BRIEF ORIGINAL RESEARCH

Collection of patient race, ethnicity, and language data in emergency departments: a national survey

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Abstract

Purpose There is mounting evidence of racial and ethnic discrimination in the Canadian health care system. Patient level race and ethnicity data are required to identify potential disparities in clinical outcomes and access to health care. However, it is not known what patient race, ethnicity, and language data are collected by Canadian hospitals. This gap limits opportunities to identify and address inequalities in the health care system. The emergency department (ED) is a major point of contact for many patients accessing the health care system, and is therefore a reasonable place to conduct analysis of patient data collection. This study aims to quantify the proportion of Canadian EDs that collect patient race, ethnicity, and primary language data.

Methods We identified all Canadian EDs and distributed a survey to 616 EDs across the country.

Results We received responses representing 202 EDs (32.8%). One fifth (20.3%) of responding EDs reported that they collected race and ethnicity data and 38.1% collected primary language data. Reported uses for these data included quality improvement, research, and direct patient care.

Conclusion The majority of Canadian EDs do not collect patient race, ethnicity, and language data. This gap limits our ability to identify inequalities in health outcomes or access to health care. Lack of race, ethnicity, and language data also hinders our ability to develop and evaluate programs and interventions that aim to correct these inequalities.

Keywords Race/ethnicity · Language · Emergency department · Patient data · Equity

Résumé

Objectif Il existe de plus en plus de preuves de discrimination raciale et ethnique dans le système de soins de santé canadien. Les données relatives à la race et à l'ethnicité des patients sont nécessaires pour identifier les disparités potentielles dans les résultats cliniques et l'accès aux soins de santé. Cependant, on ne sait pas quelles données sur la race, l'ethnicité et la langue des patients sont recueillies par les hôpitaux canadiens. Cette lacune limite les possibilités d'identifier et de traiter les inégalités dans le système de soins de santé. Le service des urgences (SU) est un point de contact majeur pour de nombreux patients accédant au système de soins de santé, et constitue donc un endroit raisonnable pour mener une analyse de la collecte

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de données sur les patients. Cette étude vise à quantifier la proportion de services d'urgence canadiens qui recueillent des données sur la race, l'origine ethnique et la langue principale des patients.

Méthodes Nous avons recensé tous les services d'urgence canadiens et distribué un sondage à 616 services d'urgence dans tout le pays.

Résultats Les réponses reçues représentent 202 services d'urgence (32,8 %). Un cinquième (20,3 %) des services d'urgence qui ont répondu ont indiqué qu'ils recueillaient des données sur la race et l'origine ethnique, et 38,1 %, sur la langue principale. Les utilisations déclarées de ces données comprenaient l'amélioration de la qualité, la recherche et les soins directs aux patients.

Conclusion La majorité des services d'urgence canadiens ne recueillent pas de données sur la race, l'origine ethnique et la langue des patients. Cet écart limite notre capacité à identifier les inégalités dans les résultats de santé ou l'accès aux soins de santé. Le manque de données sur la race, l'ethnicité et la langue entrave également notre capacité à élaborer et à évaluer les programmes et les interventions visant à corriger ces inégalités.

Mots clés race/ethnicité · langue · service des urgences · données sur les patients · équité

Clinician's capsule

What is known about the topic?

Canadian institutions, including health care institutions, have a poor record of collecting population race, ethnicity, and language data.

What did this study ask?

What proportion of Canadian emergency departments (EDs) collect patient race, ethnicity, and primary language data at registration?

What did this study find?

This survey found that 20.3% of EDs collect patient race and ethnicity data, and 38.1% of EDs collect patient primary language data.

Why does this study matter to clinicians?

We need to improve patient demographic data collection systems in EDs so we can know the demographics of our patients and identify and address systemic inequalities.

Introduction

Racism and ethnic discrimination have long had an impact on health care outcomes in Canada. *In Plain Sight,* the 2020 investigation into Indigenous-specific racism in British Columbia health care [1], highlighted racism in the health care system. Canada is behind other countries in exploring how health care access, treatment, and outcomes are affected by + sociodemographic factors such as race, ethnicity, and language.

In 2017, the United Nations Committee on the Elimination of Racial Discrimination noted Canada's record of not collecting sociodemographic data on its population, resulting in an inability to evaluate the status of various groups' rights [2]. The CAEP 2021 statement on racism and colonialism in emergency medicine [3] recommends that emergency departments (EDs) collect and use equity data to identify disparities and improve care. The COVID-19 pandemic also revealed race-based inequity in health outcomes [4] and highlighted the need for race-based data collection.

This report aims to ascertain the proportion of Canadian EDs that collect patient race, ethnicity, and primary language data. Our findings will determine the need for better ED data systems to characterize the racial, ethnic, and language composition of patients seeking care in Canadian EDs.

Methods

Study population and setting

This national survey targeted all Canadian EDs. For the purpose of this study, we defined an ED as a hospital-affiliated facility providing 24-h emergency medical care.

There is no centralized registry of Canadian EDs. We identified 616 Canadian EDs by searching hospital names from The Statistics Canada Open Database of Health Care Facilities [5] and searching all regional health authority websites. We then used hospital websites and switchboards to identify the most appropriate contact with knowledge of the information collected during patient registration for each ED. Contacts varied among EDs and included ED managers, head nurses, hospital nursing executives, registration supervisors, registration clerks and health records employees.

This study was approved by the University of British Columbia Research Ethics board.

Survey instrument

The survey questionnaire was developed based on phrasing and language used in other studies on sociodemographic data [6]. We pilot tested the survey with three emergency physicians and refined it based on the feedback. A French-speaking team member translated the questionnaire into French. The final survey consisted of six questions (Online Appendix 1). We delivered the survey using Qualtrics® (www.qualtrics.com).

Study protocol

We contacted all 616 EDs via telephone or email between May and November 2021. We used hospital names to track responses in the database, but we did not collect other participant identifiers.

Analysis

We identified the city that each ED was located in and used 2016 Canadian census data [7] to calculate the proportion of the population that self-identifies as visible minority or Indigenous, and the proportion with primary language other than English or French. We used these proportions to look for correlations with survey responses and the demographics of the population. As this report was exploratory with no predefined hypotheses, we report descriptive statistics (proportions) without testing statistical significance.

Results

We received responses from 139 individuals. If multiple responses were received for a single site, discordant responses were considered false and removed from analysis. For concordant responses, we retained one response for data analysis. This left 127 responses representing 202 EDs (Online Appendix 2 Fig. 1). This was a 32.8% response rate (202/616).

Several respondents provided responses for entire health authorities or groups of EDs under the same leadership. When one respondent gave a response for more than 10 EDs, which happened in two instances, we contacted the individual to verify that the response was valid for all EDs. We also continued to accept responses from individual EDs within that group to check concordance. These responses were then applied to all hospitals within that group.

One-eighth (25/202) of responding EDs were from cities with visible minority populations at or higher than the national average (22.3%) and half (96/202) were from cities with Indigenous populations at or higher than the national average (4.9%). EDs from cities that served areas with non-English/French primary language populations at or higher than the national average (21.1%) made up 15.8% (32/202) of respondents.

Of the 202 EDs included in this analysis, 20.3% (41/202) reported that race and ethnicity data was systematically collected from all ED patients and 38.1% (77/202) reported that primary language data were systematically collected from all patients (Table 1).

Table 1 Results of survey

Survey question	
Does your hospital ask all patients about their race and/or ethnicity when they register in the emergency department?	Number and (%) of responses, $n = 202$
Yes	41 (20.3)
No	161 (79.7)
Does your hospital ask all patients about their primary language when they register in the emergency department?	Number and (%) of responses, $n = 202$
Yes	77 (38.1)
No	125 (61.9)
What is the data on patient race and ethnicity used for?	Number and (%) of responses, $n = 41$
Research studies	27 (65.9)
Quality improvement projects	28 (68.3)
Direct patient care	7 (17.1)
Other	8 (19.5)
What is the data on patient language used for?	Number and (%) of responses, $n = 77$
Research studies	28 (36.4)
Quality improvement projects	35 (45.5)
Direct patient care	28 (36.4)
Other	12 (15.6)

EDs in cities with higher proportions of visible minorities or Indigenous patients collected race, ethnicity, and language data at lower rates than EDs from cities with lower proportions of visible minorities or Indigenous-identifying patients (Online Appendix 2 Figs. 2 and 3.) EDs in cities with higher proportions of patients whose primary language was not English or French collected race and ethnicity data at lower rates than EDs in other cities, but collected language data at higher rates (Online Appendix 2 Fig. 4).

Of the 41 respondents that collected race and ethnicity data, seven (17.1%) used it for direct patient care, 28 (68.3%) used it for quality improvement, 27 (65.9%) used it for research, and eight (19.5%) used it for other purposes (Table 1). Of the 77 respondents that collected primary language data, 28 (36.4%) used it for direct patient care, 35 (45.5%) used it for quality improvement, 28 (36.4%) used it for research, and 12 (15.6%) used it for other purposes (Table 1).

Discussion

Interpretation of findings

Our findings indicate that the majority of Canadian EDs do not systematically collect sociodemographic data such as race, ethnicity, and language on their patients. Interestingly, EDs in areas with higher proportions of minority groups collected sociodemographic data at lower rates than EDs in other areas. One exception was that EDs in areas with higher non-English/French populations collected language data, but not other sociodemographic data, at higher rates than EDs in other areas.

Comparison to other studies

Other countries have more robust systems for collecting patient sociodemographic data. A 2003 national survey of American hospitals found that 78.5% of hospitals collected race and ethnicity data and 59.7% collected primary language data, although issues remained with accuracy and standardization of this data [8]. A 2021 study from the United Kingdom found that over 86% of national ED visits had patient ethnicity recorded [9].

Limitations

There are limitations to this study. The low response rate limits the generalizability of this study. Regional imbalances may have also impacted our study; for example, we received no responses from Nunavut or the Yukon. Discrepancies were also noted on several occasions in duplicate responses, which reflects the potential for inaccuracy in self-reported data. Because surveys required participants to include their hospital names, it is possible that some respondents were not candid for fear of backlash or judgment. Several respondents responded for entire hospital groups or health authorities, which may not exactly reflect individual hospital practices. We did not collect data on the size of hospitals or whether they were teaching or community hospitals, which limits the analysis. This survey also focused only on data collected during patient registration in the ED. This does not account for data collected later during the ED stay.

Clinical implications

As Canada continues to acknowledge and reconcile its history of racism and systemic discrimination, the need for patient data on race, ethnicity, and primary language is increasingly important. This research highlights the need to continue to explore barriers to collecting patient sociodemographic data and initiatives to help hospitals create sociodemographic data collection systems. This study's finding that fewer EDs collected sociodemographic data when they served more visible minority, Indigenous, or non-English/French speaking patients may reflect the fears of alienating or offending patients with these questions. Some health authorities, such as Sinai Health in Toronto, Ontario, have created resources that provide guidelines and rationale for collecting patient sociodemographic data [10]. This type of data collection can support equity-based research, quality improvement projects, and direct patient care initiatives.

Research implications

If Canadian hospitals prioritize improving their patient sociodemographic data collection systems, future studies that quantify the impact of race, ethnicity, and language on patient health care treatment and outcomes will be possible. Future research should also consider the impact on health outcomes of other sociodemographic factors like gender, sexuality, and socioeconomic status.

Conclusion

This study highlights the need for ongoing research and resources to address the paucity of race, ethnicity, and language data collection in Canadian EDs. Multiple Canadian health organizations have made commitments to addressing racism and discrimination in our health care system over the past several years, but these commitments are impossible to uphold unless we identify health outcome inequalities in our health care system and evaluate programs and interventions that aim to correct these inequalities. Systematic sociodemographic data collection is one of the fundamental

steps to identification, acknowledgement and reconciliation of systemic discrimination in Canada's health care system.

Declarations

Conflict of interest No conflicts of interest to disclose.

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