

Check for updates

Unmet healthcare needs among migrants without medical insurance in Montreal, Canada

Valéry Ridde ^a, Joséphine Aho^b, Elhadji Malick Ndao^b, Magalie Benoit^b, Jill Hanley^c, Solène Lagrange^b, Amandine Fillol^{a,b}, Marie-France Raynault^{b,d} and Patrick Cloos^{b,e}

^aIRD (French Institute For Research on sustainable Development), CEPED (IRD-Université de Paris), ERL INSERM SAGESUD, Dakar, Senegal; ^bUniversity of Montreal School of Public Health, Montreal, Canada; ^cSchool of Social Work, McGill University, Quebec, Canada; ^dCentre de recherche Léa Roback sur les inégalités sociales de santé de Montréal, University of Montreal, Montréal, Canada; ^eCentre de recherche en santé publique, Montréal, Canada

ABSTRACT

While access to healthcare for permanent residents in Canada is well known, this is not the case for migrants without healthcare coverage. This is the first large-scale study that examines the unmet healthcare needs of migrants without healthcare coverage in Montreal. 806 participants were recruited: 436 in the community and 370 at the NGO clinic. Proportions of individuals reporting unmet healthcare needs were similar (68.4% vs. 69.8%). The main reason invoked for these unmet needs was lacking money (80.6%). Situations of not working or studying, not having had enough food in the past 12 months, not having a medical prescription to get medication and having had a workplace injury were all significantly associated with higher odds of having unmet healthcare needs. Unmet healthcare needs were more frequent among migrants without healthcare coverage than among recent immigrants or the citizens with health healthcare coverage (69%, 26%, 16%). Canada must take measures to enable these individuals to have access to healthcare according to their needs in order to reduce the risk of worsening their health status, something that may have an impact on the healthcare system and population health. The Government of Quebec announced that all individuals without any healthcare coverage will have access to COVID-19 related health care. We hope that this right, the application of which is not yet obvious, can continue after the pandemic for all health care.

ARTICLE HISTORY

Received 13 January 2020 Accepted 13 May 2020

KEYWORDS

Universal health coverage; unmet healthcare needs; migrants; undocumented; access to care; medical insurance; Canada; Quebec

Introduction

Canada's commitment to universal health coverage has recently been highlighted by two recent major articles on the history of the healthcare system and its contemporary challenges (Flood et al., 2018; Martin et al., 2018). Canada made a commitment to achieve universal health coverage (UHC) by 2030 in the context of the Sustainable Development Goals (Martin et al., 2018). Some describe UHC as the 'third global health transition' (Rodin & De Ferranti, 2012) but '*The Canadian system of universal health coverage is showing its age*' and '*gaps in coverage persist*' (Flood et al., 2018). Canada does not have a single healthcare system across the country; each province and territory organises it according to its context, but must follow the fundamental principles of the Canadian Health Act (universal, transferable, comprehensive, accessible and public). Despite these principles,

CONTACT Valéry Ridde valery.ridde@ird.fr 😰 IRD (French Institute for Research on Sustainable Development), CEPED (IRD-Université de Paris Descartes), ERL INSERM SAGESUD, Dakar, Senegal

and the quality of its provincial systems, not all health and medical services (e.g. drugs, home care, mental health, dental care) are fully covered for all by public insurance (hereafter (public) healthcare coverage), a situation that leaves the door open to private intervention (Martin et al., 2018). In addition, some groups, especially certain categories of temporary migrants, are excluded from this nominally universal health coverage.

Immigration is the main contributor to Canada's population growth (Montazer, 2018). It is estimated that 21.9% of people currently living in Canada were born abroad, compared to 13%¹ in the USA or 11.7% in France (Martin et al., 2018). But in Canada and globally, there are concerns about access to care for migrants (Appave & Sinha, 2017; Martin et al., 2018; Ridde, 2018; Ridde & Ramel, 2017; Stanbrook, 2014).

In Canada, citizens, permanent residents, refugees and asylum seekers, some temporary foreign workers and other migrants with temporary status are covered by public health insurance (provincial or federal). However, before the SARS-CoV-2 pandemic, access to care for migrants without health-care coverage (e.g. some temporary workers, most international students, undocumented migrants) was problematic (Brabant & Raynault, 2012b; Siddiqi et al., 2009). Even temporary foreign workers who have healthcare coverage have difficulty accessing care in Canada (Hennebry et al., 2016). In Quebec, all permanent residents as well as some temporary migrants are entitled to public health insurance through the Régie de l'Assurance Maladie du Québec (RAMQ). Asylum seekers are not eligible for RAMQ, but may access equivalent services through the Interim Federal Health Program (IFHP). However, many migrants with valid temporary status, as well as those without authorised status, are excluded from any public healthcare coverage want to receive healthcare services or medication, they need to pay user fees before receiving the services (which can vary according to the doctors, the region or the institution). In cases of emergencies (including childbirth) they can be billed afterwards. The exception is if a healthcare professional accepts to see them free of charge.¹

Despite this situation, there is a lack of health research focus on this heterogeneous population of uninsured migrants. It is as if migrants without healthcare coverage are '*invisible*' (Rode, 2009) and their challenges in accessing healthcare ignored (Flood et al., 2018; Martin et al., 2018). There are many known barriers for accessing healthcare that are often cumulative (Allen et al., 2017; Giron, 2017). In a special series of *The Lancet* on the Canadian healthcare system, only a few small-scale studies examined the experiences of migrants. These studies confirm the challenges of access to healthcare for migrants, but *The Lancet* papers do not mention any studies on migrants without healthcare coverage (Martin et al., 2018).

International research affirms that healthcare coverage is not universal as long as some are excluded from national health systems (Legido-Quigley et al., 2019). A great deal of research (Ingleby & Petrova-Benedict, 2016), including two reviews described the barriers that undocumented migrants in European countries encounter in accessing healthcare (Winters et al., 2018; Woodward et al., 2014). Financial barriers are one of the major reasons documented for lack of access to healthcare (Brabant & Raynault, 2012a; CIUSSS, 2019; DeVoe et al., 2007; McBride et al., 2020; Vignier et al., 2017) as is fear of being deported, which has been documented in Montreal (Brabant & Raynault, 2012a; CIUSSS, 2019). In France, one of the main barriers for undocumented migrants concerns administrative complexities and lack of information about the system (IOM, 2016). Uninsured migrants find themselves obliged to renounce health care, resulting in unmet healthcare needs (defined here as a failure to obtain healthcare when needed) (Brabant & Raynault, 2012a). Research suggests that not having healthcare coverage can lead to potentially deleterious consequences, for example: late diagnosis of cancer and untreated chronic diseases with serious complications (Davis, 2003) or negative self-perception of health (Cloos et al., 2020). In Canada, migrant women without healthcare coverage face insufficient pregnancy follow-up (Khanlou et al., 2017), which has been shown to cause preventable stillbirths (Morriss, 2013). A review of the literature published between 2002 and 2008 on undocumented migrants (no legal migratory status in Canada) revealed deleterious effects of delays in accessing care, feelings of social exclusion and poor mental

health (Magalhaes et al., 2010). It has been shown in Toronto that migrants without medical coverage are at greater risk of mental health problems and death, especially for those who leave the emergency room without treatment (Hynie et al., 2016). Yet, while the challenges of access to care for migrants in general and asylum seekers in Canada are relatively widely known and well studied (Martin et al., 2018; Rousseau et al., 2008), this is much less so for migrants without healthcare coverage (Brabant & Raynault, 2012b; Caulford & D'Andrade, 2012; Magalhaes et al., 2010; Robert et al., 2018).

The objective of this article is to describe unmet healthcare needs and associated factors among migrants without healthcare coverage in Montreal, Canada.

Materials and methods

Participants

A cross-sectional survey was conducted in Montreal among migrants (defined as being born outside of Canada) who reported being without healthcare coverage (meaning not being covered by the Province of Quebec public health insurance (RAMQ) or by the Interim Federal Health Program (IFHP)); were age 18 and over; resided or intended to reside in the province of Quebec for more than 6 months and/or obtain permanent residence. Individuals who were unaware that they were eligible for the IFHP or who had benefitted from it in the past but had not been able to extend or to renew it were also included. Exclusion criteria included: benefitting from private insurance that covered all types of primary care, being a Canadian citizen or a permanent resident; being under 18 years old; being unable to communicate in one of the six languages of the study; and having already participated in the current study.

Study design

There were two distinct recruitment processes: community-based recruitment and recruitment through the NGO, Doctors of the World (DoW)'s health clinic for uninsured migrants.

Recruitment in the community was undertaken using venue-based sampling. A formative assessment took place prior to the study (Huard, 2016). Key informants from community organisations and from academia participated in 5 brain-storming sessions to identify neighbourhoods and places that the study population was known or likely to gather. A list of these places was established and regularly updated in consultation with community organisations and other key informants. The listing included places of worship, community organisations, parks, stores, food banks, transit hubs and community events. Prior to fieldwork and throughout the study, an awareness and community engagement campaign was conducted via social media, local newspapers and radio. All participants were given an information sheet and were encouraged to communicate the information to potential eligible participants.

The second type of recruitment took place at an NGO clinic in Montreal that is specifically dedicated to migrants without healthcare coverage. The migrant clinic of DoW does not offer prenatal and other follow-up services. It only offers essential care for specific medical problems, psychosocial support services, information on rights and facilitates possible referral to other relevant care services. The team is made of both employees and volunteers (doctors, nurses and social workers) who provide free services to uninsured migrants without healthcare coverage. As the clinic runs on project grants, donations and limited availabilities of volunteer doctors, they are often unable to respond to the complex needs of this population (Belaid et al., 2020). All persons using the clinic were eligible to participate in the study and were invited to do so. For recruitment, we approached only patients in the waiting room who went through the initial screening, and hence had no public health coverage.

The questionnaire was developed using the Trajectory model to understand health disparities in immigrants/refugees (Edberg et al., 2011). Questions and scales used and validated in migrant

studies or in studies of the general population were included when possible. The questionnaire included variables on: sociodemographic characteristics (age, sex, education, number of years in Quebec); migratory legal status (categories of legal migration status in Canada or not); knowledge of English or French; socioeconomic status (occupation, income, food insecurity); social resources; a scale on post-migration stress (Carvajal et al., 2013); health (psychological distress measured by the Kessler 6 scale, self-perceived health, diagnosed conditions, undiagnosed conditions); unmet health-care needs; use of health services; and barriers to access to care.

The questionnaire was pre-tested, reviewed and validated in French. It was translated (and back-translated) in English, Spanish, Haitian Creole, Arabic, Mandarin and piloted with 4–6 native speakers for each language.

Data collection

Data collection took place from June 2016 to September 2017. Eligibility was assessed through an informal screening questionnaire that asked about trajectory of migration and healthcare coverage. Trained multicultural and multilingual research assistants administered the questionnaire through 30–90 min- face-to-face interviews using a tablet (OdK Collect software).

Data analysis

Descriptive analysis of sociodemographic and socioeconomic characteristics was performed on both sub-samples (community-based and DoW health clinic-based) and on the whole sample, using means, standard deviation and proportions. Differences between the sub-samples were not statistically significant for the main dependent and independent variables thus, results of the sample as a whole (or stratified by sex) are presented here.

We assessed variables associated with the main dependent variable (unmet healthcare needs) as measured by 'since you've been without medical insurance here, have you ever needed healthcare without being able to access it?' (15). We used the conceptual model of access to care by Andersen (1995) to guide our analysis. The following independent variables were assessed as potential correlates of unmet healthcare needs: predisposing factors (sociodemographic variables, knowledge of English or French), enabling factors (material and financial resources), knowledge about the health system, having a private additional insurance (that covers dental care and paramedical specialists such as chiropractor, etc., but not primary health care), duration of stay in Quebec and needs (physical or mental conditions). Univariate analyses were conducted using Pearson X2 for categorical variables and Student t test for continuous variables. Variables associated with the dependent variable in the univariate analysis with a P < 0.25 were included in a multivariate logistic regression. Independent variables were entered by bloc in the multivariate regression: predisposing factors, enabling factors and needs. Age and sex were included in the model as potential confounders.

Missing values were rare and did not exceed 5% for most variables except 3 variables for which missing values reached a maximum of 12%. They were assumed to be missing at random and excluded from the analysis. The model was run on respondents with complete observations for all variables. Goodness of fit was assessed using Hosmer and Lemeshow test and the model's chi square (Hosmer et al., 2013). Adjusted OR and their 95% CI are presented. A P < 0.05 was considered statistically significant.

Ethics approval

This research was approved by the Research Ethics Board of the University of Montreal (15.154). All individuals were free to not answer specific questions or to withdraw at any time. Respondents received \$20 compensation for their participation.

Results

Sample characteristics

Overall, 806 participants were recruited: 436 (54.1%) in the community and 370 (45.9%) at the clinic. The categories of participants' migrant status varied according to the location of recruitment (Table 1). Community-recruited included: all refugees respondents (currently uninsured despite eligibility for the IFHP) (n = 2, 100.0%); most asylum seekers (n = 41, 71.9%); most students and their dependents (n = 44, 64.7%); most temporary migrant workers and their dependents (n = 16, 53.3%); most long-term visitors (n = 115, 53.0%); and half of those without migrant legal status and who had not submitted a request to obtain one (n = 81, 50.3%). Individuals with other types of temporary status (n = 58, 55.8%) or those without migratory legal status and had submitted a request to obtain one (n = 73, 51.8%) were more likely to have been met at DoW.

Most participants recruited at the DoW clinic were women (268/370, 72.4%) resulting in a predominantly female sample (506/802; 63.1%) (Table 1). The median age was 37 years (range 18–87). Individuals were most likely to be married (48.9%) or single (28.8%). Participants were highly educated, with 46.4% having at least one university degree. The median duration of stay in Quebec was 2 years (range 0–53 years) while the median number of years being without healthcare coverage was 1 year (range 0–27) (Table 1). Women were predominantly not able to work (because of an incapacity or because they took care of their children) (n = 222, 44.9%) while a majority of men had a job (n =167; 58.8%).

Health and access to healthcare

Over a third (n = 295, 36.9%) of the migrants interviewed reported that they have received a medical diagnosis by a healthcare professional in their lifetime while 677 persons (84.0%) stated that they had a health issue in the past 12 months. Among those who declared having received a diagnosis from a health professional (n = 295), the most frequent reported diagnosis was cardiovascular and circulatory diseases (n = 99, 33.6%), endocrine/metabolic system (n = 76, 25.8%), mental health issues (n = 40, 13.6%) and musculoskeletal system (n = 33, 11.2%). However, almost a fifth (n = 101, 18.6%) of all participants reported not knowing where one can access healthcare. Among those who did access healthcare, the most frequently type of facilities ever accessed were private pharmacies (n = 487, 60.1%), community organisations health services such as DoW clinic (n = 340, 42.8%), other walk-in clinics (n = 173, 20.7%), dental clinics (n = 132, 15.6%) and hospitals (n = 110, 13.5%). Services such as osteopathy, chiropractic and physiotherapy were used by less than 3% of the participants.

Unmet healthcare needs

Over two-thirds of the participants (n = 541, 69.0%) reported unmet healthcare needs. This proportion was similar among those recruited at DoW and in the community (69.8% vs. 68.4%, respectively) and among males and females (67.4% vs. 69.8%, respectively).

Among those with a legal migrant status, some sub-groups declared high unmet healthcare needs, notably, temporary workers and their dependents (n = 22, 73.3%) and students and their dependents (n = 49, 73.1%) (Table 2). The association between unmet healthcare needs and migrant status was not statistically significant.

The main reasons invoked for these unmet healthcare needs were not having enough money to pay fees (n = 437, 80.6%), fear of being overcharged (n = 398, 73.4%), the potential negative impact of a health consultation on migration status (n = 119, 22.0%) and fear of rejection by the hospital (n = 35, 6.5%).

Table 1. Sociodemographic characteristics of migrants without healthcare coverage in Montreal (n = 803).^a

Variable	Men (<i>n</i> = 294)	Women (<i>n</i> = 506)	Trans $(n = 3)$	Total	
Age (in years)					
Mean	40.8	40.0	45.3	40.3	
Median	39.0	35.0	45.0	37.0	
Range	18.0-87.0	18.0-87.0	41.0-50.0	18.0-87.0	
Place of recruitment					
	n (%)	n (%)	n (%)	n (%)	
Community-based	192 (65.3)	238 (47.0)	3 (100)	433 (53.9)	
DoW clinic	102 (34.7)	268 (53.0)	0 (0)	370 (46.1)	
Total	294 (100)	506 (100)	3 (3)	803 (100)	
Education					
No diploma	6 (2.1)	14 (2.8)	0 (0)	20 (2.5)	
Primary school	21 (7.3)	44 (8.9)	0 (0)	65 (8.3)	
Secondary school	70 (24.4)	110 (22.1)	1 (33.3)	181 (23)	
Post-secondary non-university diploma	63 (22)	93 (18.7)	0 (0)	156 (19.8)	
Undergraduate university degree	88 (30.7)	166 (33.4)	2 (66.7)	256 (32.5)	
Graduate university degree	39 (13.6)	70 (14.1)	0 (0)	109 (13.9	
Total	287 (100)	497 (100)	3 (100)	787 (100)	
Marital status	207 (100)		5 (100)	, , , , , , , , , , , , , , , , , , , ,	
Married	140 (47.8)	250 (49.4)	2 (66.7)	392 (48.9)	
Common law relationship	18 (6.1)	41 (8.1)	0 (0)	59 (7.4)	
Widow	. ,				
	5 (1.7)	33 (6.5)	0 (0)	38 (4.7)	
Separated/Divorced	26 (8.9)	55 (10.8)	1 (33.3)	82 (10.2)	
Single	104 (35.5)	127 (25.1)	0 (0)	231 (28.8)	
Total	293 (100)	506 (100)	3 (100)	802 (100)	
Region of origin					
Africa	43 (15)	76 (15.4)	0 (0)	119 (15.2)	
Latin America	110 (38.3)	173 (34.9)	0 (0)	283 (36.1)	
Asia	17 (5.9)	24 (4.8)	0 (0)	41 (5.2)	
Caribbean	31 (10.8)	78 (15.8)	0 (0)	109 (13.9)	
Europe & USA	22 (7.7)	42 (8.5)	3 (100)	67 (8.5)	
Middle East	64 (22.3)	102 (20.6)	0 (0)	166 (21.1)	
Total	287 (100)	495 (100)	3 (100)	785 (100)	
Migratory status	207 (100)		5 (100)	,,	
Accepted refugees	0 (0)	2 (0.4)	0 (0)	2 (0.3)	
Asylum seekers	24 (8.5)	33 (6.7)	0 (0)	57 (7.3)	
Temporary foreign workers and dependents	11 (3.9)	19 (3.8)	0 (0)	30 (3.8)	
Students and dependents	21 (7.4)	47 (9.5)	0 (0)	68 (8.7)	
Visitors (long term, Supervisa for grandparents and	63 (22.3)	154 (31.1)	0 (0)	217 (27.8)	
working holiday category)					
Other temporary residents	31 (11.0)	73 (14.7)	0 (0)	104 (13.3)	
No legal migrant status (application submitted)	56 (19.8)	83 (16.8)	2 (100)	141 (18.1)	
No legal migrant status (no application submitted)	77 (27.2)	84 (17.0)	0 (0)	161 (20.6)	
Total	283 (100)	495 (100)	2(100)	780 (100)	
Occupation					
Paid job	155 (54.6)	121 (24.5)	2 (66.7)	278 (35.6)	
Unpaid job	12 (4.2)	18 (3.6)	0 (0)	30 (3.8)	
Looking for a job	39 (13.7)	46 (9.3)	1 (33.3)	86 (11.0)	
				56 (7.2)	
Studying Other	11 (3.9) 19 (6.7)	45 (9.1)	0 (0)	61 (7.8)	
		42 (8.5)	0 (0)	• • •	
Not being able to work or retired	48 (16.9)	222 (44.9)	0 (0)	270 (34.6)	
Total	284 (100)	494 (100)	3 (100)	781 (100)	
Duration of stay in Quebec (in years)					
Mean	4.3	3.1	0.0	3.5	
Median	2.0	1.0	0.0	2.0	
Range	0.0-53.0	0.0-27.0	0.0-0.0	0.0-53.0	
Number of years without healthcare coverage					
Mean	2.5	2.3	0.0	2.3	
Median	1.0	1.0	0.0	1.0	
			0.0		

^aFor three participants we don't have gender variable.

Migrant status	Total number recruited	Proportion with unmet healthcare needs
Legal migrant status		
Temporary foreign workers and dependents	30	73.3%
Students and dependents	67	73.1%
Other temporary residents	102	70.6%
Visitors (long term, Supervisa for grandparents and working holiday category)	216	63.4%
Refugee claimants	56	62.5%
Accepted refugees	2	50.0%
No legal migrant status (application submitted)	135	67.4%
No legal migrant status (no application submitted)	157	76.4%

^aFor those for which migrant status AND unmet healthcare needs were known.

Factors associated with unmet healthcare needs

Not being able to work, not having had enough food in the past 12 months, not having a medical prescription to get medication and having had a workplace injury were significantly associated with higher odds of unmet healthcare needs. Having a secondary school or post-secondary diploma was associated with lower odds of unmet healthcare needs compared to those with a university degree. Not having a legal migratory status was associated with higher odds of unmet healthcare needs but lost significance when duration of residence in Quebec was entered into the model (Table 3).

Discussion

Most of the migrants without healthcare coverage in Montreal are in the middle of their working lives, mostly married, educated and available for the job market – yet they are living with temporary and precarious immigration status. Despite most of our respondents being present in Canada with an authorised status, this status did not qualify them for public healthcare coverage. The main reason reported for not using healthcare is essentially financial. The fact of not having had enough food, a major indicator of deprivation, was significantly associated with unmet healthcare needs, an indication of a more general social suffering. Our participants experience a double burden: many are not well informed of their rights to healthcare and other social and legal services, and there is no or very limited entitlement or services available to them. The following assertion – « *Canada's universal, publicly funded healthcare system is a source of national pride, and a model of universal health coverage* » (Martin et al., 2018) – does not seem to apply to all.

In our study, 69% of migrants without medical coverage reported unmet healthcare needs. This is much higher compared to a 2010 study in Montreal which found that 19% of adults in the general population and 26% of recent immigrants (less than 10 years) reported unmet healthcare needs in the past 6 months (Lemoine et al., 2011; Pineault et al., 2016). In addition, access to care is correlated with avoidable mortality in Montreal and the health consequences are greater for the poorest in the last 25 years (Raynault et al., 2012). Our sample is mainly composed of migrants with a temporary status linked to socioeconomic precarity and, therefore, the importance of their unmet healthcare needs. Unlike the migrants in our study who were without healthcare coverage, financial issues were not mentioned as a barrier for Montrealers in 2010; instead, participants in the general study pointed to long waiting times. However, as in our study with migrants without healthcare, is largely determined by people's social context, with higher levels of education or more access to information on illness increasing expression of unmet need (Sen, 2002). In Canada, earlier research had shown a significant renunciation of care for people without medication insurance (Allin et al., 2010) and that

Table 3. Factors associated with unmet healthcare needs among migrants without healthcare coverage in Montreal ($n = 6$	519).

			Non adjusted mode		nodel	·		
Variable		with unmet althcare needs	OR	CI 95%	<i>p</i> - Value	OR	IC 95%	<i>p-</i> Value
	Predispos	ing factors						
Education								
University (Reference) None/Primary	282 70	47.6% 11.3%	1.00 1.087	[0.54–2.19]	0.816	1.00 0.99	[0.48–	0.986
							2.04]	
Secondary/post-secondary (non-university diploma)	267	41.2%	0.643	[0.42–0.97]	0.033	0.64	[0.43– 0.97]	0.034
Migratory legal status	220	E2 20/	1 00			1 00		
With legal status (Reference) Without legal status	339 280	53.3% 46.7%	1.00 1.15	[0.73–1.81]	0.549	1.00 1.14	[0.73–	0.560
Duration of stay							1.80]	
Over 2 years (Reference)	242	39.4%	1.00					
Two years or less	377	60.6%		[0.90–2.58]	0.121	1.58	[0.92–	0.090
							2.69]	
Fluency in French	167	20.00/	1 00			1 00		
Very good (Reference) Good	167 121	28.8% 19.9%	1.00 0.84	[0.48–1.48]	0 5 5 5	1.00	[0.47–	0.503
	121	19.970	0.04	[0.40-1.40]	0.555	0.02	1.45]	0.505
Weak/Low	331	51.3%	0.68	[0.43–1.08]	0.102	0.65	[0.41– 1.04]	0.072
Work status								
Working with or without salary (Reference)	249	40.1%	1.00	[0 == 0 =0]		1.00	·	
Looking for a job/studying	153	24.8%	1.37	[0.75–2.50]	0.308	1.39	[0.75– 2.54]	0.291
Not being able to work or retired	217	35.2%	1.74	[0.95–3.17]	0.070	1.72	[0.93– 2.70]	0.083
	Enabling	factors					2.7 0]	
Having someone who can share one's								
preoccupations		22 50/	1 00			1 0 0		
No (Reference) Yes	121 498	22.5% 77.5%	1.00	[0.47–1.23]	0.337	1.00	[0.47–	0.321
165	490	11.570	0.70	[0.47-1.25]	0.557	0.77	1.23]	0.521
Having someone who can give financial support								
No (Reference)	258	44.7%	1.00			1.00		
Yes	361	55.3%	0.81	[0.55–1.20]	0.299	0.80	[0.54-	0.275
Not having had enough food in the past 12 months							1.19]	
Never (Reference)	411	57.5%	1.00			1.00		
Often/Sometimes	208	42.5%	3.68	[2.35–5.77]	0.000	3.73	[2.38– 5.87]	0.000
Awareness of where to get free or low cost medical consultations							5.67]	
No (Reference)	284	49.4%	1.00			1.00		
Yes	335 50,6%		1.04	[0.70–1.53]	0.846	1.05	[0.71–	0.789
Not having a medical prescription to get medication							1.56]	
No (Reference)	542	84.1%	1.00			1.00		
Yes	77	15.9%		[1.59–6.42]	0.001		[1.57– 6.35]	0.001
Having private additional insurance							0.001	
No (Reference)	601	97.8%	1.00			1.00		
Yes	18	2.2%	0.46	[0.16–1.34]	0.158	0.47	[0.16-	0.165
Number of years without healthcare coverage	619	-	1.07	[0.99–1.15]	0.054	1.07	1.36] [0.99– 1.15]	0.067

(Continued)

Variable n	n	n % with unmet healthcare needs	Non adjusted model			Adjusted model*		
			OR	CI 95%	<i>p-</i> Value	OR	IC 95%	<i>p-</i> Value
	Need	s						
Occupational injury								
Non workers (Reference)	301	42.3%	1.00			1.00		
No occupational injury	281	9.2%	1.62	[0.92–2.84]	0.091	1.74	[0.97– 3.08]	0.060
Prior occupational injury	37	48.5%	8.93	[2.30–34.7]	0.002	9.25	[2.44– 37.17]	0.001
Diagnosed with a health issue							_	
No (Reference)	390	62.5%	1.00			1.00		
Yes	229	37.5%	1.064	[0.715–1.582]	0.761	1.002	[0.66– 1.52]	0.992
	Adjus	tment variables						
Sex	-							
Male	222	35.9%				1.00		
Women	397	63.6%				1.08	[0.71– 1.64]	0.727
Age	619	-				1.01	[0.99– 1.02]	0.310

Table 3. Continued.

*Adjusted by sex and age.

12% of Canadians over 12 years of age in a national survey in 2000/01 reported unmet health need versus only 4% in 1994/95 (Sanmartin et al., 2002).

Across all determinants of access to care, the financial barrier comes first in our sample, which seems paradoxical within the Canadian public health system that is supposed to protect the population from catastrophic healthcare expenditures (Martin et al., 2018). Whether they have healthcare coverage or not, migrants in Canada are certainly part of the population yet many of them are denied healthcare coverage despite paying for it via taxation. The Canada Health Act (1984), which contributed to the creation of the current healthcare system, aimed to 'limit extra-billing and user charges' (Flood et al., 2018). Denying access to care for migrants without healthcare coverage is financially and socially counterproductive (Batifoulier, 2018; European Union, 2015; Kraft et al., 2009). Financially, excluding some people from accessing healthcare when they need it might eventually result in increased healthcare expenditures for both the individuals and the healthcare system. At the social, moral and ethical levels, denying access to care to a segment of the population living within a territory (and who might get permanent immigration status in the future) is discriminatory and creates social inequities and exclusion that can contribute to the deterioration of social cohesion (Legido-Quigley et al., 2019). Furthermore, it is obviously not in line with the values advocated by the Canadian health system, namely « equity and solidarity » (Martin et al., 2018).

Being forced to renounce care obviously violates social rights (European Union, 2015; Giron, 2017; Rode, 2009) and, in the context of UHC, violates the human right of accessing health care (Ooms et al., 2014; Robert et al., 2017, 2018). As has been said for Canadians with healthcare coverage (or Koreans and Italians for instance (Busetta et al., 2018; Hwang, 2018)), the subjective expression of unmet health need provides essential information to decision makers (Allin et al., 2010). In Canada, as in the USA and Europe, more and more cities are declaring themselves Sanctuary Cities in order to protect life and allow access to public services for undocumented migrants (Bontemps et al., 2018). However, the Canadian healthcare system is organised in such a way that cities have little leeway to act because of their dependence on provincial governmental authorities (Martin et al., 2018). While the debate on the increasing privatisation of the healthcare system in Canada, and Quebec in particular, continues, in particular by proposing an increase in individual direct payments (Beland et al., 2008; Flood et al., 2018), some provinces have mobilised public

funds to provide access to care for uninsured migrants (Medical Officer of Health, 2013). In Quebec, the authorities have been slow to act and may face significant public health and economic consequences (European Union, 2015). For example, children born in Canada (thus Canadian citizens) to migrant parents without permanent residency, are denied access to Quebec's public healthcare coverage. How can the fact that many clinics in Montreal refuse to vaccinate uninsured migrant children be justified, being in clear opposition to the Quebec Immunisation Protocol and provincial public health guidelines? Lack of awareness of the directive is in part to blame. « In Canada, we consider ourselves super egalitarian. But we're not » says Monique Bégin, federal health minister in 1984 when the Canada Health Act was adopted to create Canada's national universal healthcare system (Clark, 2018). As the resilience of health systems is increasingly being questioned (Turenne et al., 2019), it seems urgent that the Canadian and Quebec health systems find solutions to allow medically uninsured migrants to access healthcare. As mentioned in a special issue on the Canadian healthcare system 'If the core values of access on the basis of care rather than ability to pay are to survive, it is imperative to embrace evidence-based reform that is also grounded in history to better understand the windows of opportunity for change' (Flood et al., 2018). Furthermore, there is no evidence that providing care to uninsured migrants would increase the number of people coming to Canada to seek healthcare (Behrmann & Smith, 2010; Beland & Zarzeczny, 2018). Our research therefore shows that it is certainly time to act to improve access to care for uninsured migrants in Canada. We believe that human dignity and citizenship rights (McBride et al., 2020) is at stake.

Despite major efforts to have as diverse a recruitment as possible, and in the absence of the possibility of using a probabilistic sample, certain social groups were poorly represented in our survey (e.g. Chinese or Anglo-Caribbean migrants). This can be explained by our recruitment procedure based on venue-based sampling (places frequented by migrants from targeted communities) and health clinic recruitment (sick migrants who can travel to attend this clinic). However, if our sample does not claim to be representative of migrants without healthcare coverage from Montreal, it seems to us sufficiently diversified to increase the external validity of the results. It is possible that individuals may have ended up in our sample twice because the ethical issues required no personal information to identify respondents. However, all investigators were attentive to this issue of possible duplication and close supervision of the data collection leads us to believe that this did not occur. Furthermore, duplicates found in our database were excluded from the final sample. We do not exclude the presence of bias introduced by interviewers who had to use a standardised questionnaire in several languages to explain complex concepts. Finally, all data are self-reported and we do not have objective data (e.g. health outcomes), but this procedure allowed us to respect our ethical commitment to the people we met and the community organisations that supported us in our recruitment.

Conclusion

This major research in Montreal shows the extent of the challenges of access to healthcare for migrants without healthcare coverage. «An inclusive approach to refugee and migrant health that leaves no one behind during the COVID-19 pandemic should guide our public health efforts» (Kluge et al., 2020). Quebec recently declared that COVID-19 related diagnostic and healthcare will be covered for all residents regardless of migration status. We hope that this right, the application of which is not yet obvious, can continue after the pandemic and not just for COVID-19! For universal health coverage in Quebec and Canada to become a reality, it seems essential, particularly for human rights and social justice reasons (McBride et al., 2020) but also for health economics and public health, to find an urgent and relevant long-term solution for this category of the population who is living on the territory. However, there is still a lot of knowledge to be uncovered regarding this issue, as in Europe (Legido-Quig-ley et al., 2019). The data from our survey will tell us more about the social determinants of their health or their mental health status.

Note

 Of note, however, in the context of the COVID-19 crisis in the Spring of 2020, the Quebec government announced that COVID-related testing and treatment would be provided free of charge for any uninsured migrants. While charges will continue to apply for non-COVID health care, this was a welcome measure for the uninsured and one that, advocates hope, may open the door to broader reforms in the future.

Acknowledgements

We would like to thank Anne Gosselin and two anonymous reviewers for their critical reading of a preliminary version of this text, as well as Doctors of the World, its staff, students, community organisations, and all the research assistants and migrants we met so that this research can take place. This research was funded by the Canadian Institutes of Health Research (MOP 142332).

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by Institute of Population and Public Health: [Grant Number MOP 142332].

ORCID

Valéry Ridde D http://orcid.org/0000-0001-9299-8266

References

- Allen, E. M., Call, K. T., Beebe, T. J., McAlpine, D. D., & Johnson, P. J. (2017). Barriers to care and healthcare utilization among the publicly insured. *Medical Care*, 55(3), 207–214. https://doi.org/10.1097/MLR.00000000000644
- Allin, S., Grignon, M., & Le Grand, J. (2010). Subjective unmet need and utilization of health care services in Canada: What are the equity implications? *Social Science & Medicine*, 70(3), 465–472. https://doi.org/10.1016/j.socscimed. 2009.10.027
- Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior*, *36*(1), 1–10. https://doi.org/10.2307/2137284
- Appave, G., & Sinha, N. (2017). Migration in the 2030 Agenda (p. 141). International Organization for Migration.
- Batifoulier, P. (2018). Santé des migrants, miroir de société. Colloque.
- Behrmann, J., & Smith, E. (2010). Top 7 issues in medical Tourism: Challenges, knowledge gaps, and future directions for research and policy developmen. *Global Journal of Health Science*, 2(2), 80–90. https://doi.org/10.5539/gjhs. v2n2p80
- Belaid, L., Benoit, M., Azari, L., Kaur, N., & Ridde, V. (2020). Population health intervention implementation among migrants with precarious status in Montreal: Underlying theory and key challenges. SAGE Open, 10(2). https://doi. org/10.1177/2158244020917957
- Beland, D., & Zarzeczny, A. (2018). Medical tourism and national health care systems: An institutionalist research agenda. *Globalization and Health*, 14, 68. https://doi.org/10.1186/s12992-018-0387-0
- Beland, F., Contandriopoulos, A. P., Quesnel-vallée, A., & Robert, L. (2008). Le privé dans la santé. Les discours et les faits. Presses de l'université de Montréal.
- Bontemps, V., Makaremi, C., Mazouz, S., Bernard, H., & Babels (Research program) (2018). Entre accueil et rejet: Ce que les villes font aux migrants. Le Passager clandestin.
- Brabant, Z., & Raynault, M. F. (2012a). Health of migrants with precarious status: Results of an exploratory study in Montreal – Part B. Social Work in Public Health, 27(5), 469–481. https://doi.org/10.1080/19371918.2011.592079
- Brabant, Z., & Raynault, M. F. (2012b). Health situation of migrants with precarious status: Review of the literature and implications for the Canadian context – Part A. Social Work in Public Health, 27(4), 330–344. https://doi.org/10. 1080/19371918.2011.592076
- Busetta, A., Cetorelli, V., & Wilson, B. (2018). A universal health care system? Unmet need for medical care among regular and irregular immigrants in Italy. *Journal of Immigrant and Minority Health*, 20(2), 416–421. https://doi. org/10.1007/s10903-017-0566-8

- Carvajal, S. C., Rosales, C., Rubio-Goldsmith, R., Sabo, S., Ingram, M., McClelland, D. J., Redondo, F., Torres, E., Romero, A. J., Oleary, A. O., Sanchez, Z., & de Zapien, J. G. (2013). The Border community & immigration stress scale: A preliminary examination of a community responsive measure in two Southwest samples. *Journal of Immigrant and Minority Health/Center for Minority Public Health*, 15(2), 427–436. https://doi.org/10.1007/ s10903-012-9600-z
- Caulford, P., & D'Andrade, J. (2012). Health care for Canada's medically uninsured immigrants and refugees: Whose problem is it? *Canadian Family Physician Medecin De Famille Canadien*, 58(7), 725–727. e362–364. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3395500/pdf/0580725.pdf
- CIUSSS. (2019). Demandeurs d'asile, réfugiés et migrants à statut précaire Un portrait montréalais réalisé par la Direction régionale de santé publique du CIUSSS du Centre-Sud-de-l'Île-de-Montréal (p. 67). Gouvernement du Québec.
- Clark, J. (2018). Monique bégin: Canadian health icon. *The Lancet*, 391(10131), 1658. https://doi.org/10.1016/S0140-6736(18)30469-0
- Cloos, P., Ndao, E. M., Aho, J., Benoît, M., Fillol, A., Munoz-Bertrand, M., Ouimet, M.-J., Hanley, J., & Ridde, V. (2020). The negative self-perceived health of migrants with precarious status in Montreal, Canada: A cross-sectional study. *PLOS ONE*, 15(4), e0231327. https://doi.org/10.1371/journal.pone.0231327
- Davis, K. (2003). The cost and consequences of being uninsured. *Medical Care Research and Review*, 60(2), 89S–99S. https://doi.org/10.1177/1077558703254157
- DeVoe, J. E., Baez, A., Angier, H., Krois, L., Edlund, C., & Carney, P. A. (2007). Insurance + access ≠ health care: Typology of barriers to health care access for low-income families. Annals of Family Medicine, 5(6), 511–518. https://doi.org/10.1370/afm.748
- Edberg, M., Cleary, S., & Vyas, A. (2011). A trajectory model for understanding and assessing health disparities in immigrant/refugee communities. *Journal of Immigrant and Minority Health*, 13(3), 576–584. https://doi.org/10. 1007/s10903-010-9337-5
- European Union. (2015). Cost of exclusion from healthcare: The case of migrants in an irregular situation. Publications Office of the European Union.
- Flood, C. M., Marchildon, G., & Paech, G. (2018). Canadian medicare: Historical reflections, future directions. *Health Economics, Policy and Law*, 13(3–4), 219–225. https://doi.org/10.1017/S1744133118000014
- Giron, S. (2017). La prise en compte des plus démunis dans notre système de santé. Soins, 62(817), 19–21. https://doi. org/10.1016/j.soin.2017.05.005
- Hennebry, J., McLaughlin, J., & Preibisch, K. (2016). Out of the loop: (In)access to health care for migrant workers in Canada. *Journal of International Migration and Integration*, 17(2), 521–538. https://doi.org/10.1007/s12134-015-0417-1
- Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). Applied logistic regression (third edition). Wiley.
- Huard, J. (2016). Les stratégies de recrutement des migrants sans assurance médicale dans un contexte de recherche à Montréal : Comment contrer la méfiance des participants? (p. 25) [Rapport de stage]. http://www.equitesante.org/ projet-migrants/
- Hwang, J. (2018). Understanding reasons for unmet health care needs in Korea: What are health policy implications? BMC Health Services Research, 18), https://doi.org/10.1186/s12913-018-3369-2
- Hynie, M., Ardern, C. I., & Robertson, A. (2016). Emergency room visits by uninsured child and adult residents in Ontario, Canada: What diagnoses, severity and visit disposition reveal about the impact of being uninsured. *Journal of Immigrant and Minority Health*, 18(5), 948–956. https://doi.org/10.1007/s10903-016-0351-0
- Ingleby, D., & Petrova-Benedict, R. (2016). Recommandations on access to health services for migrants in an irregular situation : an expert consensus. IOM.
- IOM. (2016). MIPEX health Strand country Report: France. IOM MHD RO.
- Khanlou, N., Haque, N., Skinner, A., Mantini, A., & Kurtz Landy, C. (2017). Scoping review on maternal health among immigrant and refugee women in Canada: Prenatal, intrapartum, and postnatal care. *Journal of Pregnancy*, 2017, 1– 14. https://doi.org/10.1155/2017/8783294
- Kluge, H. H. P., Jakab, Z., Bartovic, J., D'Anna, V., & Severoni, S. (2020). Refugee and migrant health in the COVID-19 response. *The Lancet*, S0140673620307911. https://doi.org/10.1016/S0140-6736(20)30791-1
- Kraft, A. D., Quimbo, S. A., Solon, O., Shimkhada, R., Florentino, J., & Peabody, J. W. (2009). The health and cost impact of care delay and the experimental impact of insurance on reducing delays. *The Journal of Pediatrics*, 155(2), 281–285.e1. https://doi.org/10.1016/j.jpeds.2009.02.035
- Lagrange, S., Fillol, A., Fête, M., & Ridde, V. (2018). Les enfants et les femmes enceintes sans assurance médicale à Montréal (p. 54). IRSPUM. https://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers19-04/010075810.pdf
- Legido-Quigley, H., Pocock, N., Tan, S. T., Pajin, L., Suphanchaimat, R., Wickramage, K., McKee, M., & Pottie, K. (2019). Healthcare is not universal if undocumented migrants are excluded. *BMJ*, 14160. https://doi.org/10.1136/ bmj.l4160
- Lemoine, O., Simard, B., Provost, S., Levesque, J.-F., Pineault, R., & Tousignant, P. (2011). Rapport descriptif global de l'enquête populationnelle sur l'expérience de soins à montréal et en montérégie (p. 47). AGENCE DE LA SANTÉ ET DES SERVICES SOCIAUX DE MONTRÉAL;INSTITUT NATIONAL DE SANTÉ PUBLIQUE DU QUÉBEC.

 $https://www.inspq.qc.ca/pdf/publications/1372_RappDescripGlobalEnquetePopuExperienceSoinsMtlMonteregie.pdf$

- Magalhaes, L., Carrasco, C., & Gastaldo, D. (2010). Undocumented migrants in Canada: A scope literature review on health, access to services, and working conditions. *Journal of Immigrant and Minority Health*, 12(1), 132–151. https://doi.org/10.1007/s10903-009-9280-5
- Martin, D., Miller, A. P., Quesnel-Vallée, A., Caron, N. R., Vissandjée, B., & Marchildon, G. P. (2018). Canada's universal health-care system: Achieving its potential. *The Lancet*, 391(10131), 1718–1735. https://doi.org/10.1016/S0140-6736(18)30181-8
- McBride, B., Shannon, K., Braschel, M., Mo, M., & Goldenberg, S. M. (2020). Lack of full citizenship rights linked to heightened client condom refusal among im/migrant sex workers in Metro Vancouver (2010–2018). *Global Public Health*, 1–15. https://doi.org/10.1080/17441692.2019.1708961
- Medical Officer of Health. (2013). Medically Uninsured Residents in Toronto (p. 22). https://www.toronto.ca/legdocs/ mmis/2013/hl/bgrd/backgroundfile-57588.pdf
- Montazer, S. (2018). Disentangling the effects of primary and secondary international migration on psychological distress: The role of mastery. *Canadian Journal of Public Health*, https://doi.org/10.17269/s41997-018-0057-2
- Morriss, F. H. (2013). Increased risk of death among uninsured neonates. *Health Services Research*, 48(4), 1232–1255. https://doi.org/10.1111/1475-6773.12042
- Ooms, G., Latif, L. A., Waris, A., Brolan, C. E., Hammonds, R., Friedman, E. A., Mulumba, M., & Forman, L. (2014). Is universal health coverage the practical expression of the right to health care? *BMC International Health and Human Rights*, *14*, 3. https://doi.org/10.1186/1472-698X-14-3
- Pineault, R., Borgès Da Silva, R., Provost, S., Breton, M., Tousignant, P., Fournier, M., Prud'homme, A., & & Levesque, J.-F. (2016). Impacts of Québec primary healthcare reforms on patients' experience of care, unmet needs, and use of services. *International Journal of Family Medicine*, 2016, 1–13. https://doi.org/10.1155/2016/8938420
- Provost, S., Agence de la santé et des services sociaux de Montréal, & Institut national de santé publique du Québec. (2013). Les besoins non comblés de services médicaux à Montréal et en Montérégie, 2010.
- Raynault, M.-F., Le Blanc, M.-F., & Lessard, R. (2012). Les inégalités sociales de santé à Montréal: le chemin parcouru : rapport du directeur de santé publique 2011. Agence de la santé et des services sociaux de Montréal, Direction de santé publique.
- Ridde, V. (2018). Migrants et migrants? Tensions mondiales entre accueil et rejet. *Canadian Journal of Public Health*, 109(3), 281–283. https://doi.org/10.17269/s41997-018-0120-z
- Ridde, V., & Ramel, P. (2017). The migrant crisis and health systems: Hygeia instead of Panacea. *The Lancet Public Health*, 2(10), e447. https://doi.org/10.1016/S2468-2667(17)30180-9
- Robert, E., Lemoine, A., & Ridde, V. (2017). Que cache le consensus des acteurs de la santé mondiale au sujet de la couverture sanitaire universelle? Une analyse fondée sur l'approche par les droits. Canadian Journal of Development Studies/Revue Canadienne D'études Du Développement, 38(2), 199–215. https://doi.org/10.1080/02255189.2017.1301250
- Robert, E., Merry, L., Benoît, M., Guimaraes, D. B., & Ruiz-Casares, M. (2018). Rien ne doit se faire pour eux sans eux : renforcer la participation des demandeurs d'asile, réfugiés et migrants sans statut et des organismes communautaires dans la recherche en santé. *Canadian Journal of Public Health*, https://doi.org/10.17269/s41997-018-0042-9
- Rode, A. (2009). L'émergence du non-recours aux soins des populations précaires : entre droit aux soins et devoirs de soins. *Lien Social et Politiques*, *61*, 149. https://doi.org/10.7202/038480ar
- Rodin, J., & De Ferranti, D. (2012). Universal health coverage: The third global health transition? *The Lancet*, 380, 861–862. https://doi.org/10.1016/S0140-6736(12)61340-3
- Rousseau, C., ter Kuile, S., Munoz, M., Nadeau, L., Ouimet, M.-J., Kirmayer, L., & Crépeau, F. (2008). Health care access for refugees and immigrants with precarious status: Public health and human right challenges. *Canadian Journal of Public Health*, 99(4), 290–292. https://doi.org/10.1007/BF03403757
- Sanmartin, C., Houle, C., Tremblay, S., & Berthelot, J.-M. (2002). Changes in unmet health care needs. *Health Reports*, 13(3), 15–21.
- Sen, A. (2002). Health: Perception versus observation. *Bmj*, 324(7342), 860–861. https://doi.org/10.1136/bmj.324.7342. 860
- Siddiqi, A., Zuberi, D., & Nguyen, Q. C. (2009). The role of health insurance in explaining immigrant versus nonimmigrant disparities in access to health care: Comparing the United States to Canada. Social Science & Medicine, 69(10), 1452–1459. https://doi.org/10.1016/j.socscimed.2009.08.030
- Stanbrook, M. B. (2014). Canada owes refugees adequate health coverage. *Canadian Medical Association Journal*, 186 (2), 91–91. https://doi.org/10.1503/cmaj.131861
- Turenne, C. P., Gautier, L., Degroote, S., Guillard, E., Chabrol, F., & Ridde, V. (2019). Conceptual analysis of health systems resilience: A scoping review. *Social Science & Medicine*, 232, 168–180. https://doi.org/10.1016/j.socscimed. 2019.04.020
- Vignier, N., Chauvin, P., & Dray-Spira, R. (2017). Un système de protection sociale universaliste, mais des barrières à l'accès aux soins encore trop nombreuses. In A. Desgrées du Loû, & F. Lert (Eds.), Parcours: Parcours de vie et de santé des Africains immigrés en France (pp. 113–135). Éditions La Découverte.

- Winters, M., Rechel, B., de Jong, L., & Pavlova, M. (2018). A systematic review on the use of healthcare services by undocumented migrants in Europe. *BMC Health Services Research*, 18(1), 30. https://doi.org/10.1186/s12913-018-2838-y
- Woodward, A., Howard, N., & Wolffers, I. (2014). Health and access to care for undocumented migrants living in the European Union: A scoping review. *Health Policy and Planning*, 29(7), 818–830. https://doi.org/10.1093/heapol/ czt061