Contents lists available at ScienceDirect



Journal of Migration and Health



journal homepage: www.elsevier.com/locate/jmh

What links can be made from narratives of migration and self-perceived health? A qualitative study with Haitian migrants settling in Quebec after the 2010 Haiti earthquake



Lara Gautier^a, Thierry Casseus^b, Judite Blanc^c, Patrick Cloos^{d,*}

^a Département de Gestion, d'Évaluation et de Politique de Santé, École de Santé Publique de l'Université de Montréal; Centre de recherche en santé publique, Université de

Montréal et CIUSSS du Centre-Sud-de-l'Île-de-Montréal, Montréal, Canada

^bÉcole de travail social, Université de Montréal, Montréal, Canada

^c Department of Population Health, Center for Healthful Behavior Change, New York University Grossman School of Medicine, New York, USA

^d École de travail social, et Département de médecine sociale et préventive, École de santé publique de l'Université de Montréal; Centre de recherche en santé publique,

Université de Montréal et CIUSSS du Centre-Sud-de-l'Île-de-Montréal, Montréal, Canada

ARTICLE INFO

Keywords: Social determinants of health Racism Migrant health Qualitative research Haiti Montreal Quebec Canada Earthquake

ABSTRACT

In January 2010, Haiti was hit by a terrible earthquake that pushed thousands of people to migrate. Many of them chose to settle in Quebec, Canada. Years after the earthquake, many Haitians continue to migrate to the Quebec province. Several studies however have shown that this population's socioeconomic status is lower than the provincial average. Given the potential multiple stressors that affect Haitian migrants in Quebec, there are concerns about their health status.

Located at the intersection of international migration studies and global public health, this paper offers an indepth qualitative investigation of Haitian migrants' representations of both their situation and self-perceived health in Montreal, Quebec. Our perspective on migrant health was inspired by the World Health Organisation's framework on the social determinants of health and recent studies in the field of migrant health. We collected and analysed qualitative data from 23 key informants (i.e., 12 women and 11 men, aged 21–76 years old) from diverse socioeconomic backgrounds. The analysis of the data from these people's narratives revealed the importance of structural determinants such as social position, and intermediate determinants such as living and working conditions. Our analysis also highlighted several interrelations between those determinants. Specifically, participants reported coping with issues related to migration status, income, occupation, language, challenging living and working conditions, and chronic stress. This study also shows that racism and social support each relate to both the structural and intermediate levels of the social determinants of health. The importance of social support brought by relatives, friends, as well as community-based organisations and religious practice, was underscored.

Our findings were coherent with available literature looking at the determinants of health of racialized and migrant minorities in other high-income regions of the world. Our conclusive remarks featured reflections on three cross-cutting issues and their practical implications for policy and practices.

1. Introduction

On the 12th of January 2010, Haiti was hit by a terrible earthquake. Approximately 200,000 people died and many more were displaced within the country while others migrated to other destinations in the Americas. Some sought refuge in countries like Canada, the United States or France after long and arduous journeys within and across several Central and/or South American countries, sometimes sources of stress and trauma (sexual assault, rape, attacks) with potential deleterious consequences (Cénat et al., 2020). After the earthquake, a special sponsorship program was set up by the Ministry of Immigration in Quebec in order to allow a few thousand Haitian earthquake victims the opportunity to join their family residing in the province. To facilitate settlement and to support the integration of sponsored newcomers, Quebec funded community organisations implemented an integration and support programme (Cloos et al., 2016). In the summer of 2017, many Haitians residing in the USA since the earthquake sought refugee status in Canada after the newly elected President threatened to cancel temporary protected status for Haitians in the USA (Radio-Canada, 2017).

* Corresponding author.

E-mail address: patrick.cloos@umontreal.ca (P. Cloos).

https://doi.org/10.1016/j.jmh.2020.100017

Received 23 October 2020; Received in revised form 2 December 2020; Accepted 2 December 2020 Available online 8 December 2020 2666-6235/© 2020 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

The city of Montreal, Quebec is one of the main destinations for Haitian migrants in North America. According to Mills, relations between Canadian and Quebec societies and Haitian migrants are shaped by antagonistic dynamics: solidarity, welcome, integration and sharing of ideas on the one hand, racism, deportation, professional de-qualification or even exploitation on the other hand (Mills, 2016). Over the years, the Haitian population in Quebec experienced substantial social problems (Labelle et al., 1983, Cloos et al., 2016). According to the 2016 city census, there were nearly 145,000 people in the Quebec province who identified themselves as being of Haitian origin; of this number, 65.4% were aged 15-64 (population average: 41.9 years old); and 49.2% were women (Statistics Canada, 2017). Thus, the Haitian community in Quebec is heterogeneous in terms of cultural, social and economic background, migration status, period of settlement and place of birth (Cloos et al., 2016). Within this community in 2011, 43.0% of people of Haitian origin are Canadian-born and over half (57.0%), including non-permanent residents, were born outside the country, and can therefore be labelled as international migrants (Ministère de l'Immigration et des communautés culturelles, 2011). In addition, income inequalities are growing for people with Haitian origins; the reason for this being that the mean revenue of Haitian settling in Quebec decreased between 2011 and 2016 (Jeune Chambre de Commerce Haïtienne, 2019).

The literature about the health of Haitians immigrants in North America is scarce for multiple reasons, including lack of confidence in research (Fête, 2019). High rates of stress and depression post-earthquake were reported among a Haitian community in USA (Martinez et al., 2014). Authors suggest that the stress associated with past experience of political violence such as the Duvalier regime have negative effects on Haitian immigrants' mental health (Green et al., 2018, Cloos et al., 2019). In Quebec, a study highlights difficulties for Haitians to access mental health care (Lampron, 2012). Disasters such as earthquakes are known to be strong risk factors for psychological distress and mental health problems among survivors. Post-traumatic events that persist for longer than the primary events, and that may lengthen the impact and distress associated with the primary stressors are part of secondary stressors that should not be overlooked. Secondary stressors are related to economic, education, family, health, resources and social issues (Lock et al., 2012). Authors called for more research regarding the social and health needs among the Haitian migrant population in order to fill a research gap in migrant health (Cloos et al., 2019). One recent study undertaken with Haitian migrants residing in Montreal suggests that, due to multiple sources of stress in Haiti and during the migration journey, Haitian refugees and asylum seekers seem to be particularly affected by multiple mental health related issues (Cénat et al., 2020). The present study is part of a larger research that sought to better understand the meanings that Haitian newcomers, who experienced the 2010 earthquake in Haiti, give to their experience of migration in Quebec, in light of the social determinants of health.

2. Migration as a social determinant of health

Migrant health is shaped by multiple stressors related to circumstances and dynamics, from the place of origin to the new country of residence (Torres et al., 2013). Thus migration can be seen as a social determinant of health (Castenada et al., 2015, Cloos et al., 2020). For this empirical study, we decided to adapt WHO's framework by Solar and Irwin (2010) so as to guide the analysis. This framework suggested two main dimensions – structural and intermediate determinants of health. The first encompasses the characteristics of the host country's political and economic context, such as the type of political organisation, laws, and economic and social policies, which shape the social gradient and therefore the social position of each person according to their occupation, level of education and income. These components determine the population's living and working conditions, behaviors, and psychosocial factors such as stress, as well as the organisation of and access to the health system. These two levels of determinants will have an impact on the health and well-being of the population. Solar & Irwin originally conceptualised the category of social capital and social cohesion as a SDH "cutting across the structural and intermediary dimensions, with features that link it to both" (Solar and Irwin, 2010).

In Fig. 1, the following structural determinants have been added or adapted to integrate specifications related to migration, based on a recent paper on the health of migrants with precarious status in Montreal, Quebec (Cloos et al., 2020). Migration law and policies in place in a country affects migrants' rights, social position and access to resources and opportunities. Political and social rights and opportunities are provided according to the migration status. Migration status (i.e., permanent or temporary) or absence of status therefore contributes to shape people's social position in association with SES, gender and ethnicity/region of origin/racism. Hence, one's social position shapes one's living and working conditions, psychosocial factors, and determines one's access to services (Cloos et al., 2020). Social position now includes SES, migration status, region of birth, age and gender. In agreement with previous works studying the intersection of health and racism (Krieger, 2003), racism is viewed as a second "in-between" determinant, grounded in both structural and intermediary determinants. Based on this perspective of migration as a condition that shapes one's health as much as a condition that affects other SDH, this study explores the links between migration trajectory and self-perceived health among Haitian migrants settled in Quebec after the 2010 earthquake.

Using this adapted version of the SDH framework to make sense of Haitian immigrants' narratives, we attempt to answer the following qualitative research question: *How does the analysis of Haitian migration narratives based on the social determinants of health allow us to make links with their self-perceived health?*

3. Methods

3.1. Study design, sampling and data collection

In this qualitative study we applied a flexible case study design (Stake, 1995) using a longitudinal approach (Gautier et al., 2019). This was an intrinsic case study (Mills et al., 2010) of Haitian migrants settled in Quebec after the 2010 earthquake to better understand the links between migration circumstances and self-perceived health. A semi-structured interview guide was developed using the main dimensions of the aforementioned SDH framework (Fig. 1). Specifically, interview questions aimed at understanding: family and social situation in Haiti, arrival and reception conditions in Quebec, migrant status upon arrival, problems and difficulties encountered in daily life, solutions identified and resources mobilised to manage difficulties (e.g., school/employment, finances, housing, food), and health issues (e.g., representations, impacts on daily life, healthcare seeking, health outcomes). Data was collected from 23 key informants at three time points: in 2015 (6 interviews), 2016 (8 interviews) and 2017 (9 interviews). Two interviewers who conducted the first 14 interviews were Master and Doctoral students who spoke Haitian Creole. PC conducted the remaining nine interviews assisted by an interpreter (when interviewees could not speak French fluently). Internal diversification was used to sample the target population (Haitian migrants in Quebec) thereby highlighting a variety of gender, age, migrant status and socio-economic characteristics (Pires, 2007). The selection of study participants was built from community workers referral and interviewees' network. This snowball sampling strategy was preferred because this strategy allows the study of under-explored phenomena, especially when purposive sample is difficult to reach (Johnston and Sabin, 2010). Most of the recruitment took place in a community-based organisation located in the Northern part of Montreal, primarily but not exclusively for Haitian newcomers. This community-based organisation offers various activities and support services to newcomers (e.g., networking, French courses, employment assistance). The research team informed representatives

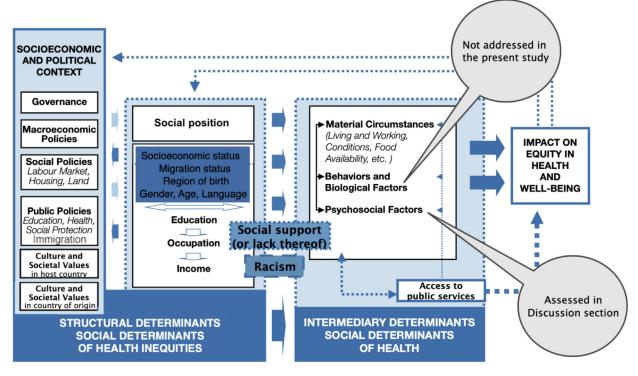


Fig. 1. Integrating migration in the conceptual framework on social determinants of health.

Source: Adapted from: Solar O, Irwin A. WHO – A conceptual framework for action on the social determinants of health. Discussion Paper Series on Social Determinants of Health.

of community-based organisations and the latter participated in the recruitment process. Some interviews were held in a room in the selected community-based organisation's facility. Some contacts were not always followed up by an interview. In a few cases, an appointment was made with the participant who was contacted by telephone; in such cases the interview was usually held at the community-based organisation's facility. In a limited number of cases, the interview took place either at another Haitian community-based facility or at the participant's home. All interviews were conducted in quiet and confidential conditions and lasted 45 to 60 minutes. Interviews were audio-recorded.

3.2. Data analysis

All interviews were verbatim transcribed (segments in Creole were also transcribed fully and a French translation was added below those segments so as to ensure a valid translation and analysis) and uploaded to QDAMiner© for data processing and coding. A deductive-inductive approach to coding was used, starting from the components of Fig. 1. A content analysis was performed (Hsieh and Shannon, 2005). In addition to the open-ended questions, the first part of the face-to-face interviews began with asking (closed) questions pertaining to self-rated health. For this section of the data, we completed a descriptive analysis of people's self-rated health.

3.3. Ethical considerations

This research was approved by the Research Ethics Board (Society and Culture) of the University of Montreal (2014-15-071-D). Information about the research was given to individuals prior to the interview. Written consent was obtained before the interview. If participants preferred not to give their name and signature, verbal consent was obtained. In this case, the interviewer had to sign a document stating that informed consent was obtained, questions were answered, and individual's rights respected. Individuals were free to answer questions or to withdraw at any time. A token of appreciation (\$20) was offered to each respondent for their participation.

4. Results

Results in this section are presented following the logic and categories of the SDH adapted framework (Fig. 1).

4.1. Participants' sociodemographic and health characteristics

Most of the participants of this study came to Canada (Montreal, QC) under the familial reunification program following the 2011 earthquake in Haiti, with the exception of two participants who recently arrived in Montreal and applied for an asylum seeker status. A total of 12 women 21–76 years of age and eleven men between 22 and 56 years old participated in the study. Table 1 describes sociodemographic and health characteristics of the participants.

The majority of participants resided in Quebec between one to six years. Three participants arrived more recently and planned to stay in Quebec and apply for an asylum-seeking status at the time of the study. Twelve respondents (six women and six men) perceived their income as insufficient to live or declared no income at all. Regarding occupation, six women and five men were employed, and one man and one woman were students. Four women and five men were unemployed. Three education level categories were used: no formal education (3), primary/secondary degrees (8) and professional/university degree (12). Four women lived alone, and the others lived with family or a friend, two men were living alone and nine with family or friends. Four men were living alone in Montreal because the rest of their family stayed in Haiti. Among the 23 participants, 16 perceive their health as positive (from good to excellent) as compared to 7 who perceived their health as negative (bad or fair). Self-assessment of health has been recognised a valid indication of functional health, morbidity, mortality, and health service use (Shields and Shooshtari, 2001), and, more generally, wellbeing . Participants reported stress (F1, F3, M6, F8, M15, F16, M18, F19,

Table 1	
Participants'	characteristics.

#	Age	Gender	Status	Education	Income	Occupation	No of years in Quebec*	Family status	Self-perceived health	Designation ($F = female, M = male$
1	35	F	PR	Secondary	insufficient	Unemployed	3	Married	Good	F1
2	60+	F	R	Without formal education	sufficient	Unemployed	3	Single	Fair	F2
3	50+	F	PR	Primary	insufficient	Housewife	2	Single	Good	F3
4	60+	F	PR	Professional	insufficient	Teacher	5	Single	Excellent	F4
5	65+	F	PR	Without formal education	insufficient	Unemployed	3	Widow	Fair	F5
6	40+	Μ	PR	Primary	insufficient	Warehouse worker	3	Married	Fair	M6
7	20+	Μ	PR	University	sufficient	Student	5	Single	Excellent	M7
8	20+	F	R(2012)/PR (2015)	Secondary	sufficient	Manager	5	Single	Good	F8
)	30+	F	С	Professional	sufficient	Customer service	6	Married	Excellent	F9
10	20+	F	PR	University	parents' revenue	Student	2	Single	Good	F10
11	20+	F	PR	Secondary	sufficient	Beneficiary attendant	5	De facto partner	Good	F11
12	20+	Μ	PR	Secondary	sufficient	Security controller	4	Single	Good	M12
13	20+	Μ	PR	Professional	sufficient	Beneficiary attendant	4	Single	Good	M13
14	20+	Μ	PR	Professional	sufficient	Accountant	5	Married	Excellent	M14
15	30+	Μ	С	University	sufficient	Real estate	5	Married	Fair	M15
16	50+	F	PR	Without formal education	insufficient	Manufacturing/ packaging operator	5	Single	Good	F16
17	50+	Μ	PR	Secondary	insufficient	Unemployed	3	Married	Excellent	M17
18	30+	М	PR	University	insufficient	Unemployed	3	Married	Bad	M18
19	50+	F	CSQ	Professional	insufficient	Unemployed	3	Widow	Good	F19
20	30+	F	PR	University	sufficient	Services	6	Single	Good	F20
21	30+	Μ	Out of status	University	no income	Unemployed	3	Single	Good	M21
22	30+	Μ	AS	Primary	insufficient	Unemployed	Less than one year	De facto partner	Fair	M22
23	40+	Μ	AS	University	no income	Unemployed	Less than one year	Married	Fair	M23

Notes: *At the time of the interview; PR: Permanent resident; C: Canadian Citizen; CSQ: Certificate of selection from Quebec; AS: Asylum seeker (in progress).

F20); fatigue (F16); hypertension (F2, F19); diabetes (M6, M15, M23); Hypercholesterolemia (M6); dental issues (F10); work injury (M17); serious traumatism due to traffic accident (M18); and some stated they feel better as compared to before in Haiti and/or after the earthquake (F2, F3, F5, F19) while others stated they felt better before in Haiti (F8, F20).

4.2. Structural determinants of health (social determinants of health inequities)

4.2.1. Political, cultural and environmental context

Most respondents came directly to Quebec from Haiti, as part of private sponsorship programs (through family members already residing in Canada), or the special humanitarian sponsorship program designed for victims of the 2010 earthquake. In general, the dire conditions created in the aftermath of the earthquake motivated the decision to leave Haiti. Several respondents spent months or years in other countries prior to reaching Canada. For one of them, the migration trajectory was particularly hazardous, possibly triggering trauma. To the questions "What was your health status in Haiti?" and "Since you moved to Quebec, how would you assess your health?", some participants answered having some health problems that started in Haiti. Several participants suggested that their already precarious living conditions in Haiti worsened in the context of widespread insecurity after the earthquake. In addition, both women and men reported having suffered from losing family members or friends or their job or house in Haiti. Several participants suggested that they developed a health problem after the earthquake. These participants, among the least advantaged socioeconomically, including men and older women, linked their health issues with the shock experienced during the earthquake and the instability in their lives. They cited hypertension, diabetes, headaches, loss of appetite, among others. Spirituality and faith are key themes emerging from most participants' discourse, including in relation to health. Participants refer to religious codes in order to make sense of their own health status. According to a participant who has suffered severe trauma as a result of an accident in Quebec, "God is the only one we can count on" (M18, 30+, poor health). Prayer and "God's will" are means to preserve themselves from illness or to enable recovery from the traumatism due to the earthquake.

4.2.2. Social position

As proposed in Fig. 1, social position is shaped by interrelated categories: SES, region of birth (here Haiti), (income, occupation and education), age, gender, migration status and language. Precariousness can be associated with both (temporary) migration status and other structural factors such as education, age, gender and language, which together determine social position.

Income: Among the seven participants who perceived their health as negative (fair or bad), five declared their income as insufficient to live or no income. Some benefit from social welfare assistance. However, it is sometimes not enough to live. One participant said:

"There are times when I do not have a penny and then I meet a person who gives me a \$20 or \$50 [banknote]." (F5, 65+, fair health)

Another participant emphasised his financial difficulties that are partly related to financial support of family members in Haiti:

"Of what I earn, I have my rent to pay, I have to eat, and also to fulfil my responsibilities in Haiti, I have my wife and children to whom I have to send money. Now life is getting more expensive. (...) This makes life not easy." (M6, 40+, fair health)

A woman (F16, 50+, good health) declared insufficient revenue to live but reported that she still managed to send money to Haiti, which made it difficult to save money. "*Insufficient income is the biggest problem*", she said. Younger students still depend on their parents' income and some benefit from financial aid.

Education (and age, gender, and language): In this section, based on the quantitative data presented above (Table 1), and interview data, we suggest relationships between education and other variables: age, gender, language, and occupation. In our sample, women generally had lower formal education than men. Two women with no formal education, and only speaking Creole, reported having a job in a factory. More women (10/12) tended to assess their health as positive (good to excellent) as compared to men (6/11), especially when looking at the most represented age category (31–59). Among the 10 women who perceived their health as positive, nine declared having at least a primary level education, while the two women who perceive their health as negative are 60+ of age with no formal education. Migration was considered particularly difficult for older women without formal education and unemployed, as compared to younger women and those with either education and/or employment:

"No, I do not work. I looked for work, but I could not find any because I am illiterate. I cannot read. I was told that I would have to submit my resume. I am 67 years old now. I was told that I am not going to find a job, I do not have the level for it." (F2, 60+, fair health)

The possibility to attend French classes at *Maison d'Haiti* reportedly facilitated their subsequent integration. As for men, once they settled in Montreal, they were more likely than women to return to college to obtain a diploma. Yet, some of them had to abandon their studies to support their families. Opportunities for young students who come to begin or complete their studies in Quebec appeared to be greater. Students also reported having the opportunity to make friends through the school system and to master French well. The feeling of empowerment through education was shared by at least three young respondents. Some respondents indicated that migration offered him the opportunity to study in Quebec, which was not the case for their family members who stayed in Haiti.

Occupation: According to a woman (F20), feeling good in life is associated with having an occupation because it allows one to stop being dependent on other people. However, many respondents, including F20, reported facing several difficulties in finding work that created stressful conditions. Thus, some volunteer through avenues such as childcare to feel better. One woman highlighted that even after accumulating a four-month experience as a volunteer in community-based organisations, when she would apply to jobs in the social care sector, she would not get called for an interview. Participants over the age of 50, both women and men, expressed that they had more difficulty in finding a job. Unlike men, women in this age group are more likely to report that they do not speak French well enough or that they cannot read. Underlining the precarious jobs that can be offered by employment agency, one woman declared:

"I was referred to an agency. But every time I went there, I was told to wait or come back another day. In the end, they offered me to start a job at eleven o'clock in the evening. This schedule is not good for me, so I refused, and I dropped this agency". (F3, 50+, good health)

Another participant emphasised the idea that such agencies maintain precarious working conditions:

"Sometimes the agency goes a week, or three days, four days without calling you. Because there is no business and you are not the only one waiting for work. The agency can place you here for three days, and next week they send you to another place for four days." (M6, 40+, fair health)

Migration status: The three participants who declare applying for asylum (2) or having a refugee status (1) perceive their health in a negative way. Respondents reported that their life plans were put on hold as a result, since those awaiting status or those who had been denied refugee status could not work legally and did not have medical coverage. Some participants reported experiencing "stress" because of the costs associated with the immigration application, and notably stress associated with medical exams and their capacity to provide sufficient financial credentials to stay in the country. It was also noticed that even if the migration trajectory was very dangerous and without medical coverage, arriving in Quebec can give a temporary feeling of relief and normal health condition, like in the case of a man (M23) who was in the process of asylum seeking at the time of the interview.

4.3. Social support (or lack thereof)

Building a new social network can be challenging. For some, it was quite difficult to leave Haiti, and large community-based organisations (such as *Maison d'Haiti*) played, for some respondents, an instrumental role in integration.

4.3.1. Social relationship and networks

Those who benefited from the Quebec sponsorship program joined already established families, three of whom followed their parents. Having family present in Quebec proved an important source of support at multiple levels. Yet, family may also be a source of conflict. Two participants indicated experiencing adjustment problems in relation to living with family members. In fact, they reported maintaining strained relations with their family members. The supporting network and social relationships in general appeared to act as a powerful buffer against stressful conditions and isolation. In fact, we found important differences in the study in relation to overall wellbeing between those who have such social network versus those who do not.

"Now, with God's help, and friends' support – friends who come to visit me and tell me little jokes, and other things like the concerts organised by our church where we are invited, this is how the water ends up drying out from my eyes." (F5, 65+, fair health)

Soon after their arrival, participants – especially the older ones – quickly sought support from community organisations dedicated to the Haitian community. *Maison d'Haiti* for instance was conceived a place not only for learning French, but also for socialising and participating in artistic activities or cultural exchanges. Social and family networks also provide financial support:

"They [family members] were the ones who helped me. They gave me food, they were the ones who went out with me when I needed to buy something, when I needed clothes to go out. They constantly watched over me, the way I should dress, what I should wear." (F19, 50+, good health)

Many participants also looked for a church of their faith. Attending a place of worship reportedly allowed them to stay connected to their community, to integrate and to be able to maintain a connection with their country of origin, particularly by sharing food and speaking Creole. When participants – especially the older ones – faced some difficulties (e.g., challenges to access health services or get a job), they were used to finding comfort in contemplation and prayer. The Church was also a place of activity and fulfilment for young and old, women and men alike.

4.3.2. Feeling of stress, loneliness, and sadness

Sources of stress are multiple and can be related by participants to living conditions in Haiti, the aftermath of the 2010 earthquake in Haiti, and the emigration process from Haiti. While in Quebec, various sources of stress were identified such as no to low income or no occupation, living and working conditions and new way of life. Many expressed feelings of stress in their narratives and some directly related stress with the development of a disease like a woman with hypertension (F19, 50+, good health), and a man (M15, 30+, fair health) with diabetes. However, in contrast to women, men (3) who expressed some form of stress also perceived their health negatively. Among them, this man (M15, 30+, fair health) stated: "*There are a lot of things, either at work, from a satisfaction standpoint when you are insecure sometimes in life, it brings a lot of stress.*"

Participants spoke about family separation and subsequent loneliness as sources of stress:

"When I arrived here, I was under stress because I left behind me, wife and children without knowing how they are doing. Even when you send them something to live with and talk to them, it is not at all the same thing as when you were there, by their side. I was under stress and on top of that, there is the whole new way of life I was not used to." (M6, 40+, fair health)

However, family conflicts can also be a source of stress. Participants expressed sadness following the loss of a relative due to the earthquake. For some of them, the memory of the earthquake was still very painful. In order to find coping strategies and information to relieve sadness or help them better integrate, participants reported turning to family members, church or community organisations, as highlighted in the previous sections.

4.4. Racism and other forms of discrimination

The focus on reported or experienced situations of discrimination is associated with the relationship that the participants have with themselves and the Quebec society. One participant pointed to the way in which Quebecers of Haitian origin are designated (as Quebecer or Haitian) according to their contribution perceived as positive or negative:

"I know that soon I could be a Canadian citizen. But automatically I do something wrong, despite the fact that I have the title of Canadian citizen, you are no longer going to say that I am a Canadian citizen you are going to say that I am a Canadian citizen of Haitian origin." (F8, 20+, good health)

While also identifying himself as Haitian and therefore similar to the majority of Montreal North residents, another participant preferred to avoid this borough so as not to be negatively labelled and associated with street gang members. A winning strategy according to him would be, not to resist, but to conform, to take his place, which would avoid being caught out. Another attitude was to show some indifference to discriminatory situations so as not to be affected and therefore feel destabilised. Another recalled changing his name in his CV, in order to increase the likelihood of being called for an interview. One woman reported feeling some kind of discrimination during job interviews. Another participant chose to file a complaint and then leave his work because of racism ultimately reflects the construction of relationships with the *other Quebecers* based on mistrust:

"You look at the person and the person gives me a little smile, and then I say to myself in my heart, that was a hypocritical laugh. But that is something you very often find here with very hypocritical Quebecers, especially in the jobs. I have nothing against them, I live in their country, I have to respect their principles and their culture but I know that they are not my friends." (M15, 30+, fair health).

The previous participant added that racism can impact daily life because of the fears that this can lead to, for example, through repeated complaints in the professional domain. Moreover, he strongly lamented such racialized hierarchy at work. Respondents specified that racism indeed happened mostly at work. Another participant decided, after having escaped from a situation of sexual harassment at work to go through confrontation in another context, this time related to racism at work:

"I was on-call. When I went to meet the person, we were walking and then I told her after you madam. She turned around and she said: there are black workers? I said: yes, there are workers of all colours. She said: Oh, that is amazing! And then we went into the office and I started the process and I said: Madam, how can I help you? And then she was explaining her stuff to me. Then at one point she asked me: can I call you brown or chocolate? I said: can I call you snow white? She said: no, I have a name. I replied: I have a name too. I am a person." (F20, 30+, good health).

In addition, F20 insisted that there was nothing in place in public health institutions in Quebec to report racist events. Regarding other forms of discrimination, a woman reported ageism: she was told that because of her age, there was little chance for her to find work.

4.5. Intermediary determinants of health

4.5.1. Living conditions

In several instances, participants' narratives suggested that the decision to settle in Quebec led to both improved living conditions and selfperceived health. The quality of the environment and the general safety of the neighbourhoods in which the participants live are also important elements justifying wellbeing improvements upon arrival. In addition, the ability to connect one's "good values" with Quebec's own "good" cultural values was acknowledged as a key determinant of integration. Conversely, all people who declare having life difficulties also perceive their health in a negative way. Those participants mentioned family conflicts, insufficient income, not being able to support family in Haiti, life insecurity, or family conflict. One participant (F8, 20+, good health) stated that her health is not as good as before, because, "in Quebec life is stressful".

4.5.2. Working conditions

Even when immigrants obtain a job, working conditions may be hard. Many interviewees reported precarious jobs including long shifts, minimum wage, monotony, and overall difficult working conditions. This experience seems to be shared both by those with study permits (which do not allow to work legally) and those waiting for a regular immigration status.

"Work in factories, undeclared work... We worked illegally because at one point we did not have a work permit. We only had study permits. It was cold! We worked in the cold because it was salad [picking], and with not enough protection. Many Haitians, all immigrants, mostly women. Most of them were without [migration] status. When I say without status, I mean waiting for status." (F20, 30+, good health)

4.5.3. Access to health care services

Respondents with permanent status have a public health coverage that allow them to access medical care:

"Actually here, your status gives you access to health [...], since you have your health [insurance] card. This is positive. Not everything is perfect, but still, this is very positive." (M17, 50+, excellent health)

Eligibility to public health coverage for permanent residents was appreciated and likely contributed to allow access to health care. And, according to a woman, access to health care helps to feel better:

"Since the day I met the family doctor, I can say that I have been fine. Thanks to the people at the clinic who referred me to a family doctor, he sent me for a series of tests; he prescribed medication, since then I feel normal." (F2, 60+, fair health)

Conversely, some without permanent status reported that they did not benefit from public health coverage. For example, a man (M22, 30+, fair health) indicated that he did not have public medical coverage yet, but he will get it when he files his application for asylum.

5. Discussion

To the best of our knowledge, this is the first qualitative study that aimed at examining the social determinants of migrant health from the perspective of Haitian nationals who settled in Montreal, Quebec after the earthquake that hit Haiti in 2010. Most participants benefited from a special sponsorship programme, a few were in the process of seeking asylum at the time of the interview. Based on population health studies in Canada, it is estimated that about 8.5% of recent migrants (9 years and less) perceived their health as negative (Cloos et al., 2020). Keeping in mind the fact that this is a qualitative study, the proportion of participants in our study who perceived their health negatively was high: about 1/3 of participants perceived their own health as negative. This could be put in relation with a sample that has, globally, a low SES, as described earlier. In this discussion, we review our findings in light of the available literature on the social determinants of health, and we highlight key issues for migrants – precarious migration status, and social support networks – that we found intertwined with other SDH.

5.1. Consistent findings with the literature on social determinants of health

Consistent with the literature (Kim et al., 2018), more women than men perceived they had good health. Many participants who declared experiencing stress also declared insufficient income (6/9). Studies have shown that people with low SES live in more stressful social environment (Adler and Newman, 2002). Both structural (e.g., lower social status), and psychosocial factors (e.g., feeling of isolation) can indeed be sources of chronic stress that are known to negatively impact health through cardiovascular and/or metabolic diseases (Wilkinson and Marmot, 2003).

Our study highlighted that both racism and migrant status (temporary or out of status) appear to generate fears and/or concerns that have the potential to negatively impact health (Cloos et al., 2020). In our study, some respondents indeed largely discussed their own experience of racism. It is also important to note that our sample is composed of recent immigrants whom might have, to date, encountered less exposure to racism and other forms of discriminations but with deleterious effects, which are known to increase over time (Noh et al., 2007). Precarious migrant status appeared to be not only a source of stress (as seen above), but also pushing Haitian immigrants to take on poorly protected jobs. According to respondents, working conditions in the agricultural field were particularly hard, and likely to cause illhealth, because of poor ergonomics (Schenker, 2010). Workplace health and safety conditions in the agricultural field are known to negatively affect immigrants' physical health (particularly those undocumented) (Quandt et al., 2013). Migrants with temporary status also face difficult conditions in urban settings, as they get recruited by placement agencies who have been criticized for offering sub-standard contracts with uncertain prospects (Salamanca Cardona, 2018). In those placement agencies, migrants from African and Caribbean origins are known to be overrepresented (Cognet, 2004). This issue relates back to structural racism (as represented in Fig. 1). Racism is thus not only featured in attitudes and daily interactions (as highlighted by some of our respondents), but also at the institutional level, through political and economic organisations that perpetuate it (Cloos, 2015).

The context of the COVID-19 pandemic is also interesting to put in perspective, as it appears to exacerbate social inequities. Temporary foreign workers – asylum seekers in particular – are at risk because they refuse to publicly denounce the dire conditions in which they work, for fear of losing their immigration status (Bouka and Bouka, 2020). In addition, a large number of asylum seekers from Haiti in the Northern districts of Montreal were employed in long-term care facilities (Freeman, 2020, Stevenson and Shingler, 2020). The tragic events in those facilities and agricultural farms have disproportionately exposed Haitian immigrants with temporary status to SARS-CoV-2, thereby drawing a continuous link between immigration status, working conditions, and health.

Other authors have suggested that Haitians suffered from traumatic chronic stress months after the 2010 earthquake (Risler et al., 2015) and even after more than two years, especially among women (Cénat and Derivois, 2014). Even though the purpose of this study was not to identify or assess participants' suffering from the aftermath of the earthquake, we inferred that some women expressed a great deal of pain and difficulty in revisiting these dramatic events. For some, the circumstances

of migration, such as being forced to migrate and unplanned migration, sparked a feeling of lack of control over migration decision. One study suggested that this could result in higher mental distress (Torres et al., 2013). Moreover, migration-related stressors in the host country, such as unfair treatment or fear of deportation, can be associated with mental distress and possibly impact self-perceived health (Torres et al., 2013).

Our study also highlighted key 'mitigating factors' of such mental distress and ill-health. Haitian migrants in Montreal indeed reported benefiting from diverse institutional and non-institutional social actors and resources (transport, social, clothes and food assistance) – faith and community based-organisations, health care and social services, and other people and organisations from and outside the Haitian community (Blanc et al., 2016). Respondents also reported maintaining close ties with relatives in Haiti; many of them sending money home and/or preparing for family reunion in Quebec. The presence of a double support network (family, friends), both in place of origin and current location, might indeed help migrants to cope with various difficulties and isolation in the country of residence (Pannetier, 2018).

5.2. Policy implications

In light of these findings, we offer a few policy recommendations. At the meso-level, we recommend implementing targeted psychosocial programmes that are fully integrated in healthcare services also have the potential to support individuals' management of chronic stress in order to reduce the level of stress and subsequent cardiovascular and metabolic diseases (Adler and Newman, 2002). At the macro-level, governments should design welfare programmes that specifically support immigrant families with young children, encourage community activity and social networking, reduce material and financial insecurity, and promote skill enhancement (Wilkinson and Marmot, 2003). Workplace regulations should be enforced in order to protect the most vulnerable, i.e. women and those with temporary or without authorised migrant status. Among these policies, institutional mechanisms should be implemented to fight racism and protect workers. Racism indeed is known to be exclusive, to harm health and to make working conditions difficult (Gravel, 2015). We hope that the Black Lives Matter movement prompt lead politicians to address systemic racism in Canada and Quebec.

Our results may also inform policymakers on the dire conditions of those with precarious status, in the context of COVID-19. Quebec recently declared that COVID-19-related diagnostic and healthcare will be covered for all residents regardless of migration status. We hope that this promise, the enforcement of which is not yet obvious, can be fulfilled including after the pandemic and not just for COVID-19 (Ridde et al., 2020). Precarious status can obviously worsen in such context, whether because of loss of work and income, little protection against the virus, isolation or insufficient access to information. With regard to immigration policies, Quebec's government announced in December 2020 that people who have applied for asylum and who have been working in the province's health and social services in the context of the COVID-19 pandemic will be eligible for permanent residence in Canada (Le Devoir, 2020)

5.3. Strengths and Limitations

One of the strengths of this paper is to draw from rich empirical data from 23 key respondents of Haitian origins that have had diverse migration trajectory and status, and settlement experiences in Quebec. Interviews were conducted between 2015 and 2017 with people who have experienced various events, in Quebec and elsewhere (Haiti and other parts of the Americas). This two-year period made it possible to further diversify the sample by including people who had either travelled through several South American countries or had left the USA under pressure from the anti-immigrant measures of the administration at the time. In addition, even though we used snowball sampling (which might have reduced diversification), our sample reflects significant gender and age balance. As in most qualitative research, a social desirability bias has possibly shaped respondents' responses to interviewers' questions. Findings from this study must therefore be considered within the context of complex social interactions. Furthermore, even though self-perception of health is a valid measure of one's health, this self-assessment may vary for the same respondent during and after the interview. For instance, someone can state 'I do not feel in good health' during the conversation while assessing their health as 'good' in the socio-demographic questionnaire. A possible explanation for this might be that the conversation itself somehow made the participant feel better.

6. Conclusion

Our study highlighted that schools and community-based organisations can give immigrants a sense of belonging and participation in order to feel valued and not excluded. Migrants, especially those without legal status, are likely to express fear to access healthcare or public services, which are sources of chronic stress with potential adverse health outcomes (Ridde et al., 2020). There is growing evidence that communitybased organisations in particular can help link these services to those in need. Funding participatory action research with those communitybased organisations would be helpful to further highlight this role and their articulation with regular healthcare services.

In addition, available studies suggest a high prevalence of posttraumatic stress disorder among Haitians a few years after the earthquake. There is therefore a pressing need for more scientific literature or initiatives targeting survivors of the earthquake who migrated to foreign countries, including follow-up or longitudinal studies to investigate the outcomes on their overall health.

Declaration of Competing Interest

None.

Acknowledgment

Thank you to all research participants, and to *La Maison d'Haïti* and *La Perle retrouvée* (Montréal) for their assistance in the recruitment of participants. Thank you to Pierre Tessono, Stephane Alix and Vincenda for their contribution in collecting data. Thank you to Stéphanie Collins for her contribution in the initial codification of data, and Nickez McPherson and Christiana Abraham for their linguistic revisions. Thank you also to the reviewers of the Journal of Migration and Health who contributed to improving the initial version of this article.

Funding sources

This research was supported by Fonds de Recherche du Québec -Société et Culture (FORSC) (Grant number : 181088).

References

- Adler, NE, Newman, K., 2002. Socioeconomic disparities in health: pathways and policies. Health Aff. (Millwood) 21, 60–76. doi:10.1377/hlthaff.21.2.60.
- Bouka A-A, Bouka Y. Canada's COVID-19 blind spots on race, immigration and labour. Policy Options 2020.
- Blanc, J, Rahill, GJ, Laconi, S, Mouchenik, Y, 2016. Religious beliefs, PTSD, depression and resilience in survivors of the 2010 Haiti earthquake. J. Affect. Disord. 190, 697–703. doi:10.1016/j.jad.2015.10.046.
- Castenada, H, Holmes, SM, Madrigal, DS, Young, M-ED, Beyeler, N, Queseda, J, 2015. Immigration as a social determinant of health. Annu. Rev. Public Health 36, 375–392.
- Cénat, JM, Derivois, D., 2014. Assessment of prevalence and determinants of posttraumatic stress disorder and depression symptoms in adults survivors of earthquake in Haiti after 30 months. J. Affect. Disord. 159, 111–117. doi:10.1016/j.jad.2014.02.025.
- Cénat, JM, Charles, CH, Kebedom, P, 2020. Multiple traumas, health problems and resilience among Haitian asylum seekers in Canada's 2017 migration crisis: psychopathology of crossing. J Loss Trauma 25, 416–437. doi:10.1080/15325024.2019.1703610.

- Cloos, P, Collins, S, Ndeye, NL, St. Louis, J., 2016. Expériences migratoires de nouveaux-arrivants haïtiens établis au Québec depuis la catastrophe ayant frappé Haïti le 12 janvier 2010: Relations, contradictions et ambiguïtés dans l'expression de la «différence». J. Haitian Stud. 22, 37–56.
- Cloos, P, Collins, S, Joubert, W, Rosenberg, E, Gautier, L, 2019. Vieillissement et perte de mémoire : avis de migrants haïtiens résidant au Québec. Sante Publique 31, 485–495.
- Cloos, P, Ndao, EM, Aho, J, Benoît, M, Fillol, A, Munoz-Bertrand, M, et al., 2020. The negative self-perceived health of migrants with precarious status in Montreal, Canada: a cross-sectional study. Plos one 15, e0231327. doi:10.1371/journal.pone.0231327.
- Cloos, P, 2015. Pouvoirs, Différence et Stéréotypes : Regard Socio-Anthropologique sur la Santé Publique Américaine. Presses de l'Université Laval, Québec, Canada.
- Cognet, M, 2004. Quand l'infirmière est noire. Les soins et services de santé dans un contexte raciste. Face À Face Regards Sur Santé.
- Fête, M, Aho, J, Benoît, M, Cloos, P, Ridde V, 2019. Barriers and recruitment strategies for precarious status migrants in Montreal, Canada. BMC Medical Research Methodology, 19 (41). doi:10.1186/s12874-019-0683-2.
- Freeman, A., 2020. The Unequal Toll of Canada's Pandemic. IPolitics https://ipolitics.ca/2020/05/29/the-unequal-toll-of-canadas-pandemic/.
- Gautier, L, Coulibaly, A, De Allegri, M, Ridde, V, 2019. From Amsterdam to Bamako: a qualitative case study on diffusion entrepreneurs' contribution to performance-based financing propagation in Mali. Health Policy Plan. 34, 656–666. doi:10.1093/heapol/czz087.
- Gravel, MA, 2015. Coup d'oeil sociodémographique: portrait de la discrimination au Québec [An Overview of Discimination in Quebec]. Coup D'œil Sociodémographique Inst. Stat. Qué. 44, 1–9.
- Green, JC, Schoening, A, Vaughn, MG, 2018. Duvalier regime in Haiti and immigrant health in the United States. Ann. Glob. Health 84, 603–611. doi:10.9204/aogh.2366. Hsieh, H-F, Shannon, SE, 2005. Three approaches to qualitative content analysis. Qual.
- Health Res. 15, 1277–1288. doi:10.1177/1049732305276687.
- Jeune Chambre de Commerce Haïtienne, 2019. Population haïtienne au Canada: un retard inquiétant. JCCH. https://www.jcch.ca/population-haitienne-canada/. (accessed March 6, 2020).
- Johnston, LG, Sabin, K., 2010. Échantillonnage déterminé selon les répondants pour les populations difficiles à joindre. Methodol. Innov. Online 5, 38–48. doi:10.4256/mio.2010.0017a.
- Kim, SY, Schwartz, SJ, Perreira, KM, Juang, LP, 2018. Culture's influence on stressors, parental socialization, and developmental processes in the mental health of children of immigrants. Annu. Rev. Clin. Psychol. 14, 343–370. doi:10.1146/annurevclinpsy-050817-084925.
- Krieger, N, 2003. Does racism harm health? Did child abuse exist before 1962? On explicit questions, critical science, and current controversies: an ecosocial perspective. Am. J. Public Health 93, 194–199.
- Labelle, M, Larose, S, Piché, V, 1983. Émigration et immigration : les Haïtiens au Québec. Sociol. Soc. 15, 73–88. doi:10.7202/001394ar.
- Lampron, A, 2012. La schizophrénie au sein d'un Québec multiculturel : le cas des immigrants haïtiens de Montréal. Mémoire de maîtrise. Université Laval.
- Lock, S, Rubin, GJ, Murray, V, Rogers, MB, Amlôt, R, Williams, R, 2012. Secondary stressors and extreme events and disasters: a systematic review of primary research from 2010–2011. PLOS Curr. Disasters doi:10.1371/currents.dis.a9b76fed1b2dd5c5bfcfc13c87a2f24f.
- Le Devoir, 2020. Le programme de régularisation des « anges gardiens » en voie d'être lancé. (Accessed 09 December 2020).
- Martinez, LS, Reich, AJ, Ndulue, UJ, Dalembert, F, Gute, DM, Perea, FC, 2014. Employing a community based participatory research approach to bear witness: psycho-social impact of the 2010 earthquake on Haitians in Somerville, MA. J. Immigr. Minor. Health 16, 1201–1207. doi:10.1007/s10903-013-9815-7.

- Mills, S, 2016. Une place au soleil. Haïti, Les Haïtiens et Le Québec. Traduit par Hélène Paré. Québec: Mémoire d'encrier.
- Mills, AJ, Durepos, G, Wiebe, E, 2010. In: Albert J. Mills, Gabrielle Durepos & Elden Wiebe (Ed.), Encyclopedia of case study research (Vols. 1-0). SAGE Publications, Inc, Thousand Oaks, CA.
- Ministère de l'Immigration et des communautés culturelles. Portrait statistique de la population d'origine ethnique haïtienne au Québec en 2011. Gouvernement du Québec; 2014.
- Noh, S, Kaspar, V, Wickrama, KAS, 2007. Overt and subtle racial discrimination and mental health: preliminary findings for Korean immigrants. Am. J. Public Health 97, 1269– 1274. doi:10.2105/AJPH.2005.085316.
- Pannetier, J, 2018. Liens transnationaux et santé mentale : de la nécessité du lien entre ici et là-bas ? Le cas des migrations africaines en Île-de-France. Rev. Eur. Migr. Int. 34, 79–99. doi:10.4000/remi.10817.
- Pires AP. Échantillonnage et recherche qualitative: essai théorique et méthodologique. Chicoutimi: J.M. Tremblay; 2007.
- Quandt, SA, Kucera, KL, Haynes, C, Klein, BG, Langley, R, Agnew, M, et al., 2013. Occupational health outcomes for workers in the agriculture, forestry and fishing sector: Implications for immigrant workers in the southeastern US. Am. J. Ind. Med. 56, 940– 959. doi:10.1002/ajim.22170.
- Radio-Canada. Pourquoi tant d'Haïtiens demandent-ils l'asile au Canada? Radio-Canada 2017. https://ici.radio-canada.ca/nouvelle/1048519/demandeurs-asilehaitiens-canada-quebec-frontiere-illegalement-explications (accessed September 2, 2020).
- Risler, E, Kintzle, S, Nackerud, L, 2015. Haiti and the earthquake: examining the experience of psychological stress and trauma. Res. Soc. Work Pract. 25, 251–256. doi:10.1177/1049731514530002.
- Ridde, V, Aho, J, Ndao, EM, Benoit, M, Hanley, J, Lagrange, S, et al., 2020. Unmet healthcare needs among migrants without medical insurance in Montreal, Canada. Glob. Public Health 0, 1–14. doi:10.1080/17441692.2020.1771396.
- Salamanca Cardona, M, 2018. Les agences de placement à Montréal et le travail immigrant : une composante du racisme systémique au Québec ? Sociol. Soc. 50, 49–76. doi:10.7202/1066813ar.
- Shields, M, Shooshtari, S, 2001. Determinants of self-perceived health. Health Rep 13, 35–52.
- Solar O, Irwin A. WHO A conceptual framework for action on the social determinants of health. Discussion Paper Series on Social Determinants of Health, 2 2010.
- Statistics Canada. 2017. Quebec [Province] and Canada [Country] (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. https://www12.statcan.gc.ca/ census-recensement/2016/dp-pd/prof/index.cfm?Lang=E (accessed March 6, 2020).
- Stake, RE., 1995. The Art of Case Study Research. SAGE Publications, Thousand Oaks, CA. Schenker, MB., 2010. A global perspective of migration and occupational health. Am. J. Ind. Med. 53, 329–337. doi:10.1002/ajim.20834.
- Stevenson, V, Shingler, B., 2020. Quebec Relies on Hundreds of Asylum Seekers in Long-Term Care Battle Against COVID-19 | CBC News. CBC.
- Torres, JM, Wallace, S.P., 2013. Migration circumstances, psychological distress, and selfrated physical health for Latino immigrants in the United States. Am. J. Public Health 103, 1619–1627. doi:10.2105/AJPH.2012.301195.
- Wilkinson, R, Marmot, M, 2003. The Solid Facts: Social Determinants of Health, 2nd ed Copenhagen: WHO Regional Office for Europe.