

Uninsured immigrant and refugee children presenting to Canadian paediatric emergency departments: Disparities in help-seeking and service delivery

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INTRODUCTION: Access to health care for medically uninsured immigrant and refugee children is a public health concern due to the consequences of delayed or substandard care for child development and health.

OBJECTIVE: To explore possible differences in help-seeking and service delivery across migratory statuses, institutions and provinces.

METHODS: A review was undertaken of 2035 emergency files of immigrant, refugee and undocumented children without provincial health care coverage who sought care at three major paediatric hospitals in Montreal (Quebec) and Toronto (Ontario) during 2008 and 2009.

RESULTS: Refugee claimant children with Interim Federal Health Program benefits consulted for less urgent problems than the overall hospital population, except in one hospital that had a multicultural paediatric ambulatory clinic. Undocumented children and new permanent resident immigrant children within the three-month waiting period for provincial health care coverage were over-represented in the very urgent triage category and presented more often for injuries, trauma and mental health problems than did refugee claimant children.

DISCUSSION/CONCLUSIONS: Wide interhospital differences suggest that the predicament of limited access to health care of these groups of vulnerable medically uninsured children needs to be addressed through further research to inform policies and develop training.

Key Words: *Emergency; Migration; Paediatric; Refugee*

Most health care programs and policies are directed at 'Canadian children' who are native-born or of immigrant origin, and do not consider the growing number of immigrant, refugee or undocumented children who do not have access to provincial health insurance, and have either partial coverage provided by the federal government ('federally insured') or no coverage whatsoever ('uninsured'). Pilot projects in Montreal (Quebec) and Toronto (Ontario) have suggested that health care access problems for these vulnerable groups are numerous and include delays in emergency care, difficulties in accessing specialized care, unavailability of rehabilitation services and under-reporting of abuse (1,2). Despite this, very little is known about how these

Les enfants immigrants et réfugiés non assurés qui se présentent aux départements d'urgence pédiatrique du Canada: les disparités dans la recherche d'aide et la prestation de services

INTRODUCTION : L'accès aux soins de santé pour les enfants immigrants et réfugiés qui n'ont pas d'assurance est un problème de santé publique, en raison des conséquences du retard des soins ou des soins de second ordre sur leur développement et leur santé.

OBJECTIF : Explorer les différences possibles de recherche d'aide et de prestation des soins selon les statuts migratoires, les établissements et les provinces.

MÉTHODOLOGIE : Les chercheurs ont entrepris une analyse de 2 035 dossiers urgents d'enfants immigrants, réfugiés et sans papiers, sans assurance-maladie provinciale, qui ont consulté dans trois grands hôpitaux pédiatriques de Montréal, au Québec, et de Toronto, en Ontario, en 2008 et en 2009.

RÉSULTATS : Les enfants demandeurs du statut de réfugié profitant des prestations du Programme fédéral de santé intérimaire consultaient pour des problèmes moins urgents que l'ensemble de la population hospitalière, sauf dans un hôpital doté d'une clinique ambulatoire pédiatrique multiculturelle. Les enfants sans papiers et les enfants immigrants qui étaient de nouveaux résidents permanents assujettis à la période d'attente de trois mois avant d'avoir droit à l'assurance-maladie provinciale étaient surreprésentés dans la catégorie de triage très urgent et présentaient plus souvent des blessures, des traumatismes et des problèmes de santé mentale que les enfants demandeurs du statut de réfugié.

EXPOSÉ ET CONCLUSIONS : D'après les vastes différences interhospitalières, il faudrait poursuivre les recherches sur la situation difficile causée par l'accès limité aux soins de santé de ces groupes d'enfants non assurés vulnérables pour étayer les politiques et élaborer les formations.

children actually access essential health care, with what conditions they present, or which services they require and receive.

In diverse immigrant-receiving countries, immigration policy changes, together with the increasing burden of unremunerated medical services on hospital budgets, have rekindled the debate about who should provide and pay for medical services to newly arrived immigrants, refugee claimants and undocumented migrants who are not entitled to the same health care coverage as citizens and established permanent residents (3-6).

Lack of health care insurance has been associated with delay in care seeking and, according to practitioners, substandard health care. Access to health care for uninsured children is of particular

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TABLE 1
Migratory status of children's parents at the emergency department according to institution

Migratory status*	Institution			Total (n=2122)
	Hospital 1 (n=461)	Hospital 2 (n=681)	Hospital 3 (n=982)	
Refugee claimants/ federally insured	287 (62.3)	322 (47.3)	577 (58.7)	1186 (55.9)
Uninsured arrived permanent residents and undocumented/ 'grey zone' individuals	163 (35.4)	281 (41.3)	392 (41.3)	836 (39.4)
Probably without papers	159 (34)	279 (41)	17 (4)	809 (38.1)
Permanent immigrant (three-month waiting period)	0 (0)	0 (0)		17 (0.8)
Refused refugee status	3 (0.7)	0 (0)		4 (0.2)
Between two statuses, provide details	1 (0.2)	0 (0)		3 (0.1)
Temporary foreign worker	0 (0)	2 (0.3)	0 (0.0)	2 (0.1)
Temporary suspension of removal	0 (0)	0 (0.0)		1 (0.0)
Visitors	11 (2.4)	78 (11.5)		≥89 (4.7)

Data presented as n (%). Hospitals 1 and 2 are located in Montreal (Quebec) and Hospital 3 is located in Toronto (Ontario). * $P \leq 0.0001$

concern because of the long-lasting consequences of inadequate care on child development and later success, and because of the duty of the state to protect those most vulnerable. There is growing recognition of the far-reaching impact of good health during pregnancy and childhood on adult health (7). In the United States, immigration status appears to be one of the most important risk factors for children who lack health care coverage (8,9). In Europe, paediatricians report that undocumented children lack basic rights to housing, education, food and health care (10). Underutilization of preventive health care has been associated with poorer health outcomes among these undocumented children such as longer stays in hospitals, more acute health crises and higher mortality rates (1,11).

In 2010, there were 5060 refugee claimant children younger than 15 years of age living in Canada eligible for temporary health care coverage for emergency and essential health services only under the Interim Federal Health Program (IFHP) (12); 60,650 newly arrived immigrant children younger than 15 years of age with permanent resident status who had settled in Quebec, Ontario and British Columbia, where they were subject to a three-month waiting period for provincial health care coverage; and an estimated population of 200,000 to 400,000 undocumented individuals, one-quarter of whom are children (13,14). However, very little is currently known about these federally insured or uninsured populations, their access to health care and their health statuses.

The present article presents a profile of the utilization of paediatric emergency departments by medically uninsured immigrant, asylum-seeking and undocumented children in Canada, as documented by a review of emergency medical record files of three major paediatric hospitals in Ontario and Quebec.

METHOD

Research participants: Inclusion/exclusion criteria

The following categories of children and youth with a precarious status regarding their limited or lack of entitlement to health care were included in the present study:

Refugee claimant children: These children are partially covered for emergency and essential health care services only by the IFHP, administered by the federal government.

Undocumented children and 'grey zone' children: Some children are undocumented either because their family stayed in Canada beyond the date set for their removal following refusal of their refugee claim, or their temporary visitor or working visa expired. A proportion, although Canadian-born, are also effectively uninsured, having been born to parents lacking immigration status (2,15) who, for various reasons, have not sought the health care coverage to which their children are, in fact, entitled. They, together with other 'grey zone' children missing the documentation required to obtain federal or provincial health care coverage, are theoretically entitled to services but, in practice, have no access.

New permanent resident children: Officially landed immigrant children whose families have settled in Quebec, Ontario or British Columbia are subject to a three-month waiting period for provincial health care coverage.

In three major paediatric hospitals in Montreal (hospitals 1 and 2) and Toronto (hospital 3), the emergency department medical files of uninsured children were identified through a two-step process. First, all paediatric emergency files for children zero to 18 years of age lacking a *Régie de l'assurance maladie du Québec* (RAMQ) or Ontario Health Insurance Plan (OHIP) number were identified for a two-year period (2008 to 2009). In hospital 1, there were 5517 such files without a RAMQ number, 500 of which were randomly selected by the medical records personnel for data extraction by project assistants. In hospital 2, there were 805 files without a RAMQ number in the same period, all of which were similarly reviewed. Hospital 3 used an electronic database, through which 576 refugee claimants with IFHP coverage and 406 other uninsured immigrant, refugee and undocumented patients without provincial health care insurance were identified via two respective payment codes for the same two years; the 982 files represent a total population sample. Files for nonmigrant, out-of-province or forgotten/lost card clients were excluded from the analysis. For the three hospitals, the total number of files without RAMQ/OHIP for the years 2008 and 2009 included in the project database was 2124 (visitors included for hospitals 1 and 2), or 2035 cases if only new permanent residents, refugee claimants and other uninsured migrants were included.

The following information was extracted from the medical records: sociodemographic profile (age, sex, languages spoken, region or country of birth); migratory status categories (refugee claimant, undocumented, 'grey zone', new permanent residents with delay of coverage and visitors); level of emergency at intake (standard scale used in hospital triage, ranging from 1 to 5, with 1 being the most urgent); reason for consultation (categories of medical and social problems); and services received, including hospitalization, laboratory tests, medication and follow-up. Sociodemographic information and migratory status are not systematically documented in medical records and were missing in numerous files.

Data analyses

Descriptive and bivariate analyses (χ^2 and Student's *t* tests) were used to examine similarities and differences across migratory status, institutions and provinces, comparing federally insured refugee children with other groups of uninsured refugee and immigrant children, referred to in the text and tables as 'other uninsured'.

RESULTS

Refugee claimants constituted 55.9% and other uninsured (undocumented, 'grey zone', new permanent resident) constituted 39.4% of the total sample ($\chi^2[4] = 114.3; P < 0.001$). Because of the lack of systematic documentation of migratory status in the medical records, it was very difficult, and often impossible, to identify the precise immigration status of individuals within this second group of uninsured children (Table 1).

TABLE 2
Evaluation of emergency according to paediatric hospital and migratory status

Institution	Level of emergency (1 = highest, 5 = lowest)				
	1	2	3	4	5
Hospital 1 (Montreal, Quebec)					
Refugee claimants, n=257	3 (1.2)	34 (13.3)	78 (30.6)	102 (40.0)	38 (14.9)
Uninsured (immigrants, undocumented and 'grey zone'), n=159	2 (1.3)	21 (14.0)	36 (24.0)	60 (40.0)	31 (20.7)
Hospital population, n=78,244	69 (0.1)	7405 (9.5)	20,395 (26.1)	42,837 (54.7)	7538 (9.6)
Hospital 2 (Montreal, Quebec)					
Refugee claimants, n=321	0 (0.0)	7 (2.2)	68 (21.2)	197 (61.4)	49 (15.3)
Uninsured (immigrants, undocumented and 'grey zone'), n=355	4 (1.1)	20 (7.2)	76 (27.2)	149 (53.4)	30 (10.8)
Hospital population, n=60,239	530 (0.9)	4629 (7.7)	18,331 (30.4)	30,331 (50.4)	6418 (10.7)
Hospital 3 (Toronto, Ontario)*					
Refugee claimants, n=326	0 (0.0)	36 (11.0)	142 (43.6)	135 (41.4)	13 (4.0)
Uninsured (immigrants, undocumented and 'grey zone'), n=272	3 (1.1)	39 (14.7)	120 (45.3)	93 (35.1)	10 (3.8)
Hospital population, n=51,927	224 (0.4)	10,992 (21.2)	24,666 (47.5)	14,951 (28.8)	1094 (2.1)
Total					
Refugee claimants	3 (0.3)	77 (8.5)	288 (31.9)	434 (48.1)	100 (11.1)
Uninsured (immigrants, undocumented and 'grey zone')	9 (1.3)	80 (11.5)	232 (33.4)	302 (43.5)	71 (10.2)
P	≤0.01	≤0.05	NS	NS	NS

Data presented as n (%) unless otherwise indicated. *Triage data were available for 598 files for hospital 3. NS Not significant

During the same years, undocumented 'grey zone' and uninsured new immigrants constituted 0.37% of all emergency department visits in Toronto (hospital 3) and 0.33% in Montreal (combining hospital 1 and hospital 2).

The overall number of paediatric emergency files of uninsured immigrant and refugee claimant children varies widely from hospital to hospital in Montreal. The sociodemographic profile also varied according to hospital and province, reflecting regional differences in migration and resettlement patterns as well as local linguistic differences associated with help-seeking pathways. Hospital 1 had a slightly older sample, with 20.5% being teenagers (13 to 18 years of age).

Triage level of emergency for uninsured children accessing emergency care

The triage emergency ratings of refugee claimants and other uninsured children were significantly different for the very urgent ($\chi^2[10] = 15,290.01$; $P < 0.001$) and urgent ($\chi^2[10] = 89,055.93$; $P < 0.001$) categories (points 1 and 2 of the emergency triage scale, respectively) (Table 2).

The comparison of the mean emergency ratings for refugee claimant and other uninsured immigrant children with that of the general hospital population revealed a wide disparity across hospital profiles. In hospitals 2 (Montreal) ($t = 4.81$; $P < 0.001$) and 3 (Toronto) ($t = 6.83$; $P < 0.001$) the mean emergency rating at triage for uninsured immigrant and refugee claimant children was significantly higher (less urgent) than the mean emergency rating of the overall hospital populations. In contrast, in hospital 1 (Montreal), the refugee claimant and uninsured children status mean emergency rating was comparable with the overall hospital population mean emergency rating ($t = -1.62$; $P = 0.105$).

Medical and social problems of uninsured immigrant and refugee children accessing paediatric emergency departments

Although the most frequent medical problems diagnosed were quite similar for refugee claimant children and for uninsured immigrants, refugee claimant children were more frequently diagnosed with respiratory virus infection ($\chi^2[1] = 11.2$; $P = 0.001$), abdominal pain ($\chi^2[1] = 4.44$; $P = 0.035$), sickle cell anaemia ($\chi^2[1]$

$= 7.85$; $P = 0.005$) and appendicitis ($\chi^2[1] = 6.85$; $P = 0.009$), while the other group of uninsured children presented more often for musculoskeletal injuries or lacerations ($\chi^2[1] = 27.74$; $P < 0.001$), depression ($\chi^2[1] = 16.99$; $P < 0.001$), post-traumatic stress disorder ($\chi^2[1] = 13.19$; $P < 0.001$), suicidal thoughts ($\chi^2[1] = 6.97$; $P = 0.008$) or substance abuse ($\chi^2[1] = 3.91$; $P = 0.048$) (Table 3).

A difficult socioeconomic situation ($\chi^2[1] = 5.31$; $P = 0.021$) and an insufficient diet ($\chi^2[1] = 13.58$; $P < 0.001$) were more frequently reported for refugee children covered by the IFHP, whereas family or conjugal violence ($\chi^2[1] = 6.96$; $P = 0.008$) was more frequently reported for the other uninsured children (Table 3). Again, inter-hospital differences, in this case in reporting, were striking. Specifically, in hospital 2 (Montreal), social problems ($\chi^2[1] = 47.01$; $P < 0.001$) were not noted in medical record files, and family or conjugal violence ($\chi^2[1] = 21.67$; $P < 0.001$) were noted in Toronto (hospital 3).

Treatment and follow-up

Hospitalization of refugee claimant children was significantly more frequent in hospital 1 (25.1%) compared with hospital 2 (2.5%) or hospital 3 (9.2%) ($\chi^2[8] = 275.33$; $P < 0.001$) (Table 4). Medication prescription also varied from hospital to hospital. In hospital 2, 82.6% of children were prescribed medication, compared with 55.7% in hospital 3 and 34.3% in hospital 1 ($\chi^2[8] = 410.37$; $P < 0.001$). In both hospital 1 and hospital 3, the overall number of children leaving with another follow-up plan documented in the file was approximately 20%; in contrast, it was 2.0% in hospital 2, where 10.6% of children also left before ever seeing a doctor (Table 4).

DISCUSSION

Results indicate that the pattern of health care access and type of health care needs for which emergency paediatric hospital care is sought is different for refugee children with federal health care coverage than it is for the other uninsured children, which include undocumented migrants, 'grey zone' and newly arrived permanent resident immigrants. How this differential impact of partial versus no health care insurance on access to care, health status and outcomes of current refugee claimants and their children is being

TABLE 3
Comparison of medical, mental health and social problems of precarious-status children according to migratory status and institution

Health issue	Total			Institution					
	Refugee claimants	Other uninsured	P	Hospital 1		Hospital 2		Hospital 3	
				Refugee claimants	Other uninsured	Refugee claimants	Other uninsured	Refugee claimants	Other uninsured
Medical and surgical problems									
Respiratory virus	30.2	23.4	≤0.001	24.7	17.2	38.2	34.9	28.4	17.9
Injury/laceration/minor trauma	12.1	20.7	≤0.001	8.4	22.7	15.8	18.1	11.8	21.7
Gastroenteric virus	9.6	7.7	NS	7.0	4.3	9.6	10.7	10.9	6.9
Bacterial infection	6.1	6.3	NS	6.3	4.9	5.0	7.5	6.6	6.1
Abdominal pain	4.0	2.3	≤0.05	4.5	3.7	5.6	2.8	2.8	1.3
Eczema/rash	3.4	2.4	NS	5.2	0.6	5.6	5.7	1.2	0.8
Sickle cell anemia	3.5	1.4	≤0.01	2.1	0.0	0.9	1.1	5.5	2.3
Asthma	1.8	1.6	NS	2.1	1.8	1.9	1.8	1.6	1.3
Appendicitis	1.3	0.2	≤0.01	3.5	0.0	0.3	0.4	0.9	0.3
Mental health problems									
Behaviour problems (opposition, relational problems)	1.6	2.5	NS	3.5	1.3	0.0	4.3	0.9	2.6
Depression or anxiety	0.4	3.0	≤0.001	0.3	1.9	4.4	4.2	0.0	3.1
Pervasive developmental disorder	1.5	0.8	NS	1.0	0.6	1.5	1.1	1.7	0.8
Post-traumatic stress disorder	0.0	1.4	≤0.001	0.0	2.6	0.0	0.0	0.0	1.3
Suicidal thoughts	0.8	2.3	≤0.01	0.7	2.6	3.0	2.2	0.5	2.3
Substance abuse	0.2	0.9	≤0.05	0.3	0.0	1.5	1.1	0.0	1.3
Social problems									
Socioeconomic situation	5.3	3.0	≤0.05	14.0	1.9	0.0	0.0	2.8	4.3
Family or conjugal violence	1.0	2.5	≤0.01	0.7	0.6	0.0	0.4	1.7	4.8
Insufficient diet	2.4	0.4	≤0.001	6.7	0.6	0.0	0.0	1.7	0.5
Negligence	0.1	0.1	NS	0.4	0.0	0.0	0.0	0.0	0.3

Data presented as % unless otherwise indicated. Hospitals 1 and 2 are located in Montreal (Quebec) and Hospital 3 is located in Toronto (Ontario). NS Not significant

TABLE 4
Treatment plan according to institution and migratory status

Treatment plan	Institution								
	Hospital 1			Hospital 2			Hospital 3		
	Refugee claimants (n=243)	Other uninsured (n=138)	Total (n=381)	Refugee claimants (n=282)	Other uninsured (n=257)	Total (n=539)	Refugee claimants (n=561)	Other uninsured (n=353)	Total (n=914)
Hospitalization	25.1	12.9	20.7	2.5	3.9	3.2	9.2	9.6	9.4
Medication	31.7	38.8	34.3	82.3	82.9	82.6	63.2	43.6	55.7
Leave without follow-up	22.6	22.3	22.5	1.9	1.4	1.7	15.3	11.9	14.0
Leave with follow-up	20.2	25.2	22.0	0.9	3.2	2.0	8.0	32.6	17.5
Leave before seeing the doctor	0.4	0.7	0.5	12.4	8.5	10.6	4.3	2.3	3.5

Data presented as n. Hospitals 1 and 2 are located in Montreal (Quebec) and Hospital 3 is located in Toronto (Ontario)

affected by extensive changes to the IFHP, implemented on June 30, 2012, will require additional research.

Castaneda (16) emphasized the utility of identifying undocumented status because it so clearly highlights migrants' position of precarity in the global economy and the resulting difficulty of accessing health care. Unfortunately, although they likely constituted a large number of the children having no provincial health insurance within our 'other uninsured' study group (39.4% of the total sample), the undocumented and 'grey zone' children were difficult to distinguish from their newly arrived permanent resident peers because migratory status is not usually recorded in medical files. In spite of these challenges, our results suggest that uninsured migrant and refugee claimant children represent a sizable population with distinct characteristics. The over-representation of the other uninsured children in high-acuity emergency triage rating categories further suggests that, for some, there may

have been a delay in help seeking, as reported elsewhere in the literature (16). Ethnographic data collected in Montreal indicated that undocumented parents are quite fearful of institutions and favour private practitioners whom they pay. These qualitative data also emphasize the precarity of these children's environment, which may be associated with an increase in certain types of health problems, particularly injuries (17). In Toronto, walk-in clinics, special clinics that serve or assist uninsured populations, and hospitals are preferred by uninsured clients (2). There is a need to examine both possible institutional and governmental responses to this access problem, as has been the case in other immigrant-receiving countries, with the creation of special public health care programs for undocumented children in Sweden and several states in the United States (10,18,19).

The fact that refugee claimant children had emergency ratings at triage indicating a lesser degree of emergency than the general

hospital population (in hospital 2 and hospital 3) suggests that, for this group of children, the emergency department at a hospital may be the easiest gateway to access health care. This may be because of the specifications associated with the IFHP, which is limited to urgent and essential care, being interpreted differently by diverse professionals and institutions.

This was, however, not true in hospital 1, perhaps due to the availability of a refugee/recently-arrived migrant outpatient clinic. The literature emphasizes the importance of community-oriented health care services and the learning and trust-building processes that need to occur for undocumented migrants, in particular, to connect with such services (20). The results of our study suggest that when a refugee family clinic is available, as in hospital 1, they may use it rather than the services of a hospital emergency department.

Compared with federally insured refugee claimants, other uninsured migrant patients may present to the emergency room for different concerns and receive different types of diagnoses. The greater representation of trauma/laceration, severe mental health issues (eg, suicide/depression) and family violence within the completely uninsured client population may suggest that these families may come to the emergency department only when there are no other resources available.

The differences in the detection/recording of social problems across hospitals were quite striking. The under-reporting of social problems, such as socioeconomic precarity and insufficient diet, in hospital 2 underscores the need to sensitize health care professionals to the social problems for these vulnerable population groups (21,22). In a study of clinical interactions involving unauthorized Mexican immigrants to the United States, Holmes (23) described how clinicians systematically miss the key social determinants of the suffering of uninsured patients, inadvertently blaming the patients themselves. Our initial findings suggest that this area may need to be further researched in Canada as well.

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CONCLUSION

The present study highlights the usefulness of not only health insurance status but also migratory status in medical records because it appears to be associated with unique help-seeking and service delivery patterns and, thus, has implications for optimal health service provision. However, recording and accessing currently unavailable data concerning migratory status raises important ethical issues. How can we ensure that this information will not be used to further jeopardize either access to needed health care or the overall safety of these families? Are institutions and governments ready to reopen the debate around entitlement to health care for uninsured children regardless of status?

In the Canadian social and political context, which recently further restricted health care provision for refugee children (24), more research is needed to understand the consequences of this social and health issue on these groups of vulnerable children.

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