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When Identity Shapes Care: The Stigmatization of Indigenous Patients in the Québec Healthcare System

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Abstract

Background

In Canada, Indigenous peoples face significant health inequities compared to the rest of the population. These inequities are mostly attributable to dynamics of oppression that permeate all levels of society, including racial prejudice, stigmatizing attitudes, and discriminatory behaviour within the healthcare system. Building on an innovative tool and an anti-oppressive approach, this study aimed to determine whether healthcare professionals in the province of Québec have different perceptions, approaches, and behaviours when working with Indigenous patients than with non-Indigenous patients and to compare these perceptions, approaches, and behaviours across two healthcare professions (medicine and nursing).

Methods

This study was based on a quantitative experimental design using a self-administered online questionnaire and was conducted among healthcare professionals working in Québec between February 1 and May 24, 2024. Participants were physicians of any specialty and nurses of any level with a license to practice in that province, recruited with the help of professional orders and associations. The main dependent variable was social stigmatization, measured across three dimensions: affective, cognitive, and behavioural. The stigmatization measurement tool used a clinical vignette with either a test version (featuring an Indigenous patient) or a control version (featuring a non-Indigenous patient), randomly distributed across participants. Average scores were calculated for the cognitive and affective dimensions, as well as for the clinical recommendations sub-dimension. An overall aggregated score was obtained by combining the scores from the cognitive and affective dimensions (ranged from lowest stigmatization 1 to 6).

Results

A total of 1,800 professionals (1,464 nurses; 336 physicians) participated. Professionals who completed the test vignette had higher mean stigmatization scores than those with the control vignette. After adjustments, the observed mean differences were 0.16 (95% CI: 0.08–0.24) for the aggregated mean score, 0.12 (95% CI: 0.05–0.18) for the cognitive dimension, and 0.09 (95% CI: 0.03–0.14) for the affective dimension. The adjusted mean differences were more pronounced among physicians compared to those obtained from nurses.

Conclusion

Overall, these results highlight the existence of systematic differences in healthcare professionals' perceptions and care of Indigenous patients. These differences also depend on the profession and context of professional practice.

Background

In Canada, as in other countries with a similar colonial history, Indigenous peoples (First Nations, Métis, and Inuit, the three Indigenous groups recognized in Canada) face significant health inequities compared to the rest of the population. Colonization and its enduring effects are structural determinants of these inequities, which manifest in various physical health conditions and mental health issues, such as suicide and depression.[1,2] These health inequities, both preventable and unjust, constitute a major public health issue in Canada.[1] They have been highlighted in numerous reports from various public bodies, including the Truth and Reconciliation Commission of Canada, the Public Inquiry Commission on Relations between Indigenous Peoples and Certain Public Services in Québec, as well as the November 2022 research report on free and informed consent and forced sterilizations of First Nations and Inuit women in Québec.[3,4] These reports have all reached similar conclusions: the health system, through oppressive mechanisms linked to racism, stigmatization, and discrimination, contributes to the increase in health inequities experienced by Indigenous peoples.[3,4]

In the literature, social stigmatization is defined as a set of negative attitudes, feelings, and beliefs of members of a majority group towards members of a minority group, which can lead to unfair treatment (discrimination) of the latter.[5,6] Social stigmatization is not limited to everyday interactions: in clinical settings, it can affect how patients and healthcare professionals interact and may compromise the quality of care provided. Several studies have documented the negative biases and stereotypes that Indigenous patients face within the healthcare system. According to these studies, Indigenous patients are unfairly perceived as more complex or "heavier" cases, as difficult or uncooperative patients, neglectful or unable to take care of themselves or their child, and prone to problematic behaviours or substance abuse.[5, 7–9] These stereotypes lead to certain forms of discrimination that have significant physical and emotional impacts, such as improper and abusive clinical interactions, misdiagnoses or missed diagnoses, inappropriate pain management, and services avoidance, to name a few.[10,11] These elements are not trivial, as stigmatization contributes to health inequities experienced by Indigenous peoples, inflicting an additional and preventable burden of suffering on these populations.[4,12]

This study is part of a larger participatory research project aimed at documenting the racism and stigmatization experienced by Indigenous peoples at the hands of healthcare professionals. It complements the existing literature that seeks to document the experiences of racism and stigmatization experienced by Indigenous peoples.[7,13–17] The aim of this study was not to replace this experiential knowledge, but rather to support it with quantitative data derived from responses provided by healthcare professionals. Thus, in this study, which is part of the anti-oppressive research tradition, our aim was to shift the focus onto the dynamics of oppression, racism, and discrimination perpetrated

by healthcare professionals, rather than yet again directing the gaze towards those who suffer injustices and inequities. This study is the first of its kind in Canada to document the issue of stigmatization of Indigenous peoples using an experimental approach and quantitative data from physicians and nurses. Its aim was to determine whether healthcare professionals in the province of Québec have different perceptions, approaches, and behaviours when working with Indigenous patients than with non-Indigenous patients and to compare these perceptions, approaches, and behaviours across two healthcare professions (medicine and nursing).

Methods

Study design

This study was based on a quantitative experimental design and was conducted with healthcare professionals working in the province of Québec.

Study population

Eligible participants in the study were physicians (of all specialties) and nurses (of all degrees), authorized to practice in the province of Québec. To be eligible, participants had to hold a valid license to practice as a professional. In addition, participants had to be able to read and respond to the questionnaire in French. All participants provided written informed consent.

Sampling and data collection

Participants were recruited using a non-probability, voluntary participation sampling method. To maximize participation in each group, physicians and nurses were recruited using different strategies tailored to their professional organization styles and available access channels. For physicians, the invitation to participate was sent through newsletters and the websites of professional orders and associations, including the Collège des médecins du Québec (CMQ), the Collège québécois des médecins de famille (CQMF), the Fédération des médecins spécialistes du Québec (FMSQ), and the Fédération des médecins omnipraticiens du Québec (FMOQ). For nurses, the invitation was sent directly via personalized emails based on a list provided by the Ordre des infirmières et infirmiers du Québec (OIIQ). The target sample size was 2,012 participants. This was calculated using G*Power software, version 3.1.9.7.[18] Based on our sample size estimates, this sample was sufficient to detect a small effect size (d = 0.125), with 80% statistical power and a 5% significance level, for a two-tailed Student's t-test comparing two independent means, assuming two groups of equal size.

A self-administered online questionnaire on Qualtrics[19] was sent to all participants in the winter of 2024, between February 1 and May 24, 2024, with a link to access the questionnaire. To reach physicians, our partners (CMQ, CQMF, FMSQ, FMOQ) shared the link to the questionnaire via their monthly newsletters.

CMQ included a reminder in the next newsletter edition approximately one month later. For nurses, the OIIQ provided us with a list of emails for its members who met our eligibility criteria and had agreed to be contacted for research purposes (representing 20,000 nurses). The link to the questionnaire was sent directly by email to the members on that list, followed by a reminder one month later.

During data collection, a deception strategy was used. This approach consisted of not explicitly detailing the basic information and specific objectives of the study related to stigmatization of Indigenous peoples, in order to limit social desirability bias and thereby improve the validity of responses. Complete information was provided to participants at the end of the questionnaire, with the option for them to withdraw from the study considering its actual objectives, even though their participation was completely anonymous. The study and this data collection strategy were approved by the research ethics committee of the Centre intégré universitaire de santé et services sociaux de la Capitale-Nationale (Project No. MP-13-2023-2792_SPPL).

The questionnaire

The questionnaire included the measurement tool developed by our multidisciplinary research team in a previous project[20] and is presented in Appendix 1. This tool consists of two parts: the first presents a clinical vignette involving a patient with type 2 diabetes visiting a healthcare professional; the second contains questions related to this vignette designed to assess stigmatization. The questionnaire includes questions to collect participants' sociodemographic characteristics (see Appendix 1). The clinical vignette has two versions: a test version featuring an Indigenous patient and a control version presenting a non-Indigenous patient. Only the patient's cultural identity differs between the two versions, allowing the effect of this variable on participants' responses to be measured. Upon opening the invitation link, healthcare professionals were randomly assigned either to the group receiving the test version or to the group receiving the control version of the questionnaire. While participation in the survey was anonymous to protect participants' information, respondents provided written consent (in the form of a checkbox) to participate in the study.

Variables of interest

Dependent variables

Social stigmatization was our primary dependent variable. It was assessed across three dimensions: affective (4 items), cognitive (11 items), and behavioural (2 items). For the first two dimensions, each item corresponded to a statement for which the participant was asked to rate their level of agreement or disagreement (1 = strongly disagree, 6 = strongly agree), with a higher score indicating greater stigmatization and a lower score, less stigmatization. The items used to measure these two dimensions demonstrated good reliability (internal consistency), with Cronbach's alpha coefficients of 0.73 for the affective dimension and 0.84 for the cognitive dimension. An aggregate mean score was calculated

from the mean scores of these two dimensions, with a Cronbach's alpha coefficient of 0.86. This score also ranged from 1 to 6.

The questions used to assess stigmatization on the behavioural dimension included two sub-dimensions: stigmatization related to symptom interpretation and stigmatization related to clinical recommendations. For the clinical recommendations sub-dimension, participants were asked to rank six different recommendations in order of priority, placing the highest priority at the top and the lowest at the bottom. The clinical recommendation "Limit your consumption of alcohol and other drugs, if applicable" was considered the most stigmatizing option and was used to calculate the score for this sub-dimension. When the stigmatizing option was placed in first position, it received a score of 6; the second position corresponded to a score of 5; and the third, fourth, fifth, and sixth positions corresponded to scores of 4, 3, 2, and 1, respectively.

To assess stigmatization related to the interpretation of symptoms, participants were asked to evaluate the severity of the symptoms presented by the Indigenous or the non-Indigenous patient based on the clinical situation described in the questionnaire. The possible responses to this question were grouped into three categories: less severe (including the response choices "mild" and "moderately severe"), severe, and very severe.

To summarize, the dependent variables were:

- the average scores calculated for each of the three dimensions of stigmatization (affective, cognitive, and behavioural, sub-dimension "clinical recommendations");
- the aggregate average score of the affective and cognitive dimensions;
- the level of severity (less severe, severe, and very severe) reported for the sub-dimension "interpretation of symptoms" of the behavioural dimension;
- The score of the stigmatizing option for the "clinical recommendations" sub-dimension of the behavioural dimension.

Exposure

Exposure corresponded to the version of the clinical vignette assigned to the participants. Randomization into two groups was carried out using the Qualtrics platform. One group of participants was randomly assigned the test version of the questionnaire, presenting an Indigenous patient, while the other group received the control version, presenting a non-Indigenous patient. The exposure variable was binary, consisting of two categories: having completed the test version or the control version of the questionnaire.

Covariates

The covariates included sociodemographic factors (age, sex, membership in an ethnocultural minority) and factors that could potentially affect the stigmatization of Indigenous patients, such as professional practice characteristics (profession: nurse or physician, number of years of professional experience), type of care setting (primary care, secondary and tertiary care, long-term care, non-clinical settings), administrative region, and frequency of contact with Indigenous patients in personal or professional life.

Data processing and statistical analysis

The data were exported from Qualtrics to Excel, version 2608, and statistical analyses were performed using R version 4.4.2. After data verification and cleaning, we ran a descriptive analysis to compare the two groups based on the version of the clinical vignette. A description of the study population was produced by calculating means and standard deviations for continuous variables, as well as absolute and relative frequencies for categorical variables. Average scores were calculated for each of the three stigmatization dimensions, along with an overall mean score for the cognitive and affective dimensions. To look at variations in healthcare professionals' attitudes, perceptions, and behaviours towards Indigenous versus non-Indigenous patients, we used linear regression to model the continuous dependent variables based on covariables. To analyze the dependent variable of the behavioural dimension, more specifically, the sub-dimension of symptom interpretation, we used an ordinal logistic regression, since this variable consisted of three categories. All models were adjusted for age, sex, ethnocultural minority status, occupation, primary care setting, and administrative region. The adjustment strategy was guided by an a priori approach based on the directed acyclic graph (DAG) to minimize confounding bias. Subgroup analyses were conducted according to occupation (physician, nurse). The significance threshold α was set at 5%.

Results

Participant characteristics

In total, 42,837 healthcare professionals were invited to participate in the study, which included 20,000 nurses and 22,837 physicians. The total number of participants, after data collection, was 2,520, of which 700 did not provide any sociodemographic information and 20 had missing values. These 720 responses were thus eliminated, leaving a total of 1,800 participants, which still allowed us to detect a small effect size (d = 0.132). Of these, 1,464 participants were nurses. The overall participation rate was therefore 4.2%, with a rate of 7.3% among nurses and 1.5% among physicians (reflecting the different recruitment strategies). Healthcare professionals aged 25 to 34, 35 to 44, and 45 to 54 represented 23.4%, 29.7%, and 24.3% of the sample, respectively, which was about three-quarters of the participants. The majority of the sample (86.9%) was made up of women, which also reflects the reality of the healthcare professions. Regarding the main care setting, more than half of the participants worked in secondary and tertiary care settings (Table 1).

Table 1
Sociodemographic characteristics of the participants

Variables	Total n (%)	Non-Indigenous vignette n (%)	Indigenous vignette n (%)
Total	**1800**	**897 (49.8)**	**903 (50.2)**
Age			
18–25 yrs	95 (5.3)	49 (5.5)	46 (5.1)
25–34 yrs	422 (23.4)	213 (23.7)	209 (23.1)
35–44 yrs	534 (29.7)	246 (27.4)	288 (31.9)
45–54 yrs	437 (24.3)	227 (25.3)	210 (23.3)
55–64 yrs	232 (12.9)	127 (14.2)	105 (11.6)
≥ 65 ans	80 (4.4)	35 (3.9)	45 (5.0)
Gender			
Female	1565 (86.9)	781 (87.1)	784 (86.8)
Male	226 (12.6)	113 (12.6)	113 (12.5)
Non-binary	9 (0.5)	3 (0.3)	6 (0.7)
Identify as a visible minority: Yes	205 (11.4)	98 (10.9)	107 (11.8)
Identify as an Indigenous person: Yes	21 (1.2)	11 (1.2)	10 (1.1)
Profession: Physician	336 (18.7)	171 (19.1)	165 (18.3)
Administrative region			
Rural	154 (8.6)	64 (7.1)	90 (10.0)
Semi-urban	849 (47.2)	436 (48.6)	413 (45.7)
Urban	797 (44.3)	397 (44.3)	400 (44.3)
Primary care setting			
Primary care	437 (24.3)	210 (23.4)	227 (25.1)
Secondary and tertiary care	939 (52.2)	475 (53.0)	464 (51.4)
Long-term care	157 (8.7)	69 (7.7)	88 (9.7)
Non-clinical setting	267 (14.8)	143 (15.9)	124 (13.7)

Comparison of average scores based on the completed vignette

Table 2 presents the mean scores for each dimension. In the group of healthcare professionals who completed the test clinical vignette, the mean aggregate score was 3.82 on a scale of 1 to 6, whereas in the group who completed the control clinical vignette, it was 3.67. Overall, healthcare professionals in the test group had, on average, a score 0.15 higher than that of professionals in the control group (95% confidence interval (CI) [0.07, 0.24], $p < 0.001$). For the cognitive dimension, the difference in mean scores between the two groups was 0.11 (95% CI [0.05, 0.18], $p < 0.001$), with a higher score in the test group. Regarding the affective dimension, belonging to the test group was associated with an average increase of 0.09 in the score (95% CI [0.04, 0.14], $p = 0.001$) compared to the control group. No statistically significant difference was observed for the behavioural dimension, for both the sub-dimension of clinical recommendation and that of symptom interpretation. The estimates remained unchanged after adjustment for potential confounders (Table 3).

Table 2
Average level of stigmatization (descriptive statistics)

Variables	**Total** **Average (SD)**	**Non-Indigenous vignette** **Average (SE)**	**Indigenous vignette** **Average (SE)**
Average combined score	3.74 (0.90)	3.67 (0.88)	3.82 (0.92)
Average score – affective dimension	5.59 (0.60)	5.55 (0.64)	5.64 (0.56)
Average score – cognitive dimension	4.60 (0.71)	4.54 (0.70)	4.66 (0.73)
Average score – behavioural dimension	2.29 (1.27)	2.30 (1.22)	2.29 (1.31)

Table 3
Differences in adjusted average stigmatization scores according to the vignettes

Variables	MD (95% CI)	P-value	aMD	95% CI	P-value	Cohen's d effect size
Aggregate mean scores	0.15 (0.07, 0.24)	< 0.001	0.15	(0.07, 0.24)	< 0.001	0.165
Mean scores – affective dimension	0.09 (0.03, 0.14)	0.001	0.09	(0.04, 0.14)	0.001	0.134
Mean scores – cognitive dimension	0.11 (0.05, 0.18)	< 0.001	0.11	(0.05, 0.18)	< 0.001	0.156
Mean scores – behavioural dimension, clinical recommendations sub-dimension	-0.01 (-0.13, 0.11)	0.856	-0.02	(-0.14, 0.10)	0.729	0.002
	OR	**P-value**	**aOR**	**95% CI**	**P-value**	
Behavioural dimension, symptom interpretation sub-dimension	0.98 (0.80, 1.20)	0.809	0.98	(0.80, 1.21)	0.876	

"Indigenous" vignette vs. "Non-Indigenous" vignette (reference)

aMD: adjusted mean difference; CI: confidence interval; aOR: adjusted odds ratio

Adjustment variables: age, gender, identify as a visible minority, identify as an indigenous person, primary care setting, profession, administrative region.

Level of stigmatization by profession

The results shown in Table 4 indicate that the level of stigmatization directed towards the Indigenous patient in the study varied depending on the profession. Physicians who completed the test clinical vignette had an average score 0.37 points higher than those who completed the control clinical vignette (95% CI [0.18, 0.56], $p < 0.001$). For the cognitive and affective dimensions of stigmatization, physicians in the test clinical vignette group had higher average scores than those in the control vignette group, with adjusted mean differences of 0.27 (95% CI [0.12, 0.43], $p < 0.001$) and 0.29 (95% CI [0.13, 0.45], $p < 0.001$), respectively.

Table 4
Adjusted mean differences in scores by vignette, by profession among physicians and nurses

Variable	Physicians		Nurses	
	aMD (95% CI)	**P-value**	**aMD (95% CI)**	**P-value**
Aggregate mean scores	0.37 (0.18, 0.56)	< 0.001	0.11 (0.02, 0.21)	0.015
Mean scores – affective dimension	0.29 (0.13, 0.45)	< 0.001	0.04 (-0.02, 0.09)	0.162
Mean scores – cognitive dimension	0.27 (0.12, 0.43)	< 0.001	0.08 (0.01, 0.16)	0.024
Mean scores – behavioural dimension, clinical recommendations sub-dimension	-0.31 (-0.59, -0.01)	0.039	0.06 (-0.07, 0.18)	0.399
	aOR	**P-value**	**aOR**	**P-value**
Behavioural dimension, symptom interpretation sub-dimension	1.77 (1.05, 2.97)	0.031	0.86 (0.69, 1.08)	0.201

"Indigenous" vignette vs. "Non-Indigenous" vignette (reference)

aMD: adjusted mean difference; CI: confidence interval; aOR: adjusted odds ratio

Adjustment variables: age, gender, identify as a visible minority, identify as an indigenous person, primary care setting, administrative region.

Regarding the behavioural dimension, for the symptom interpretation sub-dimension physicians tended to interpret the symptoms of Indigenous patients as more severe than those of non-Indigenous patients (adjusted odds ratio [aOR] = 1.77; 95% CI [1.05, 2.97]; p = 0.031). For clinical recommendations, among physicians who completed the test clinical vignette, the stigmatizing option ("Limit alcohol and other drug use, if applicable") was ranked as a lower priority compared to those who completed the control clinical vignette, with an adjusted mean difference of -0.31 (95% CI [-0.59, -0.01], p = 0.039).

In general, nurses who completed the test clinical vignette had higher mean scores than those who completed the control clinical vignette (adjusted mean difference [aMD]: 0.11; 95% CI [0.02, 0.21], p = 0.015). This difference was also observed for the cognitive dimension, with nurses who completed the test clinical vignette showing a mean increase of 0.08 in score (95% CI [0.01, 0.16], p = 0.024) compared to those who completed the control clinical vignette. No statistically significant differences were observed among nurses for the behavioural dimension, either for the clinical recommendation sub-dimension or for the symptom interpretation sub-dimension, nor for the affective dimension.

Discussion

This study aimed to examine experimentally whether Indigenous patients are perceived and approached differently from non-Indigenous patients among healthcare professionals in the province of Québec and to compare how these perceptions and approaches vary by profession. The results showed that healthcare professionals who completed the clinical vignette featuring an Indigenous patient had slightly but significantly higher average scores than those who responded to the control vignette (with a non-Indigenous patient), for the overall average score as well as for the cognitive and affective dimensions of stigma. Subgroup analyses by profession indicated that the link between the vignette version and stigmatization scores was observed among both physicians and nurses. However, the difference in averages observed between the test and control groups appeared to be more pronounced among physicians than among the nurses. These differences might be attributable to differing disciplinary cultures, approaches, and clinical roles between the two professions.

Although the effect sizes (Table 3) observed for each dimension showed that the statistical magnitude of the mean differences was low (less than 0.2), these differences are still worth noting in a practical context of clinical interactions. Our results are consistent with a descriptive body of literature[8,17,21] examining Indigenous patients' experiences within the healthcare system, which are marked by stigmatizing behaviours and attitudes from professionals. For example, according to the Regroupement des centres d'amitié autochtones du Québec (RCAAQ), a coalition of Native friendship centres, racism and discrimination against Indigenous peoples in the Québec healthcare system constitute a well-documented and concerning reality. In a survey conducted in 2018 by the RCAAQ, 57% of respondents reported having been victims of racism within the Québec service network.[17,21]

This study has several strengths. Its main strength lies in its relatively large sample size, allowing for precise estimates of the associations studied. The observed participation rates (7.32% among nurses and 1.5% among physicians) are consistent with those of other studies conducted in these populations, which indicate that healthcare professionals, particularly physicians, are a difficult population to recruit and generally exhibit low response rates.[22,23] Moreover, response rates for surveys using online questionnaires are usually low and tend to decrease over time, particularly among healthcare professionals.[24] The use of a digital tool for data collection helped to minimize input errors. Also, the instrument used to measure stigmatization in this study was subject to a development and validation process conducted by a multidisciplinary team composed of researchers, physicians, nurses, and Indigenous partners.[20] Stigmatization is a sensitive subject that has sparked numerous media debates in recent times. For this reason, obtaining responses from participants free of social desirability bias represented, in our view, a particular challenge. To minimize this bias, the initial information provided to participants did not explicitly detail the specific objectives related to stigmatization, although full explanations were offered at the end of the questionnaire (deception strategy). This approach was approved by the research ethics committee.

However, the results of this study must be interpreted within their limitations. First, it should be noted that the recruitment strategies for the two professions differed and were adapted to the specific

characteristics and organizational structures of each group. Physician recruitment was carried out through newsletters of professional associations. For nurses, it was possible to send personalized emails from a contact list provided by the OIIQ. This difference in recruitment could have introduced a selection bias and thus limited direct comparability between physicians and nurses. Also, despite the use of a deception strategy, it is impossible to completely rule out social desirability bias, which could have led to underestimation of the prevalence of stigmatization within this sample.

Although this study was conducted using a large and diverse sample, the results should be interpreted with caution. The generalizability and extrapolation of the results to all healthcare professionals should take into consideration potential sources of bias, including selection bias and social desirability bias, especially given that the response rate was relatively low despite the large sample size.

These results revealed the existence of stigmatizing attitudes and behaviours from some healthcare professionals towards Indigenous patients that could potentially affect the quality of care and interactions between patients and healthcare providers. This finding highlights the need for more cultural safety awareness training for healthcare professionals or in study programs.

Conclusion

This study was based on an experimental study design and showed that, in certain clinical settings, healthcare professionals could perceive and assess an Indigenous patient in a more stigmatizing manner than they would a non-Indigenous patient. It also highlighted modest variations in perceptions and assessments depending on the profession, suggesting a difference in effect between physicians and nurses. These results provide crucial empirical data shedding light on the social stigmatization of Indigenous patients in clinical settings in Québec. They help document this phenomenon with a large and diverse sample and underscore the need for further research to identify ways to reduce these inequities.

Abbreviations

aMD
adjusted mean difference
aOR
adjusted odds ratio
CI
confidence interval
CMQ
Collège des médecins du Québec
CQMF
Collège québécois des médecins de famille
DAG

directed acyclic graph
FMOQ
Fédération des médecins omnipraticiens du Québec
FMSQ
Fédération des médecins spécialistes du Québec
MD
mean difference
OIIQ
Ordre des infirmières et infirmiers du Québec
OR
odds ratio
RCAAQ
Regroupement des centres d'amitié autochtones du Québec

Declarations

Ethics approval and consent to participate: This study was approved by the research ethics board of the Centre intégré universitaire de santé et services sociaux de la Capitale-Nationale (Project No. MP-13-2023-2792_SPPL) and was conducted in accordance with the ethical principles of the Declaration of Helsinki and the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2).

Consent for publication: Not applicable.

Availability of data and materials: The datasets used and/or analyzed to conduct this study are not publicly available due to confidentiality requirements. A request may be submitted to the corresponding author, subject to ethical and confidentiality requirements.

Competing interests: The authors declare that they have no competing interests.

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Supplementary file: see questionnaire in Appendix

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