33,723 Syrian refugees, including 17,627 government assisted refugees (GARs), 12,651 privately sponsored refugees (PSRs) and 3,445 blended visa office-referred cases (BVORs) <sup>2</sup>. Approximately 43% of all arrivals to Canada have landed in Ontario with almost 40% of these coming to Toronto<sup>2</sup>. Before and during the migration journey, many refugees experience hardships and stressful life events including conflict-related violence, family loss, exploitation, injuries and poor nutrition that put them at risk for physical and mental health problems<sup>3,4</sup>.

Research suggests that refugees have unique health needs that are different from the general Canadian population. They also experience barriers to accessing services<sup>5</sup>. Prior to arrival, Syrian refugees have a medical history and a physical examination but the results are not shared with local service providers<sup>6</sup>. The absence of this data makes the development of needs-based health planning and the development of appropriate services problematic<sup>7</sup>.

Moreover, to date, there is no data on differences in service use and health-related outcomes between GARs and PSRs. The limited data we have comparing the experiences and outcomes of GARs versus PSRs raises important questions for health planners and policy makers about the realities of resettlement for different categories of refugees, particularly in terms of the social determinants of health, including access to health services<sup>8,9</sup>.

This study was funded by the health planners in Toronto to help them develop an appropriate service response to the influx of Syrian refugees. Given the increased role of private sponsorship in this

particular refugee response they also wanted to understand if there were any differences in needs between government assisted and privately sponsored refugees. The specific aims of the study were to:

1. examine the health needs of Syrian refugees in Toronto within their first few months of arrival
2. document health service use of newly arrived Syrian refugees
3. investigate differences in health and service use for government assisted and privately sponsored refugees.

## Methods

### Study design:

This study used a cross-sectional interview design to provide a snapshot of the differences in health, health needs and health service use between GARs and PSRs in their first few months in Canada. Recruitment and data collection occurred between April 2016 and September 2016.

### Setting:

The study took place in Toronto, Ontario, Canada. Interviews were conducted in hotels where Syrian refugees were initially hosted, participants' homes and partnering community and settlement agencies including COSTI Immigrant Services, the Arab Community Centre of Toronto (ACCT), the Canadian Centre for Victims of Torture (CCVT) and Armenian Family Support Services.

### Sample:

The aim was to sample 400 newly resettled Syrian refugees across the Greater Toronto Area (GTA). The initial recruitment was conducted through the distribution of research flyers in hotels, and through direct referrals and communication with community and settlement agency partners. After initial contact, flyer distribution and entry an acceptance by groups in temporary hotels and those linked to partner organizations, news of the study spread by word of mouth. Inclusion criteria were: Syrian refugee who speaks Arabic or English; whose length of stay in Canada is 12 months or less; and who is 18 years of age or older. 500 Syrian refugees were approached for the study, 463 individuals were interested in taking part and 400 of these were invited for interviews in order to reach the target sample.

### Measures:

Participants were interviewed face-to-face in Arabic. Interviews took about half an hour. Data was collected using three survey tools: the TC LHIN Socio-Demographic questionnaire<sup>10</sup>, the RAND-36 Health Survey Questionnaire<sup>11</sup> and the Canadian Community Health Survey questions on health service use and unmet needs<sup>12</sup>.

The first measure was the Arabic version of the TC LHIN Socio-Demographic Data Collection tool<sup>10</sup>. Study participants were asked demographic questions about their sponsor (GARs, PSRs), date of arrival in Canada, gender, language preference when speaking with healthcare providers and chronic illness or disability.

The second measure was the Arabic version of the RAND-36 Health Survey Questionnaire (RAND-36)<sup>11</sup>. The RAND-36 consists of 36 items that measure eight health scales: physical functioning, bodily pain, role limitations due to physical health problems, general health perceptions, role limitations due to personal or emotional problems, general mental health, social functioning and energy/fatigue in the past four weeks<sup>11,13</sup>.

Finally, questions from the Canadian Community Health Survey related to participants’ healthcare use and unmet health needs were verbally translated by the research assistant at the time of the interview<sup>12</sup>.

**Analysis:**

**Socio-demographics, health needs and health service use**

Descriptive statistics of the total sample as well as inferential statistical measures including independent samples t-tests and Chi Square were used to determine differences between GARs and PSRs. BVORs and individuals whose sponsorship status was unknown were included in the full sample description but excluded from further analyses.

**Perceived physical and mental health**

To calculate RAND-36 scores, we followed the original RAND scoring recommendations<sup>13</sup>. First, we calculated the raw scores for the eight health scales (physical functioning, bodily pain, role limitations due to physical health problems, general health perceptions, role limitations due to personal or emotional problems, general mental health, social functioning and energy/fatigue in the past four weeks). Raw scores range from 0-100, with high scores indicating a more favourable health state<sup>13</sup>. After calculating the raw score for each of the eight scales, those scores were weighted based on the Item Response Theory (IRT) method to produce T-scores, and normalized against a standardized United States population<sup>14</sup>. The T-scores were then summed together accordingly to form two composite scores for physical health (PH) and mental health (MH)<sup>14</sup>. We used independent samples t-test to measure the differences in RAND-36 scores between GARs and PSRs.

**Results**

**Sample Characteristics:**

Of the 400 refugees interviewed 44.3% were GARs, 52.3% were PSRs and 3.5% were on a blended visa office-referred (BVOR) program or had unknown status. Among privately sponsored refugees 91.4% were sponsored by the Armenian community and 5.7% by a Catholic church. Of the total sample, 55.3% were female and 44.8% were male. Participants ranged in age from 18 to 86 years old with the largest number of participants falling into the working age group (see Table 1 for details). On average, PSRs were 10 years older than GARs. Respondents had been in Canada for less than one month to one year. The average length of residence in Canada was 4.43 months with a standard deviation of 2.24. On average, PSRs had resided in Canada longer than GARs at the time of the interview. While 39% of all GARs were interviewed in hotels where they were initially hosted, all PSRs were interviewed in the community where they were resettled. Low literacy levels were noted in the sample with more than a half of the total sample (54.3%) reported less than a high school education. PSRs had significantly higher levels of education than GARs. Regarding language, only 59.5% of the total sample preferred to speak in Arabic to their healthcare providers.

**Perceived physical and mental health:**

Regarding physical health, 50.7% reported that their current health was similar to that of a year ago; 32.8% reported having better health; and 16.5% reported having worse health compared to one year ago (see Table 2).

The sample of Syrian refugees had better perceived physical and mental health (using the RAND-36 tool) than a standardized USA population<sup>14</sup>. There were significant differences between the two sponsorship

groups. PSRs had a significantly higher mean perceived score in all physical and mental health scales (see Table 2).

Of the total sample, 105 individuals (26.3%) reported having one or more of the following: chronic illness, developmental disability, learning disability, mental illness and/or physical disability. Among those with a chronic illness, 56 people reported cardiovascular diseases, 29 people reported diabetes and 20 people reported musculoskeletal diseases.

### **Health needs and health service use:**

Nearly all of participants (91.3%) reported seeing a doctor at least once since arriving to Canada (see Table 3). More than three-quarters of the total sample reported having a family doctor who they saw, on average, every other month since arrival. There was a significant difference between GARs and PSRs in that almost all PSRs, compared to only six of ten GARs, reported having a family doctor. While a higher proportion of PSRs than GARs accessed an eye specialist, a higher proportion of GARs accessed a dentist and spoke to a social worker about their physical or mental health (see Table 3).

Despite seeing healthcare providers upon arrival to Canada, almost half of the total sample (49%) reported some unmet healthcare need, with a higher proportion of GARs (55.9%) reporting unmet healthcare needs compared to PSRs (41.6%). The majority of respondents (84.2%) who reported an unmet healthcare need mentioned only one type including the treatment of a physical health problem or dental care. The three most often reported reasons for respondents not having had their healthcare needs met were: long wait times (34.2%), costs associated with services (27.6%) and lack of time to seek health services (19.9%).

### **Interpretation**

This study is the first assessment of the health status and needs of newly arrived Syrian refugees resettling in Canada. It offers a snapshot of health service use, difficulties in accessing services and a comparison of privately versus government assisted refugee groups. This study presents demographic characteristics as well as health service use and health needs among a sample of newly resettled Syrian refugees in Toronto, Ontario. Newly resettled Syrian refugees are a heterogeneous group with different demographic characteristics including age, preferred language and levels of education. The participants of this study reported better physical and mental health than a general population. Despite accessing healthcare providers on a regular basis since arrival to Canada, almost half of respondents reported unmet health needs. Finally, a number of significant differences between the two main sponsorship groups were noted.

Our findings are in line with previous studies on refugee health indicating that upon their first year of arrival, refugees report better health than the average Canadian population<sup>15</sup>. Evidence suggests that the high perceived health status can be attributed to the initial resettlement support and access to health services through the Resettlement Assistance Program (RAP) or private sponsorship which is offered for up to one year<sup>16</sup>. Refugees are also eligible for the Interim Federal Health Program (IFHP) which helps cover some medications and dental costs, also offered for up to one year<sup>16</sup>. Although our sample perceived their health as good, over a quarter reported one or more chronic illnesses or disabilities; with the majority reporting one or more chronic illness. This is not surprising when we consider that diabetes and cardiovascular diseases are noted as the most prevalent health concerns among Syrian refugees who are screened through the immigration medical examination prior to coming to Canada<sup>17</sup>. Our findings also coincide with reports indicating the high prevalence of non-communicable

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diseases (NCD) in the Syrian population. Literature suggests that NCD among Syrian refugees in Jordan posed the highest burden on the Jordanian healthcare system<sup>18,19</sup>. Literature shows that refugees are at risk for deteriorating mental and physical health soon after arriving in Canada<sup>16, 20,21</sup>. Our findings related to the significantly emerging unmet health needs might predict a course towards this outcome. Existing data suggests that on top of the pre-existing health problems prior to migration such as injuries and chronic illnesses, refugees are more likely to experience socio-economic barriers during the subsequent years of resettlement in Canada, which might contribute to their health status deterioration<sup>16</sup>.

While nearly all of our study participants saw a doctor at least once since arriving to Canada and over three-quarters reported having a family doctor, our findings show significant unmet health needs. Despite the extensive support Canada has put in place for the initial resettlement of newly arrived Syrian refugees including the extended health coverage and Ontario's exemption from the three month waiting time for provincial health coverage, long wait times to see healthcare providers and costs associated with some services not fully covered through the IFHP, such as dental care, were the most often-reported reasons by our study participants for not receiving needed care<sup>22</sup>. Our findings are in line with national data showing that patients in Canada continue to experience long wait times to receive medically necessary treatments<sup>23</sup>. Wait times specifically have been emphasized in the literature due to their serious consequences including increased pain, suffering and negative mental health outcomes<sup>23</sup>. Furthermore, a lack of appropriate services leaves many refugees under-served<sup>24</sup>. The high number of reported unmet health needs and the reasons associated with them highlight the existing gaps in the Canadian healthcare system and indicate that more comprehensive care and management is required beyond the initial support provided upon refugee resettlement.

The study also showed differences in access to healthcare services between GARs and PSRs. The private sponsorship program has played an important role in increasing the number of resettled refugees in Canada and the process helps refugees get timely support<sup>25</sup>. It is important to recognize that some of the differences noted between GARs and PSRs may be linked to the length of time in Canada as well as the differing processes. There was no difference between the two groups in seeing a doctor for health care concerns; however, there was a significant difference between the two groups regarding whether or not they had a family doctor. At the time of the interview PSRs had been in Canada longer while a significant proportion (39%) of the government sponsored refugees were still living in hotels which was a factor in them not having a family doctor.

**Limitations and implications for future research:**

Results from this study have limited generalizability because a high proportion of GARs were interviewed in hotels and had a short length of stay in Canada. The data collected in this study was based on self-reports; further assessment of individuals' personal health information records might be useful for accurate reporting of healthcare usage by newly arrived Syrian refugees. Moreover, longitudinal research is also needed to explore Syrian refugees' health, health service use and health needs as they change in subsequent years after resettlement to Canada. The snowball method of sampling may have also introduced bias. However, in the Toronto context the approach and findings are useful in offering a lens through which the service needs of this new refugee group can be considered.

**Conclusion:**

In conclusion, this was the first Ontario study on Syrian refugees. Canada's commitment to increase the number of resettled refugees necessitates further investment in greater short-term support to meet the health needs of refugees during the initial stages of resettlement. Addressing long wait times and

investing in covering further medical costs such as dental care under the IFH program might reduce long-term public costs and ensure that newly arrived refugees are reaching their potential in their new home.

Confidential



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Table 1: Demographic profile for the sample and relationship between demographics and sponsorship (PSRs compared to GARs)

	Total sample n=400	GARs n=177	PSRs n=209	Sig.		
				Measure	df	P value
<b>Age Mean (<math>\pm</math>SD)</b>	40.59( $\pm$ 14.91)	35.45 ( $\pm$ 12.39)	45.14 ( $\pm$ 15.76)	t=-6.63	384	<0.001
<b>Gender (% Female)</b>	55.3	48.0	61.7	X <sup>2</sup> =8.161	1	0.017
<b>Sponsorship status (%)</b>						
GARS	44.25					
PSRs	52.25					
BVORs	3					
Prefer not to answer	0.5					
<b>Residency in Canada Mean (<math>\pm</math>SD)</b>	4.43 ( $\pm$ 2.24)	2.98 ( $\pm$ 1.64)	5.62 ( $\pm$ 1.94)	t=-14.28	384	<0.001
<b>Education (%)</b>				X <sup>2</sup> =33.37	2	<0.001
Secondary or less	54.3	70.1	41.6			
High School	21.0	16.4	24.4			
Bachelor degree or more	24.7	13.6	34.0			
<b>Preferred language (%)</b>						
Arabic	59.5					
Armenian	29.0					
English	8.8					
Kurdish	2.0					
Turkish	0.8					

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Table 2: RAND-36 scores

	Total sample n=400	GARs n=177	PSRs n=209	Sig.		
				Measure	df	P value
<b>Health now compared to 1 year ago (%)</b>				$\chi^2=4.46$	2	0.108
Better	32.8	37.3	28.2			
Same	50.7	45.8	56.0			
Worse	16.5	16.9	15.8			
<b>Physical health composite (PHC) standardized t-score</b>	58.23 (±10.49)	55.62 (±11.96)	60.65 (±8.42)	t=-4.83	384	<0.001
Physical functioning (raw score)	85.45 (±23.03)	82.68 (±24.87)	88.54 (±20.17)	t=-2.55	384	0.011
Role limitations due to physical health problems (raw score)	78.88 (±38.05)	70.48 (±43.56)	85.89 (±31.27)	t=-4.03	384	<0.001
Pain (raw score)	73.39 (±31.85)	65.90 (±35.45)	80.73 (±26.63)	t=-4.68	384	<0.001
General health (raw score)	67.35 (±20.03)	63.56 (±20.95)	70.62 (±18.45)	t=-3.52	384	<0.001
<b>Mental health composite (MHC) standardized t-score</b>	57.37 (±12.03)	54.50 (±13.25)	59.79 (±10.39)	t=-4.39	384	<0.001
Social functioning (raw score)	81.53 (±25.88)	73.73 (±29.04)	88.22 (±20.57)	t=-5.72	384	<0.001
Role limitation due to emotional problems (raw score)	69.42 (±42.29)	60.08 (±47.15)	77.19 (±36.34)	t=-4.02	384	<0.001
Energy/fatigue (raw score)	62.26 (±19.79)	59.89 (±21.02)	64.38 (±18.04)	t=-2.26	384	0.024
Emotional well-being (raw score)	71.8 (±19.06)	67.39 (±21.46)	74.33 (±16.34)	t=-3.60	384	<0.001

Table 3: Healthcare usage and unmet needs by sponsorship status

	Total sample <i>n</i> =400	GARs <i>n</i> =177	PSRs <i>n</i> =209	Sig.		
				Measure	df	P value
<b>Do you have a family Doctor (%YES)</b>	79.8	58.2	97.6	$\chi^2=91.47$	1	<0.001
<b>Talked to the following healthcare providers about physical and/or mental health (%YES)</b>						
Doctor	91.3	88.7	93.3	$\chi^2=2.53$	1	0.112
Eye specialist	48.5	35.0	59.3	$\chi^2=22.67$	1	<0.001
Dentist	42	49.2	32.5	$\chi^2=11.01$	1	0.001
Social worker	14.5	31.6	δ	$\chi^2=73.92$	1	<0.001
Other specialists	8.8	8.5	8.1	$\chi^2=0.02$	1	0.904
Other allied healthcare providers	13	21.5	4.3	$\chi^2=26.40$	1	<0.001
<b>Unmet health needs (%YES)</b>	49	55.9	41.6	$\chi^2=7.86$	1	0.005

Notes: δ = data suppressed; Other specialists include surgeon, allergist, orthopedist and psychiatrist; other allied healthcare providers include nurse, psychologist and physiotherapist.

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