Immigrant Status and Unmet Health Care Needs

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ABSTRACT

Objectives: To compare whether unmet health needs differ between immigrants and non-immigrants, and examine whether help-seeking characteristics account for any unmet needs disparities.

Methods: The data are from the Canadian Community Health Survey Cycle 1.1, conducted by Statistics Canada in 2000-2001. The study sample includes 16,046 immigrants and 102,173 non-immigrants aged 18 and older from across Canada. The study employs logistic regression models to examine whether help-seeking behaviours explain unmet needs differences.

Results: Logistic regression analysis indicates that immigrants have a 12% (95% CI: 6-18) lower all-cause unmet needs risk (odds ratio) than non-immigrants after controlling for differences in help-seeking characteristics. The unmet needs risk among long-term immigrants (15 years of residence and more), however, is similar to non-immigrants after considering these characteristics. We found differences between immigrants and non-immigrants in reasons for unmet needs, with more immigrants believing that the care would be inadequate, not knowing where to access health care, and having foreign language problems.

Conclusions: The Canadian health care system delivers sufficient health care to immigrants, even though the poverty rate and proportion of visible minorities are comparatively higher within this subpopulation. Nonetheless, these results indicate that some immigrant-specific health care access barriers may exist.

MeSH terms: Health services needs; access to health care; immigration

La traduction du résumé se trouve à la fin de l'article.

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The number of Canadians having an unmet health care need is growing despite universal health care coverage. We define an unmet need as either insufficient or untimely treatment of a medical problem. Around 12% of Canadians aged 12 and older experienced an unmet need in 2000-01, a three-fold increase from the 1994-95 prevalence rate.[1,2] The Canadian health insurance system aims to provide all legal residents with comprehensive and equal benefits regardless of province, income, or employment status,[3] but the intensification of unmet needs suggests that health care access is a developing problem for many health care users. This growth in unmet needs remains largely unexplained, but appears to correspond to health care access barriers among disadvantaged social groups. Although an egalitarian mandate grounds the Canada Health Act, the literature indicates that the unmet needs risk is greatest among women, low-income households, and other vulnerable groups.[2] Our general objective is to determine whether immigrant status (foreign-born nativity and length of Canadian residence) represents an unmet needs risk, and to investigate whether help-seeking characteristics influence unmet needs disparities between immigrants and non-immigrants.

Previous Canadian studies observe that socio-economic status cannot account for health status differences between immigrants and non-immigrants or visible minorities and non-minorities, presumably because universal health insurance guarantees basic health care.[4,5] Access to health care, however, also depends upon non-socio-economic factors. Health care access disparities between immigrants and non-immigrants can occur through several other channels, including language problems, differing socio-cultural concepts of health and illness, or biases among health care providers.[6,7] For instance, a recent Canadian study reports that health services can be unresponsive toward minority ethno-cultures, and demonstrates that language problems prevent some Chinese immigrants from effectively articulating their symptoms to health care professionals.[8] This study also observes that health professionals often fail to understand immigrants' medical complaints within the *social context* of their lives, and particularly their immigrant-specific problems.

Prior research findings demonstrate that social differences in perceptions of health and illness, awareness of health risks, and attitudes toward the benefits of medical treatment partially explain help-seeking differences across diverse social groups.[9-11] For example, some health scientists argue that individuals with disadvantaged educational backgrounds may delay seeking medical attention because they do not appreciate the implications of particular symptoms or the benefits of preventive care.[11] Unmet needs may therefore reflect differential health care expectations and utilization habits because social context frames help-seeking behaviours.[12,13] In this respect, the social context of the migration process is a potential factor in the relationship between help-seeking behaviours and health care utilization. Differences between the immigrant and non-immigrant populations in ethnic composition, socioeconomic status, exposure to stress, and social support, among other variables, may thus form grounds for differences in unmet needs.

Our analysis begins with descriptions of the reasons for unmet needs and the type of care not received by immigrant status. Our multivariate empirical investigation adapts Andersen's[14] model of health care utilization to determine whether unmet needs differences between immigrants and non-immigrants are associated with help-seeking characteristics. Our adaptation of Andersen's model considers help-seeking a function of predisposing characteristics, enabling resources, health-related needs, and access barriers. We follow Andersen's theoretical model to construct a series of logistic regression models designed to isolate psychosocial and socio-demographic reasons for unmet needs differences between immigrants and non-immigrants. Our study concludes by investigating whether unmet needs among immigrants differ by length of residence in Canada. We address these issues to offer health care policy-makers insight into health care needs and behaviours among immigrant Canadians.

METHODS

Our data source is the Canadian Community Health Survey (CCHS) Cycle 1.1, conducted by Statistics Canada in 2000-2001. The CCHS 1.1 provides cross-sectional, individual-level information on various health determinants, health status, health care utilization, and socioeconomic and demographic attributes for 136 health regions across Canada. The target population includes household residents aged 12 and older, excluding those living on Indian Reserves, Canadian Forces Bases, medical institutions, and some remote areas. Further information about the CCHS design and sample selection is available elsewhere.[15] After restricting our analysis to adults (age 18 and older), our study includes 102,173 non-immigrants (Canadian-born adults) and 16,046 immigrants (foreign-born adults). The data were weighted in our analyses to represent the target population.

This study describes, defines, and measures unmet health care needs according to three CCHS questions. The first question screened respondents with an unmet health care need from those without by asking: "During the past 12 months, was there ever a time when you felt that you needed health care but didn't receive it?" Second, the respondents who answered "yes" to the first question were asked to detail their reasons for having an unmet need, including availability issues, excessive waiting periods, financial costs, language problems, family responsibilities, and other reasons. A third question prompted these respondents to specify their unmet need type, with five possible responses: unmet physical need, unmet emotional or mental need, insufficient general practitioner (GP) examinations, insufficient injury treatment, and other self-specified unmet needs. Our multivariate analysis considers responses to the first question to determine overall unmet needs differences between immigrants and non-immigrants. Our bivariate analysis considers the responses to the second and third questions for descriptive purposes only. We also consider the third question in multivariate analysis (data not shown) that describes specific differences (e.g., unmet physical need) in unmet needs between immigrants and non-immigrants. Based on research into help-seeking behaviours, our analysis introduces five groups of explanatory variables (predisposing characteristics, enabling resources, barriers to health care, medical need, and years in Canada) for overall differences in unmet needs. The Appendix

TABLE I

Reasons for Unmet Health Need by Immigrant Status: Canada, 2001

Reason†	Immigrant	Non-immigrant	p-value‡
Not available in area	8.89%	8.95%	0.925
Not available when required	18.49%	17.37%	0.162
Waiting time too long	30.74%	31.32%	0.555
Felt would be inadequate	16.73%	14.85%	0.013
Cost	11.16%	10.32%	0.192
Too busy	10.11%	10.13%	0.975
Didn't get around to it	6.95%	10.57%	<0.001
Didn't know where to go	5.52%	3.57%	<0.001
Transportation problems	3.05%	2.16%	0.005
Language problems	2.42%	0.18%	<0.001
Personal/family responsibilities	0.98%	1.68%	0.008
Dislike doctors/afraid	3.15%	3.23%	0.846
Decided not to seek care	5.96%	6.87%	0.086
Other	0.07%	0.10%	0.572
N	1,859	14,140	

Note: Weighted percentages, unweighted N.
† Multiple responses were allowed
‡ Computed from a chi square test of independence with d.f. = 1.

TABLE II

Type of Care Not Received by Immigrant Status: Canada, 2001

Type of Care†	Immigrant	Non-immigrant	p-value‡
Physical health problem	75.54%	71.22%	<0.001
Emotional/mental health problem	6.67%	9.21%	<0.001
Regular check-up	9.24%	7.78%	0.011
Injury	7.83%	9.41%	0.010
Other	6.52%	6.26%	0.618
N	1,859	14,140	

Note: Weighted percentages, unweighted N.
† Multiple responses were allowed
‡ Computed from a chi square test of independence with d.f. = 1.

TABLE III

Odds Ratios of Unmet Health Need on Immigrant Status and Selected Predictors: Canada, 2001

Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	95% CI		Model 7†
Immigrant (1 = yes)	0.817 ***	0.861 ***	0.811 ***	0.780 ***	0.812 ***	0.879 ***	0.820	0.938	–
Years in Canada									
<5	–	–	–	–	–	–	–	–	0.659 ***
5-9	–	–	–	–	–	–	–	–	0.833 *
10-14	–	–	–	–	–	–	–	–	0.738 ***
≥15	–	–	–	–	–	–	–	–	0.937
Native-born (reference)									
Predisposing Characteristics									
Age	–	1.009 ***	–	–	–	0.984 ***	0.977	0.990	–
Age square (⟷ 100)	–	0.980 ***	–	–	–	0.990 *	0.990	0.990	–
Female (1 = yes)	–	1.325 ***	–	–	–	1.204 ***	1.167	1.240	–
Education	–	1.019 ***	–	–	–	1.065 ***	1.058	1.073	–
Enabling Resources									
Social support	–	–	0.985 ***	–	–	0.988 ***	0.987	0.990	–
Community belonging	–	–	0.900 ***	–	–	0.952 ***	0.938	0.965	–
Marital status									
Separated/divorced	–	–	1.285 ***	–	–	1.118 ***	1.062	1.175	–
Widowed	–	–	0.693 ***	–	–	1.015	0.934	1.096	–
Never married/single	–	–	1.163 ***	–	–	0.967	0.917	1.017	–
Married/cohabiting (reference)									
Barriers to Health Care									
Low income (1 = yes)	–	–	–	1.426 ***	–	1.146 ***	1.095	1.197	–
Visible minority (1 = yes)	–	–	–	1.072 *	–	0.905 **	0.864	0.946	–
Rural residence (1 = yes)	–	–	–	0.866 ***	–	0.975	0.906	1.044	–
Medical Need									
Chronic condition (1 = yes)	–	–	–	–	1.683 ***	1.919 ***	1.874	1.964	–
Health	–	–	–	–	0.743 ***	0.660 ***	0.642	0.678	–
Stress	–	–	–	–	1.514 ***	1.348 ***	1.330	1.366	–
- Log L	46826	46239	46166	46677	43955	42686	–	–	42676
Δ Chi square	–	587	659	149	2871	1268	–	–	–
d.f.	–	4	5	3	3	12	–	–	15

* Model includes control variables shown in Model 6.
* p<0.05 ** p<0.01 *** p<0.001 (two-tailed test).

presents the definitions and descriptive statistics for our variables. The correlations among these variables are generally significant, but low in magnitude (data not shown).

RESULTS

Our analysis focusses on Canadians aged 18 and older, excluding those living on Indian Reserves, Canadian Forces Bases, medical institutions, and some remote areas. Overall, 11.6% of immigrants have an unmet need, compared to 13.6% of non-immigrants (data not shown). Table I presents the descriptive statistics for the reasons behind these unmet needs. For both immigrants and non-immigrants, the primary reasons appear to indicate health care delivery problems. Long waiting time is the most prevalent reason for unmet needs, as about 31% of immigrants and non-immigrants have this problem. Over 18% of immigrants and 17% of non-immigrants have an unmet need because medical service was unavailable when required. About 17% of immigrants and 15% of non-immigrants have an unmet need associated with the perceived inadequacy of health care services. Other prominent reasons include regional unavailability, cost, and being too busy to get care. There are some differences between immigrants and non-immigrants in these reasons. Immigrants report a higher occurrence of unmet needs because of perceptions that the care would be inadequate, not knowing where to access health care, transportation barriers, and language problems.

Table II also refers to immigrants and non-immigrants with unmet needs, and describes the specific unmet need types. For both groups, unmet needs are related primarily to physical health problems. The vast majority of unmet needs (76% among immigrants and 71% among non-immigrants) fall under this category. Overall, about 0.5% of the target population have more than one type of unmet need (data not shown). Immigrants are more likely to report more than one type (0.55%) than non-immigrants (0.5%), but the difference is not statistically significant (p>0.05).

Table III details the odds ratios from a series of nested logistic models that examine whether unmet needs differ between immigrants and non-immigrants through help-seeking characteristics. Our baseline model (model 1) examines the relationship between immigrant status and unmet needs without considering any controls. Our subsequent models introduce controls for help-seeking characteristics, including predisposing characteristics (model 2), enabling resources (model 3), barriers to health care (model 4), and medical need (model 5). Model 6 combines models 1-5 to examine the total effect of help-seeking characteristics. The purpose of this modelling strategy is to confirm or eliminate our selected reasons for unmet-needs differences between immigrants and non-immigrants. Model 7 illustrates how unmet needs between immigrants and non-immigrants differ according to length of residence in Canada.

Model 1 shows that immigrants are 18% (100x(.817–1)) less likely to have an unmet need than non-immigrants. Model 2 indicates that predisposing characteristics

do not explain this difference, although the magnitude of the estimate attenuates slightly (p>0.05). Consistent with the literature, however, age and age square,[16] gender,[17] and education[18] are important factors in general unmet needs. Model 3 illustrates that enabling resources influence unmet needs, as is consistent with prior evidence,[19] but the differences in enabling resources cannot explain away the unmet needs differences between immigrants and non-immigrants (p>0.05). Model 4 shows that, although barriers to health care are generally important, again this does not account for unmet-needs advantage among immigrants. A similar pattern obtains for medical need. Even in Model 6, which considers our selected explanatory variables simultaneously, immigrants have a 12% lower risk of having an unmet need, with the decline in the estimate between models 1 and 6 being non-significant.

Compared to non-immigrants, immigrants residing in Canada for 15 years or more have a lower unmet-need risk (data not shown), but this advantage disappears with the introduction of control variables (model 7). According to model 7, those with 10-14 years of residence show a lower risk than non-immigrants. Immigrants with 5-9 years of residence have a somewhat lower unmet-needs risk than non-immigrants (p<0.05). Those with less than 5 years of Canadian residence also have a lower unmet-needs risk.

We conducted separate logistic regression analyses of specific unmet health-need types (data not shown). With all control variables added (in multivariate logistic analysis), we found that immigrants are significantly less likely to report unmet health needs for physical and emotional problems than non-immigrants. The differences in regular check-ups, injuries, and other unmet needs are non-significant, although the signs on the coefficients for immigrant status are similar to those for physical and emotional unmet needs.

APPENDIX

Definitions and Descriptive Statistics for Predictor Variables Used in the Multivariate Analyses of Unmet Health Needs: Canada, 2001

Predictor	Variable Definition and Code	Immigrants Mean or %	Non-immigrants Mean or %
Predisposing Characteristics			
Age	Age in years	47.93	44.22
Age square	Quadratic term of age	2578.83	2247.63
Female	Dummy indicator (1 = yes, 0 = no)	50.5%	51.1%
Education	Educational attainment in 10 levels (1 = grade 8 or less, …, 10 = university degree or above)	5.63	5.28
Enabling Resources			
Social support	Perceived social support (high = greater perceived social support, Cronbach's á = 0.92)†	62.48	64.11
Community belonging	Sense of belonging to community in 5 levels (1 = very weak, …, 5 = very strong)	3.11	3.15
Marital status			
Separated/divorced	Dummy indicator (1 = yes, 0 = no)	6.8%	7.9%
Widowed	Dummy indicator (1 = yes, 0 = no)	6.9%	5.5%
Never married/single	Dummy indicator (1 = yes, 0 = no)	15.9%	24.5%
Married/cohabiting	Reference category	70.5%	62.1%
Barriers to Health Care			
Language problem	Unable to speak English/French (1 = yes, 0 = no)	6.3%	0.1%
Low income	Income was inadequate (1 = yes, 0 = no)	12.8%	9.7%
Visible minority	Dummy indicator (1 = yes, 0 = no)	48.5%	3.7%
Rural residence	Residing in rural areas (1 = yes, 0 = no)	7.0%	21.1%
Medical Need			
Chronic condition	Dummy indicator (1 = having any chronic conditions, 0 = otherwise)	61.0%	67.0%
Health	Self-reported health status in 5 levels (1 = poor, …, 5 = excellent)	3.61	3.72
Stress	Self-reported stress level in 5 levels (1 = not at all stressful, …, 5 = extremely stressful)	2.80	2.85
Years in Canada			
<5	Dummy indicator (1 = yes, 0 = no)	12.9%	–
5-9	Dummy indicator (1 = yes, 0 = no)	13.3%	–
10-14	Dummy indicator (1 = yes, 0 = no)	13.6%	–
≥15	Dummy indicator (1 = yes, 0 = no)	60.2%	–
N		16,046	102,173

Note: Weighted means or percentages, unweighted N.
† See text for detailed description.

DISCUSSION AND CONCLUSION

Our initial results indicate that Canadian immigrants have an 18% lower risk of facing an unmet need than non-immigrants. This finding is not surprising in light of the fact that immigrants have better health profiles than non-immigrants, including fewer chronic conditions, long-term disabilities, and major depressive episodes.[20-22] Our findings, moreover, suggest that differences in help-seeking characteristics do not appear to account for the unmet-needs difference between immigrants and non-immigrants. After introducing controls for various health care access determinants, immigrants still have a 12% lower chance of having an unmet need.

Our extended analysis identified significant differences in unmet needs by length of Canadian residence. Our findings are somewhat perplexing because the unmet-need differential between immigrants and non-immigrants does not steadily improve or decline with length of residence. Our suspicion is that cross-sectional data are responsible for this pattern, as our length-of-residence categories represent different immigrants, and thus our findings on unmet needs by length of residence must be interpreted with caution. But these findings do question whether visible minority status is a consistent unmet-needs risk variable. Since the 1980s, most immigrants to Canada arrived from "non-traditional" sources, and especially Asian countries.[23] Our findings suggest that the unmet-needs advantage is concentrated among recent arrivals to Canada. Another study observes that the demand for preventive medical care decreases and vague complaints become common as acculturation increases,[24] which could explain this initial advantage, and thus implies that unmet needs among recent immigrants could eventually increase.

The comparatively low unmet-needs rate among immigrants suggests that the Canadian health care system is generally fulfilling their needs. The low unmet-needs rate among recent immigrants is somewhat unexpected considering that accessibility barriers should be greater among new immigrants than for non-immigrants, par-

ticularly because of health care preferences, language problems, and visible minority status. But there is some justification for concern: our descriptive results indicate that there may be immigrant-specific access barriers, for immigrants do appear to have more unmet needs because of language problems, not knowing where to access health care services, and believing care would be inadequate.

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RÉSUMÉ

Objectifs : Comparer les besoins insatisfaits des immigrants et des non-immigrants en matière de santé pour déterminer si, d'une part, ces besoins sont les mêmes et, d'autre part, déterminer si les écarts sont attribuables aux caractéristiques des demandes d'aide.

Méthodes : Les données proviennent du cycle 1.1 de l'Enquête sur la santé dans les collectivités canadiennes réalisée par Statistique Canada en 2000-2001. L'échantillon était composé de 16 046 immigrants et de 102 173 non-immigrants de 18 ans et plus, de partout au Canada. L'étude, qui s'appuie sur des modèles de régression logistique, visait à déterminer si les comportements des personnes qui demandent de l'aide pouvaient expliquer les écarts quant à la nature des besoins insatisfaits.

Résultats : L'analyse de régression logistique révèle que la probabilité (non arrondie) qu'on ne satisfasse pas aux besoins des immigrants, peu importe le motif invoqué, est de 12 % (IC de 95 % : 6-18) inférieure à celle des non-immigrants; ces résultats font suite à l'évaluation des écarts liés aux caractéristiques des demandes d'aide. La probabilité qu'on ne réponde pas aux besoins des immigrants de longue date (qui habitent au Canada depuis au moins 15 ans) est toutefois semblable à celle des non-immigrants, après évaluation de ces caractéristiques. Nous avons constaté qu'il y a des différences entre les motifs invoqués par les immigrants et les non-immigrants pour expliquer l'insatisfaction des besoins; les immigrants étaient plus nombreux à croire que les soins seraient inadéquats, à ne pas connaître les façons d'accéder aux soins de santé et à éprouver des difficultés liées à la langue.

Conclusions : Le système de santé canadien offre aux immigrants des soins suffisants et ce, en dépit du taux plus élevé, au sein de cette sous-population, de pauvreté et de la proportion des minorités visibles. Il n'en demeure pas moins que ces résultats indiquent qu'il existe des obstacles particuliers à l'accès aux soins de santé pour les immigrants.