Why are African Immigrants in Canada Reluctant to Use Mental Health Services? A Systematic Inventory of Reasons

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Abstract

Background

Studies suggest that despite a high prevalence of mental health conditions among African immigrants in Western countries, they tend to underuse mental health services, compared with native-born people. This study explored the reasons for underuse of conventional mental health services among African immigrants in Canada.

Method

The study participants were 280 African immigrants who had experienced depressive symptoms but did not use conventional mental health services. They were presented with a questionnaire that contained 50 statements referring to reasons for not using conventional mental health services while experiencing depressive symptoms. They were asked to indicate their degree of agreement with each of the statements on a scale of 0-10. Responses were then analyzed using factor analysis.

Results

A eight-factor structure of reasons was found: "*Symptoms underestimation and perceived self-efficacy*" (important for 61% of the sample), "*Relying on community support*" (56% of the sample), "*Cost and waiting time*" (45% of the sample), "*Influence of significant others*" (34% of the sample), "*Denying competence*" (32% of the sample), "*Fear of stigmatization*" (23% of the sample), "*Nature of the consultation*" (10% of the sample) and "*Social models*" (8% of the sample). Scores on these factors were related to participants' demographics.

Conclusion

These findings strongly suggest that strategies to promote the use of mental health services among African immigrants must be multifaceted rather than focused on one single barrier. When implementing these strategies, policymakers should put more emphasis on increasing mental health literacy among African immigrant communities, as well as providing them with culturally sensitive mental healthcare.

Background

African immigrants are one of the fastest growing groups of immigrants in North America [1, 2]. This immigrant group faces challenging post-migration experiences such as systemic racism, unemployment, social isolation, financial difficulties, distress over separation with family members, worrying about family back home, prejudice and discrimination, acculturation stress, language barriers, and adjustment to a new and sometimes unwelcoming environment [3–5]. These stressful experiences may exacerbate existing mental health problems or initiate new mental health concerns [5–7]. Furthermore, immigration is considered a major life stress event that is comprised of numerous losses, including of family and friends, language, culture, homeland, social status, cultural resources, contact with one's ethnic group,

and loss of the cultural self [6, 8]. The chronic and multifaceted nature of the stress experience in immigrants is known as *Ulysses Syndrome* [8], which is linked to major mental health problems, including suicidal behavior, depression, anxiety, and somatoform symptoms [8, 9].

A growing body of research suggests that there are considerable mental healthcare needs in African immigrant communities. A Canadian study found that the prevalence of depression in the Ethiopian immigrant community in Ontario was higher than that of the general population [10]. In Israel, suicide rates among Ethiopian immigrants were found to be dramatically higher than those of the general population [11, 12]. Since suicide rates in the Ethiopian population were generally equal to those seen in Israel [13], researchers concluded that the increased rate of suicidality among Ethiopian immigrants could not be attributed to higher levels of mental health problems prior to immigration [6]. In the United Kingdom, inpatient men who committed suicide were significantly more likely to be Black African immigrants than White British men [14]. Another study showed that male immigrants from North Africa had significantly higher suicide risks compared with English-born men [15]. A study of mental health needs among African immigrants in Sweden found that 20% of participants met symptom criteria for depression, while 18.5% met criteria indicative of anxiety [16].

In Canada, where the healthcare system is publicly funded and available to all citizens and residents, several studies have found that non-European immigrants were less likely to use conventional mental health services when experiencing mental health problems, compared with Canadian-born people [17, 18]. For instance, a recent study showed that African immigrants in Montreal were almost three times less likely to use mental health services in response to emotional problems, mental disorders and addictions, compared with Canadian-born people [18]. Although Canada's Mental Health Strategy considers improving mental health services for immigrants a priority [19], there is little information on the reasons underlying the lower rate of service usage among non-European immigrants. The only study that investigated this question focused on immigrants from Caribbean backgrounds [20]. Using qualitative ethnographic interviews, it identified a wide diversity of reasons given for not consulting mental health services: a) perceived over-willingness of physicians to rely on pharmaceutical medication as a primary intervention; b) beliefs that medication could not solve the roots of mental health problems; c) perceived lack of time of physicians as the time allowed did not allow patients to ask questions; d) difficulty in disclosing one's weak side and discussing personal problems with a stranger; e) perceived uncaring and hostile attitudes of physicians during previous doctor-patient interactions; f) beliefs in the curative power of spiritual interventions; and g) preference for traditional folk medicine.

African immigrants are the second largest number of recent immigrants to Canada, ahead of immigrants from Europe [1]. To our knowledge, no study has examined their mental health usage patterns. Furthermore, as this immigrant group has its own culturally mediated understanding of symptoms and coping strategies, and its own social challenges [21–23], and because these variables affect help-seeking for mental health problems [17, 18], the reasons found in other immigrant groups for not consulting mental health services may not apply, or at least they may present with different weights.

The aim of the present study was to investigate African immigrants' given reasons for not consulting mental health services. Owing to the wide diversity of reasons suggested by previous studies, we chose to use a structural approach. This enabled us to delineate a possible motivational structure underlying non-use of mental health services, isolate specific types of reasons, and measure their contributions. This is an important endeavor as previous research strongly suggested that non-use of health services while experiencing symptoms is the product of a complex motivational net, and that the nature and impact of some motives may be completely unexpected [24–26]. Furthermore, delineating such a motivational structure can help policymakers to target specific motives to promote access to mental health services among African immigrants.

Method

Participants

Participants for this study were recruited in Montreal: one of the most ethnically diverse cities in Canada, and a city where one in three inhabitants is an immigrant. They were recruited through community centers that provide services to immigrants, daycare services, and recreational places in areas of the city that have a high density of inhabitants with African backgrounds, African grocery stores, and churches. Flyers advertising the study were posted at these locations and circulated through African community networks. The flyers invited participants that were African immigrant adults who had experienced symptoms suggesting a major depressive episode (based on the criteria of the Diagnostic and Statistical Manual of Mental Disorders 5th ed.) within the past 12 months but did not seek help in a conventional healthcare facility.

From January 2015 to March 2020, 288 individuals contacted the researchers. After receiving a full explanation of the study and its procedures, 280 agreed to participate. Their ages ranged from 18 to 69 years old. All the participants (165 women and 115 men) spoke French—the official and common language of the research setting—as their first or second language. The participants had emigrated from 13 different African countries: Democratic Republic of Congo (N = 45), Cameroon (N = 28), Côte d'Ivoire (N = 28), Algeria (N = 36), Morocco (N = 22), Guinea (N = 21), Tunisia (N = 8), Togo (N = 14), Rwanda (N = 23), Tchad (N = 6), Somalia (N = 4), Ethiopia (N = 3), Benin (N = 6), Burkina Faso (N = 12), Congo (N = 3), Senegal (N = 9), Central African Republic (N = 2), Mali (N = 7) and Angola (N = 1).

Material

The material was a 65-item questionnaire that consisted of statements referring to reasons for not seeking help from conventional healthcare facilities. The items for the questionnaire were devised following multiple steps. First, a list of items was created by the investigators based on previous studies on reasons for not seeking help from healthcare services [20, 22, 23, 24]. This list was then shown consecutively to two focus groups with eight African immigrants in each who, under the direction of the first author, reformulated items judged as ambiguous and suggested additional items based on their personal experience and that of their relatives and friends. The revised version of the list was then

presented to a third focus group, composed of eight other African immigrants, who found the statements easy to understand and made no additional suggestions. Forty-eight items from the list are shown in Table 1. The common wording of all items—“When I was experiencing these symptoms, one of the reasons why I did not seek care from a conventional healthcare service was that […]”—was chosen to reflect the fact that several reasons can be operating at the same time, or at different times, for the same person [27]. An 11-point scale was printed following each statement. The two extremes of the scale were labeled "*completely false*" (0) and "*completely true*" (10).

Table 1
Results from the Second Exploratory Factor Analysis. Means and standard deviations. Cronbach's alpha.

Items	Factors							
When I was experiencing these symptoms, one of the reasons why I did not seek care from a conventional healthcare service ...	I	II	III	IV	V	VI	VII	VIII
… was that I wanted to maintain other people's respect for me.	**.82**	.13	.09	.07	.17	.01	.13	− .02
… was that I was worried that others would think less of me.	**.82**	.17	.10	.14	.17	.10	− .02	.06
… was that I risked losing my friends.	**.82**	.12	.03	.25	.12	.15	.09	.06
… was that I was afraid that some people in my community would look down on me.	**.80**	.19	.11	.17	.01	.09	.14	.18
… was that it would have damaged my social status.	**.80**	.24	.15	.22	.01	.14	.09	.17
… was that I wanted to maintain a positive image of myself in the eyes of others.	**.77**	.19	.25	.15	.08	.07	.12	.06
… was that I would no longer have been respected within my community.	**.76**	.13	.12	.15	.13	.20	.03	.16
… was that I was afraid of losing the love of certain people.	**.75**	.14	.11	.18	.03	.27	.06	.04
… was that it would have undermined the respect that people in my community have for me.	**.74**	.20	.21	.08	− .05	.22	.09	.24
… was that it would have harmed the image that others have of me.	**.72**	.21	.14	.16	.04	.10	.11	.02
… was that the reason for my symptoms was not medical.	.05	**.73**	.12	.14	− .02	.03	.03	.17
… was that healthcare professionals would not understand my problem.	.24	**.69**	.19	.01	.16	.12	.15	.12
… was that I did not trust this type of professional.	.06	**.68**	.19	.13	.22	.11	.17	.16

I = *Fear of stigmatization*; II = *Denying competence*; III = *Symptoms underestimation and perceived self-efficacy*; IV = *Social models*; V = *Relying on community support*; VI = *Nature of the consultation*; VII = *Cost and waiting time*; VIII = *Influence of significant others*

Items	Factors							
… was that I doubted the competence of this type of professional.	.28	**.64**	.03	.25	.02	.12	.14	.33
… was that I had reservations about the effectiveness of the help that I would be offered.	.20	**.63**	.12	.04	.22	.11	.02	.01
… was that I doubted that healthcare professionals could help me.	.30	**.62**	.11	.18	.15	.12	.17	− .02
was that I doubted that healthcare professionals would have enough compassion for me.	.10	**.61**	− .04	.22	.05	− .06	.06	.06
… was that I was worried that healthcare professionals would have trouble understanding me.	.30	**.61**	.25	.10	.16	.12	− .03	− .23
… was that I doubted that the help offered to me from healthcare professionals would meet my needs.	.29	**.56**	.17	− .04	.35	.11	.08	.16
… was that I didn't want a stranger to interfere in my private life.	.25	**.51**	.38	− .03	.12	.06	.24	.01
… was that I thought I would be able to get better on my own.	.09	− .01	**.78**	.04	.10	.03	.07	− .00
… was that I wanted to get out of this on my own.	.20	.06	**.76**	− .01	.01	.08	.07	− .02
… was that I decided it was not necessary.	.09	.26	**.72**	− .01	.01	.08	− .07	.25
… was that I wanted to prove to myself that I could overcome my difficulties on my own.	.28	.07	**.64**	.04	.20	.13	− .01	.17
… was that I decided it was not worth the effort.	.10	.29	**.63**	− .04	.14	.07	− .02	.23
… was that I was not in the habit of consulting for these symptoms.	− .00	.18	**.62**	− .06	.18	− .13	.17	− .05
… was that this is not common in my family.	.22	.12	**.57**	.14	.32	− .14	.24	.06
… was that the people who I admire do not consult for these symptoms.	.17	.07	− .03	**.82**	− .04	.14	.06	.07

I = *Fear of stigmatization*; II = *Denying competence*; III = *Symptoms underestimation and perceived self-efficacy*; IV = *Social models*; V = *Relying on community support*; VI = *Nature of the consultation*; VII = *Cost and waiting time*; VIII = *Influence of significant others*

Items	Factors							
… was that people who are respected in my community do not consult for these symptoms.	.12	.16	− .01	**.81**	− .07	.08	.07	.05
… was that the spiritual leaders in my community do not consult for these symptoms.	.23	.10	− .01	**.77**	− .01	.08	.12	.03
… was that people who I want to be like do not consult for these symptoms.	.28	.11	− .10	**.75**	.05	.10	− .02	.01
… was that no one around me consults for these symptoms.	.10	.15	.18	**.64**	− .02	.08	− .10	.02
… was that my friends do not consult for these symptoms.	.39	.11	− .03	**.56**	.02	.38	.17	.21
… was that, instead, I had support from members of my religion.	.09	.11	.13	− .00	**.78**	.26	.04	.03
… was that I had access to spiritual resources.	.02	.18	.16	.08	**.71**	.09	.08	.29
… was that, instead, I had support from people in my community.	.17	.20	.04	− .09	**.70**	− .07	.10	.08
… was that, instead, I had support from my friends.	.20	.23	.36	− .04	**.60**	− .08	.10	.04
was that, instead, I had support from my family.	− .00	.12	.22	− .04	**.55**	− .21	.22	− .03
… was because healthcare professionals would have prescribed medication.	.18	.05	.08	.15	− .03	**.81**	.11	.03
… was that healthcare professionals are not welcoming.	.38	.15	.04	.23	− .03	**.74**	.18	.14
… was that I have had bad experiences in the past with healthcare professionals.	.33	.25	− .01	.17	.06	**.73**	.11	.09
… was that consultations with healthcare professionals are brief.	.35	.13	.01	.45	.09	**.56**	− .03	− .10
… was that the waiting time to meet with a healthcare professional is long.	.13	.17	.06	.02	.18	.06	**.83**	.02

I = *Fear of stigmatization*; II = *Denying competence*; III = *Symptoms underestimation and perceived self-efficacy*; IV = *Social models*; V = *Relying on community support*; VI = *Nature of the consultation*; VII = *Cost and waiting time*; VIII = *Influence of significant others*

Items	Factors							
… was that this would entail significant financial spending.	.17	.15	.18	.06	.13	.04	**.75**	.10
… was that I do not have private insurance.	.16	.16	.06	.08	.10	.24	**.67**	.14
… was that someone close to me suggested another treatment.	.39	.28	.19	.17	.24	.11	.16	**.66**
… was that someone in my community advised me not to consult.	.23	.20	.34	.03	.16	− .02	.06	**.64**
… was that a friend suggested an alternative treatment.	.32	.23	.11	.17	.22	.22	.22	**.58**
Explained Variance.	8.01	5.08	4.27	4.10	3.09	2.92	2.33	1.95
Percent of Explained Variance	.17	.11	.09	.09	.06	.06	.05	.04
Cronbach's Alpha	.96	.90	.85	.87	.80	.87	.78	.82
M	2.80	3.76	5.88	1.65	5.34	1.78	4.60	4.14
SD	3.00	2.69	2.54	2.15	2.75	2.27	3.13	3.11
Percent of ratings > 5	.23	.32	.61	.08	.56	.10	.45	.34

I = *Fear of stigmatization*; II = *Denying competence*; III = *Symptoms underestimation and perceived self-efficacy*; IV = *Social models*; V = *Relying on community support*; VI = *Nature of the consultation*; VII = *Cost and waiting time*; VIII = *Influence of significant others*

Procedure

The research questionnaire was completed in a quiet room, usually in the participant's home. In order not to influence the responses, the researcher was not present when participants filled out the questionnaire. The questionnaire took approximately 30 minutes to complete. Full anonymity was provided to all participants. Ethics approval for the study was obtained from the Institutional Review Board of the University of Quebec at Trois-Rivières.

Data analysis

Means and standard deviations were computed for each item and for the whole sample. An exploratory factor analysis was conducted on the raw data to see whether identifiable groups of items emerged that were statistically correlated (factors). The means and standard deviations of the agreement scores of the combined items of each factor were then computed, and the effects of the demographic characteristics on scores for each factor were assessed through analyses of variance (ANOVA).

Results

Item mean scores ranged from 1.41 to 8.48 (out of 10). A first exploratory analysis conducted on the entire set of items showed that 17 of the items did not load (< .30) on any factor, or loaded on more than one factor. These items were removed and a second exploratory factor analysis was conducted on the 48 remaining items. Using the scree test—a method for determining the number of factors to retain in a factor analysis—we observed eight interpretable factors with eigen-values ranging from 1.25 to 15.72. These accounted for 67% of the variance. This eight-factor solution was retained and subjected to Varimax rotation—a statistical method that enables simplifying of the expression of complex items in order to look for independent factors. For each factor, a mean score was computed by taking the average of the values corresponding to the three to ten items corresponding to this factor. Means, standard deviations, and alpha values for each factor are shown in Table 1.

The first factor explained 17% of the variance. It was labeled "*Fear of stigmatization*" since it loaded positively on items suggesting that not consulting health services was driven by a fear that friends, relatives and community members would adopt a negative attitude toward those suspected of mental illness (e.g., "[…] one of the reasons why I did not seek care from a conventional healthcare service was that I was afraid that some people in my community would look down on me"). This type of reason was considered a key determinant (rating higher than 5 out of 10) by 23% of participants. The second factor (11% of the variance) was labeled "*Denying competence*" because all items suggested that non-consultation was driven by the conviction that healthcare professionals would not understand salient cultural issues or solve the roots of their mental health problems (e.g., "[…] one of the reasons why I did not seek care from a conventional healthcare service was that healthcare professionals would not understand my problem."). This type of reason was considered a major driver (rating higher than 5 out of 10) by 32% of participants. The third factor (9% of the variance) was called "*Symptoms underestimation and perceived self-efficacy.*" It expressed confidence in one's personal capacity to cope with symptoms (e.g., "[…] one of the reasons why I did not seek care from a conventional healthcare service was that I wanted to get out of this on my own"). This type of reason was important (rating higher than 5 out of 10) for 61% of the sample. The fourth factor (9% of the variance) was called "*Social models.*" It expressed the view that significant others had never consulted for similar symptoms (e.g., "[…] one of the reasons why I did not seek care from a conventional healthcare service was that the spiritual leaders in my community do not consult for these symptoms"). This type of reason was important (rating higher than 5 out of 10) for 8% of the sample. The fifth factor (6% of the variance) was called "*Relying on community support.*" It expressed the view that all necessary help can be obtained from community resources such as spiritual leaders, traditional healers and community members (e.g., "[…] one of the reasons why I did not seek care from a conventional healthcare service was that I had access to spiritual resources"). This type of reason was important (rating higher than 5 out of 10) for 56% of the sample. The sixth factor (6% of the variance) was called "*Nature of the consultation.*" It expressed issues regarding the way consultations are conducted (e.g. time allocated) or their outcomes (e.g. medical prescriptions). Example of item: "[…] one of the reasons why I did not seek care from a conventional healthcare service was because healthcare professionals would have prescribed medication"). This type of reason was important (rating higher than 5 out of 10) for 10% of the sample. The seventh factor (5% of the variance) was called "*Cost and waiting*

time." It expressed concerns with payments for consultations in the private sector or long waiting times to get an appointment with a health professional (e.g., "[…] one of the reasons why I did not seek care from a conventional healthcare service was that the waiting time to meet with a healthcare professional is long"). This type of reason was important (rating higher than 5 out of 10) for 45% of the sample. The eighth factor (4% of the variance) was called "*Influence of significant others*" because the items that loaded heavily on this factor expressed the individuals' compliance with their relatives' or friends' suggestions (e.g., "[…] one of the reasons why I did not seek care from a conventional healthcare service was that someone close to me suggested another treatment"). This type of reason was important (rating higher than 5 out of 10) for 34% of the sample.

A series of ANOVAs were conducted with Gender, Age and Education as the independent variable and each of the eight factors as the dependent variable. The "*Influence of significant others*" motive was more strongly expressed among less educated participants ($M = 4.95$, $SD = 3.40$) than among more educated participants, ($M = 3.96$, $SD = 3.03$), $F(1, 278) = 4.16$, $p < .05$. The "*Social models*" motive was more strongly expressed among less educated participants ($M = 2.16$, $SD = 2.58$) than among more educated participants, ($M = 1.54$, $SD = 2.03$), $F(1, 278) = 3.81$, $p < .05$. The "*Relying on community support*" motive was more strongly expressed among Muslims ($M = 6.07$, $SD = 2.74$) than among Christians ($M = 5.20$, $SD = 2.65$), and more strongly expressed among Christians than among atheists, ($M = 2.97$, $SD = 2.88$), $F(2, 270) = 8.18$, $p < .001$. Post hoc analysis using the LSD test showed that the three means were significantly different, $p < .05$.

A series of ANOVAs were also conducted with Countries of Origin as the independent variable. Four levels were considered: Guinea-Senegal, Ivory Coast, Togo-Benin and Cameroon. The other countries were not considered because there were too few participants from each country. The "*Influence of significant others*" motive was more strongly endorsed by participants from the Ivory Coast ($M = 5.74$, $SD = 3.17$) than by participants from Togo-Benin ($M = 3.99$, SD = 3.29), Cameroon ($M = 3.67$, $SD = 2.95$), or Guinea-Senegal ($M = 3.30$, $SD = 2.45$). The "*Denying competence*" motive was also more strongly endorsed by participants from the Ivory Coast ($M = 5.31$, $SD = 2.76$) than by participants from Togo-Benin ($M = 3.76$, $SD = 2.93$), Cameroon ($M = 3.36$, $SD = 2.25$), or Guinea-Senegal ($M = 3.05$, $SD = 2.62$). Post hoc analysis using the LSD test showed that, in both cases, the first means were significantly different from the three others, $p < .05$.

Discussion

The first objective of this study was to delineate the basic psychological structure of the reasons given by African immigrants for not consulting mental health services. Through factor analysis, we have identified and interpreted eight separate motivational factors. This finding is consistent with previous research [23–26] suggesting that while reluctance to use health services is certainly driven by a great number of reasons, the reasons relate to one another in a coherent and meaningful way that enables the emergence of a factorial structure. The components of this structure are not redundant: when considering types of reasons such as "*Symptoms underestimation and perceived self-efficacy*," "*Cost and waiting time*," "*Fear*

of stigmatization," "*Denying competence*," and "*Influence of significant others*," we are not looking at the same types of reasons under different guises, but are really considering four different, empirically separable types of reasons. In other words, there is strong empirical grounds for considering that the taxonomy of reasons offered here is not redundant.

The other objective was to isolate the specific types of reasons underlying non-use of mental health services and measure their contributions. The emergence of a factorial structure enabled measurement of the strength of each type of reason. As expected, most respondents (61%) identified "*Symptoms underestimation and perceived self-efficacy*" as a strong reason underlying their reluctance to use healthcare services for mental health. This finding suggests that reluctance to use mental health services was partly driven by respondents' perceptions that their symptoms were not severe enough to seek professional help and confidence in their own ability to deal with depressive symptoms. It seems logical that African immigrants would have little interest in seeking professional help for depressive symptoms if they consider those symptoms to be signs of weakness rather than a health concern that requires professional attention. This finding highlights the need to increase mental health literacy on depression in African immigrant communities. Mental health literacy is defined as, "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" [28, p. 182]. This approach seems promising based on previous studies showing that mental health literacy increases professional help-seeking behaviors [29].

As also expected, most respondents (56%) identified "*Relying on community support*" as another important reason for not seeking professional help through conventional health services. Respondents' preferences for informal help sources—e.g. spiritual leaders, traditional healers, community elders—echoed the findings of previous studies of African immigrants in the Netherlands [22, 23] and Australia [30]. Such a preference for community resources compared to conventional mental health services has been explained by a perceived inability of professional providers to effectively deliver services that meet the psychological, social and cultural needs of ethnocultural minorities [20]. This finding highlights the importance of integrating African cultural understandings of mental illness, systems of values, and healing expectations in mental health services for African immigrants.

In addition, about half of the respondents (45%) identified "*Cost and waiting time*" as an important reason for not consulting conventional health services. Although the health service in Canada is publicly funded and available to all citizens and residents, waiting times for a first consultation with a mental health professional (e.g. psychiatrist or psychologist) may take 6–12 months. African immigrants are more likely to be unemployed or in poverty, and less likely than the general population to work in jobs that provide access to private health insurance [2]. While waiting times for professional help are shorter in the private sector, these financial barriers might make access to care challenging for African immigrants.

Last, "*Influence of significant others*" and "*Denying competence*" played a major role in non-consultation for one-third of the respondents (34% and 32% respectively). "*Influence of significant others*" encompassed reasons expressing influences from relatives, friends and spiritual leaders. A study in West

Africa of patients' given reasons for not seeking care from a conventional healthcare system also identified the influence of significant others [24]. The three remaining factors—"*Fear of stigmatization*" (23%), "*Nature of the consultation*" (10%), and "*Social models*" (8%)—played a major role for less than one in four respondents.

The present study had several limitations. First, motives were assessed through self-reports. Participants' responses were, however, clearly structured so that, if they had consciously decided to misreport their motives, responses would have been given in a more or less random way and, as a result, no clear factor structure would have been found. Second, the sample was recruited from one specific area in Canada. Care must therefore be taken if the results are applied to other African immigrant communities in the country. Third, the model of reasons was created using exploratory factor analysis. It needs to be confirmed on samples of African immigrants from different parts of Canada, using confirmatory factor analysis.

Conclusion

This study sought to identify and assess the reasons underlying reluctance to use mental health services among African immigrants in Canada. Its findings provide insights for development of equitable mental health services. The structural approach helps to shed light on the various reasons for non-use of services, while appreciating the strength of each of those reasons. The findings strongly suggest that strategies to promote usage of mental health services among African immigrants must be multifaceted rather than focused on one single barrier. When implementing these strategies, policymakers should, however, put relatively more emphasis on increasing mental health literacy within African immigrant communities, as well as providing them with culturally sensitive mental healthcare.

Abbreviations

M: Mean; N: Number; SD: Standard deviation; ANOVA: Analysis of variance

Declarations

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Authors' contributions

All authors contributed to the overall study concept and design. TBB managed the data collection process. LK and TBB conducted the statistical analysis. All authors contributed to interpretation of the data. TBB, LK, and J-PG devised the paper and wrote the first draft. All authors contributed to subsequent drafts, read and approved the final version of the manuscript.

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Availability of data and materials

All data collected is available and can be accessed by contacting the corresponding author.

Ethics approval and consent to participate

Ethical approval for the study was granted by the Institutional Review Board of the University of Quebec at Trois-Rivières, Canada. All participants signed an informed consent form before completing this survey, and responses were anonymous. The procedures used in this study adhere to the tenets of the Declaration of Helsinki.

Consent for publication

Not applicable

Competing interests

The authors declare that they have no competing interests.

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