Some evidence of a protective function of immigrant status against chronic illness is found in the literature. However, as immigrants’ period of residence and level of acculturation increase, so does the prevalence of chronic conditions. One classic study found that more traditional Japanese compared with their Westernised counterparts had a lower coronary heart disease prevalence rate. A MEDLINE/PubMed search found few published studies of the effects of acculturation on hypertension with a nationally representative sample of Asian immigrants. Therefore, the primary objective of our research was to examine the hypothesis that prevalence of hypertension among Asian immigrants differs by acculturation status.

METHODS
A multiple logistic regression was conducted to assess the independent effects of acculturation and other factors on hypertension. We analysed data from the 1996–97 Canadian

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Factors associated with hypertension among Asian immigrants in Canada aged 20 years and older</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>n†</td>
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<tr>
<td>Gender</td>
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</tr>
<tr>
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<tr>
<td>Age (y)</td>
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<td>20–39</td>
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<td>5–9</td>
<td>492</td>
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<tr>
<td>10+</td>
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*p<0.05, **p<0.01, ***p<0.001; †unweighted numbers; ‡percentage (weighted) reporting hypertension; §AOR=adjusted odds ratios (adjusted for all other variables in the table); ¶CI=confidence interval; ††scores ranged from 1 (less than six months ago) to 5 (five or more years ago).
National Population Health Survey (NPHS). The sample size of Asian immigrants available from the NPHS for this study was 1972. The dependent variable was hypertension and the independent variable of interest was duration of residence. Hypertension was considered present if an affirmative answer was given to the question of whether the NPHS respondent had been diagnosed with high blood pressure by a health professional. Acculturation was defined as duration of residence in Canada and grouped into three categories: 0 to 4 years, 5 to 9 years, and 10 years and more. Control variables, identified in previous research as risk factors for hypertension, included smoking, alcohol use, physical inactivity, self-assessed health, body mass index (BMI), chronic conditions, functional limitations, psychological distress, access to health services (last blood pressure check, have a regular doctor), and sociodemographic characteristics (gender, age, and education). All analyses were weighted to reflect the sample design, adjustments for non-response, and poststratification with standard errors and significance tests computed using SUDAAN (Research Triangle Institute, Research Triangle Park, NC).

RESULTS

Table 1 shows the descriptive and multivariate results. The findings from the bivariate analysis indicate that as Asian immigrants’ period of residence in Canada increased, so did the prevalence of hypertension. The differences in the prevalence of hypertension were 2.8%, 7.4%, and 13.3% among those with 0 to 4, 5 to 9, and 10 years or more of residence, respectively. The logistic regression model showed a gradient of association between hypertension and duration of residence after adjusting for all other variables in the model. Age (older), educational attainment (lower), BMI (overweight), and psychological distress were all significantly predictive of hypertension.

DISCUSSION AND CONCLUSIONS

The results show a significant relation between Asian immigrants’ length of residence in Canada and hypertension, after adjusting for sociodemographics, smoking, drinking, health status, access to health services, and psychological wellbeing. Longer term immigrants were more likely than recent immigrants to report hypertension. Important strengths of the NPHS include its population-based nature; its recent immigrants to report hypertension. Important differences after adjusting for sociodemographic characteristics (gender, age, and education). All analyses were weighted to reflect the sample design, adjustments for non-response, and poststratification with standard errors and significance tests computed using SUDAAN (Research Triangle Institute, Research Triangle Park, NC).

REFERENCES