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Rate of Mental Health Service Utilization by Chinese Immigrants in British Columbia

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ABSTRACT

Objective: Reports suggest that immigrants are under-served by the mental health service system. The aim of this study is to examine the rates of mental health visits and hospitalization of Chinese immigrants in British Columbia using historic administrative databases.

Method: A total of more than 150,000 Chinese immigrants who landed in BC between 1985 and 2000 were identified from an immigration database which was linked to the province's administrative health records, as part of a national study on immigrant health. Controls were individually matched to immigrants by sex, age and region and randomly selected from the general BC population.

Results: Preliminary results confirm that, while Chinese immigrants use less overall health care than controls, the difference in utilization rates is particularly pronounced with regard to mental health problems, especially for visits to psychiatrists and psychiatric hospitalization.

Discussion: The under-utilization of mental health services may reflect better health status, ongoing barriers to access, or other factors. There are different implications for health policy-makers. Further research is necessary to determine the reasons for the low rates of utilization.

MeSH terms: mental health services; immigrants; utilization; Chinese; British Columbia

RÉSUMÉ

Objectif : Selon plusieurs rapports, le système des services de santé mentale desservirait mal les immigrants. Notre étude visait à examiner les taux de consultation des services de santé mentale et les taux d'hospitalisation d'immigrants chinois en Colombie-Britannique à partir de bases de données administratives historiques.

Méthode : Nous avons recensé plus de 150 000 immigrants chinois établis en Colombie-Britannique entre 1985 et 2000 à partir d'une base de données de l'immigration, reliée aux dossiers de santé administratifs de la province dans le cadre d'une étude nationale sur la santé des immigrants. Nous avons jumelé, selon le sexe, l'âge et la région, des immigrants et des témoins choisis au hasard dans la population générale de la Colombie-Britannique.

Résultats : Nos résultats préliminaires confirment que même si les immigrants chinois utilisent moins les soins de santé que les témoins dans l'ensemble, l'écart dans les taux d'utilisation est particulièrement marqué en ce qui a trait aux problèmes de santé mentale, surtout pour les consultations de psychiatres et les hospitalisations dans des services de psychiatrie.

Discussion : La sous-utilisation des services de santé mentale peut refléter un meilleur état de santé chez les immigrants, des obstacles continus à l'accès ou d'autres facteurs, ce qui a des répercussions différentes pour les responsables des politiques de santé. Une recherche plus poussée s'impose pour déterminer les causes des faibles taux d'utilisation.

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In 2001, 26% of British Columbia's population was comprised of immigrants, 37% of whom arrived within the previous 10 years. Among these recent immigrants, 40% were of Chinese origin.¹ Providing appropriate health services to such a culturally diverse population is a challenge to health policy-makers and service planners. There are reports that immigrants are less likely to use mental health services, but no comprehensive Canadian studies on this topic are available.^{2,3} The objective of this study, therefore, is to examine the rates of mental health visits and hospital discharges from 1991 to 2000 by recent Chinese immigrants to BC.

METHODS

As part of a national immigrant health project, a database of information on immigrants who landed in Canada between 1985 and 2000 and whose stated destination was BC was linked to the province's administrative health database by probabilistic linkage.⁴ Those immigrants whose place of birth and place of last permanent residence were either Hong Kong, China, Taiwan or Macau were identified as subjects for this study and their health care utilization records were extracted for analysis. Control subjects were individually matched to the immigrants by sex, age and health region, and randomly selected from the province's health plan registry, excluding those in the immigration database. This resulted in a study population of 154,728 Chinese immigrants and the same number of controls, with 51% being female and 49% male.

The number of mental health visits was derived from BC's database of fee-for-service payments to physicians. A mental health visit was defined as all inpatient and outpatient services provided to a patient in one day by a general practitioner for mental health problems or by a psychiatrist. Information on hospitalization was obtained from the hospital discharge database. Mental health hospitalizations include all hospital discharges where the most responsible diagnosis was a mental health problem or where the patient service was psychiatry or the most responsible physician was a psychiatrist. Only visits and hospitalizations that occurred between 1991 and 2000 and after the landing date of the respective immigrants were included in the

TABLE I

Rate of Physician Visits per 100 Person Years in 1991-2000

	All Physician Visits	Mental Health Visits to General Practice	Visits to Psychiatry
Immigrant			
Female	596.08 (569.45,624.07)	12.08 (10.84,13.46)	3.07 (2.16,4.37)
Male	390.28 (382.90,397.81)	6.64 (6.35,6.95)	2.20 (1.90,2.55)
Control			
Female	1007.95 (989.08,1027.28)	62.29 (59.68,65.01)	29.69 (25.71,34.28)
Male	756.55 (750.60,762.55)	46.26 (45.44,47.10)	20.37 (19.19,21.63)

Note: 95% confidence limits in parentheses

TABLE II

Rate of Hospital Discharges per 1000 Person Years in 1991-2000

	All Hospital Discharges	Mental Health Hospital Discharges
Immigrant		
Female	87.07 (79.36,95.57)	1.12 (0.65,1.95)
Male	45.64 (43.87,47.49)	0.63 (0.50,0.80)
Control		
Female	169.01 (163.05,175.20)	7.58 (6.33,9.09)
Male	131.26 (129.28,133.27)	7.57 (7.02,8.17)

Note: 95% confidence limits in parentheses

analysis. Rates for both mental health visits and hospital discharges were estimated by negative binomial regression modelling, weighted by the length of time each subject was registered in the health plan during the study period. The rates of all physician visits and hospital discharges for the immigrants and controls, regardless of diagnosis, were also calculated for comparison purposes.

Ethics approval for the study was received from the University of British Columbia Clinical Research Ethics Board.

RESULTS

Table I shows the rates of physician visits in 1991-2000. While females in both the immigrant population and the control group had higher rates of visits than males, rates for the Chinese immigrants were significantly lower than controls for both sexes. The relative difference was larger for mental health visits than for all physician visits and particularly pronounced in psychiatry. Whereas Chinese immigrant women were 59% as likely as control women to consult physicians, their rate of visits to general practitioners for mental health reasons was only 20% that of control women and rate of visits to psychiatrists was 10%. Among men, Chinese immigrants were half as likely as controls to visit any physician while their

rates of mental health visits to general practice and psychiatry compared to controls were 14% and 11% respectively.

A similar pattern was seen in hospital discharges. Table II shows that the overall rate of hospital discharges was much lower among Chinese immigrants than controls and the contrast was greater in mental health hospitalizations. While Chinese immigrant women were half as likely as controls to be hospitalized, they were only 15% as likely to be hospitalized for psychiatric reasons. The difference was more exaggerated among men, with controls having almost 3 times the rate of hospital discharges of Chinese immigrants but 12 times the rate of mental health hospital discharges. Sex difference was not observed in mental health discharges in the control group.

DISCUSSION

This is the first population-based Canadian study on immigrants' utilization of mental health services using administrative databases. The findings confirm earlier reports that immigrants are less likely to use mental health care, especially with respect to specialist and hospital care. A limitation of administrative database analysis is that the reason for the discrepancy cannot be immediately determined. Several explanations are possible. The first

hypothesis that Chinese immigrants enjoy better mental health is supported by epidemiological studies which found lower prevalence rates of mental disorders in Hong Kong, Taiwan and China – the source regions of the study population in this paper.⁵⁻⁷ If this is the case, it behooves the population and public health community to identify the protective factors among these immigrants for maintaining their positive mental health status, as such knowledge would benefit the general Canadian population.

Several studies suggest that another explanation for the immigrants' reduced use of mental health services is cultural and language barriers.⁸⁻¹⁰ The particularly low rate of visits to psychiatry is consistent with evidence that use of specialists is associated with English skills.⁸ If this is the circumstance, it will be important to examine the health and social outcomes of untreated and under-treated mental illness. It is also crucial that vulnerable subgroups within this immigrant population be identified for targeted programs.

Other alternative explanations may elucidate the results of this study. For instance, the low rates may be an artefact of physician practice patterns. Immigrants tend to seek care from general practitioners who share their language background.^{8,11} It is plausible that these physicians are less disposed to diagnosing mental health problems or referring their patients to specialist care, resulting in fewer visits made by immigrants being identified as mental health visits. This scenario implies very different strategies to ensure that immigrants receive adequate mental health care. Further research is necessary to understand the factors that contribute to the low rates of mental health service utilization by Chinese immigrants in BC; such efforts are required to achieve the best health outcome for all Canadians.

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