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Income Assistance Receipt Among Off-reserve Indigenous Peoples in Canada

Jungwee Park Health Analysis Division, Statistics Canada

Abstract: This study demonstrated income assistance (IA) receipt among Indigenous people living off-reserve using data from the 2012 Aboriginal Peoples Survey (APS), a national survey of First Nations people living off reserve, and of Métis, and Inuit. In 2011, 12 percent of Indigenous people living off-reserve received IA. This study focused on sociodemographic, labour market and health characteristics found in IA receipt and on different levels of dependence on IA. For almost half of the Indigenous IA receivers, IA was their only source of income; it was the main (but not sole) source of income for 27 percent; and for the remaining 29 percent, IA was a secondary source of income. The receipt of IA was associated with sociodemographic characteristics such as never having been married; being female; less than high school levels of education; and living in lone-parent households. About 22 percent of IA recipients were employed in 2011. Compared with other Indigenous workers not receiving IA, they were more likely to have a job with short tenure; to be part-time workers or temporary workers; and to work in the sales and services sector. Compared to non-recipients, recipients of IA also reported significantly poorer mental and physical health conditions. The associations between health status and IA remained significant after controlling for other demographic factors. These results have important implications for policymakers and other stakeholders interested in IA for Indigenous people. The complexity of employment, health, and other risk factors of IA need to be considered to understand these issues further.

Introduction

Previous research has demonstrated that historically, Indigenous people in Canada have experienced significantly higher rates of low income and poverty than much of the country's population (Murphy, Zhang, and Dionne 2012; Noël and Laroque 2009; Human Resources and Social Development Canada 2013). Among off-reserve Indigenous people, one in every six individuals has experienced low income (HRSDC 2013), a rate that was almost twice as high as the rate for the overall Canadian population. Despite improvements in recent years, low-income rates among Indigenous people have remained consistently higher than the Canadian average. According to Statistics Canada's after-tax low-income cut-offs (LICO), 10 percent of Canadians lived with low income in 2009; under the Market Basket Measure (MBM), the low-income rate was 11 percent; and under the after-tax low-income measure (LIM), it was 13 percent. The rates of low income for Indigenous people in 2009 were 15 percent, 16 percent, and 23 percent, respectively (Murphy, Zhang,

and Dionne 2012). In 2015, the LIM rate (after tax) for Indigenous people was 24 percent compared with 14 percent for non-Indigenous Canadians (Statistics Canada 2018).

Indigenous people have been limited in their access to the resources and conditions necessary to maximize socioeconomic status (Galabuzi 2004). Low income among off-reserve Indigenous people was strongly tied to their employment patterns (Murphy, Zhang, and Dionne 2012). Indigenous people were less likely than other Canadians to participate in the labour force and to be employed (Reading and Wien 2009). According to the 2016 Census, unemployment rates among individuals aged 15 and older were higher for First Nations (North American Indian), Métis, and Inuit with rates of 18 percent, 11 percent, and 22 percent respectively, compared to an unemployment rate of seven percent for the non-Indigenous population; the unemployment rate for the overall Indigenous population was 15 percent in 2016 (Statistics Canada 2018).

Moreover, there exists a considerable gap in employment earnings between Indigenous and non-Indigenous workers (Wilson and Macdonald 2010; Centre for the Study of Living Standards 2012) partly due to Indigenous people's employment in low-paying and nonprofessional positions. For example, according to studies using data from the Canadian Labour Force Survey, the top three occupations for Indigenous employees were sales and services (mainly retail sales clerks and cashiers, food and beverage occupations, protective services, and child care and home support); trades, transport, and equipment operators (mainly mechanics, contractors, construction trade workers, and transportation equipment operators); and business, finance, and administration (mainly clerical workers, and administrative and regulatory workers) (Luffman and Sussman 2007; Usalcas 2011). Compared to non-Indigenous people, they were more likely to work in sales and service occupations; trades, transport and equipment operators and related occupations; natural resources, agriculture and related production occupations; and occupations in education, law, social, community, and government services (Moyser 2017). On the other hand, Indigenous people were underrepresented in so-called knowledge occupations that tend to require higher levels of education and generally pay better (Baldwin and Beckstead 2003). Specifically, Indigenous people were less likely than non-Indigenous people to work in natural and applied sciences and related occupations; business, finance and administration occupations; management occupations; and health occupations (Moyser 2017).

¹ Statistics Canada provides two relative measures of low income: the low-income measure (LIM) and the low-income cut-off (LICO) measure. Human Resources and Skills Development Canada provides an absolute measure: the market basket measure (MBM) (Zhang 2010). The definitions of each measure are below from Murphy, Zhang, and Dionne (2012):

[•] Low-income measure: The LIM is defined as half the median family income, adjusted for family size. A person whose income is below that level is said to be in low income.

[•] Low-income cut-off: The LICO is the income level below which a family would devote at least 20 percentage points more of their income to food, clothing, and shelter than an average family would. People are said to be in the low-income group if their income falls below this threshold, adjusted based on family size and community size, and depending on whether income is calculated before or after taxes.

[•] Market basket measure: The MBM is a measure of the disposable income a family would need to be able to purchase a basket of goods that includes food, clothing, shelter, transportation, and other basic needs. The dollar value of the MBM varies by family size and composition, as well as community size and location.

Income assistance

Each Canadian province maintains a program of income assistance, sometimes referred to as "social assistance," "income support," or "welfare." No matter the name, all provincial and territorial social assistance programs provide financial assistance and in-kind goods and services to cover the cost of basic living requirements for an individual or family when all other financial resources for that individual or family have been exhausted (Federal-Provincial-Territorial Directors of Income Support 2010). The purpose of income assistance programs lies in alleviating extreme poverty by providing assistance to people with little or no income (Assembly of First Nations 2015). The programs' broad objective is to provide individuals and families with the means to fulfil basic needs for food, clothing, and shelter. In addition, they involve a wide range of employment support services and programs to promote the entry or re-entry of employable persons into the active labour force (Federal-Provincial-Territorial Directors of Income Support 2008).

As provincial/territorial governments are responsible for the provision of social assistance, a substantial degree of variation exists among jurisdictions (Curtis and Pennock 2006; Caledon Institute of Social Policy 2015; Kneebone and White 2014; Atkinson et al. 2013; Béland and Daigneault 2015; William 1998). There exist considerable differences in benefit levels for single people who are "employable," lone parents, and married parents; and there is no evidence of a strong convergence (Boychuk 2015; Roy and Boychuk 2016). For example, due to the extra support for children provided provincially, parents (whether lone or married) tend to fare better than single individuals without children, particularly in provinces such as Prince Edward Island, Québec, and Saskatchewan, compared to those in British Columbia, Manitoba and Nova Scotia (Kneebone and White 2014).

According to a recent study, the rate of income assistance receipt (the number of social assistance beneficiaries measured as a fraction of the population aged zero to 64) for Canada was about six percent in 2012 (Kneebone and White 2014). It has been noted that more information would be helpful in understanding subpopulations within the Canadian population and their relationships to provincial social assistance (Béland and Daigneault 2015). Income assistance for on-reserve Indigenous people has been documented (Aboriginal Affairs and Northern Development Canada 2012a; Aboriginal Affairs and Northern Development Canada 2012b; Aboriginal Affairs and Northern Development Canada 2013a; Aboriginal Affairs and Northern Development Canada 2013b; Aboriginal Affairs and Northern Development Canada 2013c; Aboriginal Affairs and Northern Development Canada 2013d; Aboriginal Affairs and Northern Development Canada 2014; Eisleb-Taylor 2013; First Nations of Quebec and Labrador Health and Social Services Commission 2011; Indian and Northern Affairs Canada 2007). Compared to the Canadian average, the income assistance rate is much higher among Indigenous people living on-reserve. For example, Aboriginal Affairs and Northern Development Canada (AANDC) estimated the rate of income assistance receipt for onreserve Indigenous people at 34 percent in 2012/13, and in some communities the rate is more than 80 percent (Aboriginal Affairs and Northern Development Canada 2014).

The total number of beneficiaries was estimated at 161,062, and the total expenditure for 2012/13 was \$861 million (Aboriginal Affairs and Northern Development Canada 2014).

In comparison to the patterns of income assistance among Indigenous people living on-reserve, less is known about income assistance for Indigenous people living off-reserve. Using the 2012 Aboriginal Peoples Survey (APS), this study aims to fill this data gap by investigating conditions and correlates of income assistance receipt among off-reserve Indigenous people. According to the 2012 APS, 12 percent of Indigenous people living off-reserve received provincial income assistance in 2011. This rate was twice the Canadian average, though it was lower than that of their on-reserve Indigenous counterparts. Policymakers and the general public will benefit from a better understanding of the barriers that off-reserve Indigenous people may face as they attempt to transition from income assistance to paid employment (Strategic Research Directorate 2015).

This study further examines sub-groups of Indigenous recipients of income assistance, which include Registered Indian, Non-status First Nations, Inuit, and Métis. Income assistance is a source of income for people who, for various reasons, do not work as much as others. However, recipients of income assistance are not a homogeneous group. There are some people who have no other sources of income and rely solely on income assistance to meet their basic living expenses. There are some who live mainly on income assistance while earning some money from other sources. For others, income assistance gives them a helping hand as they are actively working yet not making enough money to live from their employment. According to the 2012 APS, for almost half (about 45 percent) of the Indigenous income assistance receivers, income assistance was their only source of income; it was a secondary source of income for 28 percent; and it was the main (but not sole) source of income for the remaining 27 percent. Individuals at different levels of reliance on income assistance may have different needs and challenges, yet these subgroups have rarely been examined previously (Strategic Research Directorate 2015).

To understand income assistance receipt better, it is important to examine its correlates. This study specifically investigates the distribution of income assistance receipt by sociodemographic categories such as gender, education, household type, marital status, and Indigenous group. In doing so, it attempts to identify sociodemographic characteristics prevalent among Indigenous recipients of income assistance. In other words, this analysis identifies population groups with different levels of dependency on income assistance as well as factors associated with the receipt of income assistance. For example, in the general population, women are more likely to rely on provincial income assistance due to a higher likelihood of living in poverty, especially lone-parent mothers and unattached women (Saverse and Morton 2005; Kerr, Frost, and Bignell 2004; Wiebe and Keirstead 2004; Gurstein et al. 2008). Education is believed to be a protective factor against labour market disadvantages such as higher unemployment rates and lower earnings than those with higher levels of education (Health Council of Canada 2005; Bougie, Kelly-Scott, and Arriagada 2013; Centre for the Study of Living Standards 2012; Conference Board of Canada 2011). It is worth paying special attention to the association

between education levels and income assistance receipt among Indigenous peoples. This paper examines whether education has a significant association with the receipt of income assistance after other confounding factors are taken into consideration.

A considerable number of Indigenous people who receive income assistance report other sources of income (about 60 percent, according to the present analysis). Some of them report having worked for pay during the week prior to the reference week of the survey. It is thus important to examine the labour market characteristics of income assistance recipients who are currently working. They may be considered as the working poor (Chen 2005), and the quality of their employment may be associated with receipt of income assistance. In this analysis, as indicators of job quality, the following variables are examined: job tenure, full-time status, job security, and occupation (Lin 2008). As income assistance policies emphasize "active" support for employment rather than "passive" provisions of financial assistance, it is important that income assistance receivers get access to employment opportunities (Atkinson et al. 2013; Torjman 1996; Ministry of Community and Social Services 2012; Johnston Research Inc. 2007).

Health and the receipt of income assistance interact with each other. Poor health may be associated with low income for some individuals, with physical or mental health conditions limiting work participation. Income has been described as an important health determinant affecting many physical and mental health conditions, health status, morbidity and mortality (Raphael 2001; Hay 2006; Health Quality Ontario 2016; Mikkonen and Raphael 2010). This study examines specific associations between health and income assistance for different groups of income assistance receivers.

The present analyses aim to examine the patterns of income assistance for off-reserve Indigenous populations and associated factors to help illuminate challenges Indigenous recipients of income assistance may face.

This study aims to answer the following research questions:

First, what are sociodemographic correlates of different groups of income assistance recipients among off-reserve Indigenous people? What factors are associated with a higher risk of income assistance in terms of age, gender, Indigenous groups, marital status, and family structure? Second, what are labour market characteristics of Indigenous workers who receive income assistance in terms of job tenure, full-time status, job security, and occupation? And third and finally, to what extent are mental and physical health conditions associated with the receipt of income assistance?

Methods

Data sources

The data are from the 2012 Aboriginal Peoples Survey (APS), a national survey of Indigenous peoples (First Nations people living off reserve, Métis, and Inuit living in Canada) developed by Statistics Canada. The target population consisted of the self-identified Indigenous-identity population of Canada, aged six years and over, and living in private

dwellings. People living on Indian reserves and settlements as well as in certain First Nations communities in Yukon and the Northwest Territories were not included. Data were collected directly from respondents through computer-assisted telephone or personal interviews. Respondents were interviewed in the official language (English or French) of their choice. More than 50,000 individuals of Indigenous identity or ancestry from the 2011 National Household Survey were sampled. The overall response rate to the 2012 APS was 76 percent (28,410 respondents). More details about the survey can be found at http://www.statcan.gc.ca/APS (Statistics Canada 2017a).

The sample for the present study consisted of Indigenous people aged 18 to 64 living off reserve (N=14,962; weighted N=597,255). About 54 percent of the study population was female, and the average age of the sample was 39. Thirty-seven percent had Registered Indian status (N=5,392; weighted N=223,879); 19 percent were non-registered First Nations (N=1,864; weighted N=110,038); 40 percent were Métis (N=5,224; weighted N=236,755); and four percent were Inuit (N=2,482; weighted N=26,583). Most resided in the Prairies region (37 percent) and Ontario (25 percent), followed by British Columbia (17 percent), Quebec (10 percent), the Atlantic region (seven percent), and the Territories (four percent).

To examine the difference between the Indigenous and non-Indigenous populations in terms of receipt of income assistance, Census data were used. Data are from the 2016 Census long-form sample, which is a 25 percent sample of Canadian households that has a response rate of 97.8 percent (Statistics Canada, 2017b). This analysis covered men and women aged 18 to 64. Its total sample size is 5.3 million, representing 21.8 million Indigenous (living onand off-reserve) and non-Indigenous peoples.

Measures

Indigenous groups

Indigenous groups were classified in accordance with the Indigenous group designation as defined by Indigenous and Northern Affairs Canada (INAC). The category of Registered Indian includes respondents who reported being Status Indians, that is, Registered or Treaty Indians, regardless of whether they identify as being First Nations, Métis or Inuk. Respondents who are not Status Indians and have a single identity only are grouped by their Indigenous identity group—Non-status First Nations, Inuit, or Métis. In recognition of the uniqueness of each of the four Indigenous groups, analyses were conducted and presented separately for Registered Indian, Non-status First Nations, Inuit, and Métis. In this study, those who reported multiple Indigenous identities were excluded from analysis.

Income assistance status

APS collected the information on sources of total personal income for 2011. Based on the information on income sources, a respondent's income assistance status was characterized in one of four categories: no receipt of income assistance; receipt of income assistance as the secondary source of income; receipt of income assistance as the main (but not sole) source of income; receipt of income assistance as the sole source of income.

Education level in this analysis has five categories:

- Current student: a person is currently attending school at any level at an educational institution.
- Below high school graduation: this category includes grade 8 or equivalent or lower; some secondary education.
- High school graduation
- Some postsecondary education
- Post-secondary degree: this category includes postsecondary certificate or diploma below bachelor level; bachelor's degree; university certificate/diploma/degree above bachelor level.

Household type indicates the type of household based on various family or non-family types (in relation to the respondent) in the household. A "respondent family household" is one in which the respondent lives in the household with other members of his/her family. A "respondent non-family household" is one in which the respondent lives alone or only with persons who are unrelated to him/her, even if these persons are related to each other. In this analysis, household type was collapsed into three categories: couple household (couple with child[ren] or couple without child); lone-parent household; other family household and non-family household including unattached individuals.

Self-perceived health: excellent, very good, good, fair, or poor. Respondents who answered that their health was fair or poor were considered to have poor self-perceived health.

The number of chronic conditions is a self-reported measure of the number of chronic conditions with which a respondent has been diagnosed. Considered chronic conditions included asthma, arthritis, high blood pressure, allergies, chronic bronchitis/emphysema/COPD, diabetes, heart disease, intestinal or stomach ulcers, bowel disorders, mood disorder, anxiety disorder, learning disability, attention deficit disorder, and other diagnosed long-term condition. In this analysis, the number of chronic conditions was collapsed into three categories: 0, 1-2, 3 or more (Canadian Institute for Health Information 2011).

Self-perceived mental health: excellent, very good, good, fair or poor. Respondents who answered that their mental health was fair or poor were considered to have poor self-perceived mental health.

High psychological distress was based on six items from the Kessler Psychological Distress Scale (K6), which has been validated for American Indian respondents (Mitchell and Beals 2011). K6 measures the frequency of non-specific symptoms experienced during the previous month: sadness, nervousness, restlessness, hopelessness, worthlessness, and the feeling that everything is an effort (Kessler et al. 1996). Items are rated on a five-point Likert scale, with responses ranging from "none of the time" (score 0) to "all of the time" (score 4). The final score summarizes the six items and can range from 0 to 24, with higher scores indicating greater psychological distress (Kessler et al. 2002). In this analysis, scores 13 or

higher were categorized as indicative of high psychological distress, as previous research suggested (Kessler et al. 2002).

Labour force status was based on self-reported information on whether a person was employed, unemployed, or not in the labour force during the reference week. The 2012 Aboriginal Peoples Survey used a floating reference week for the labour force and labour market activities questions. This was because the survey was conducted over a six-month period (February 6, 2012 to July 31, 2012). The definition of the "reference week" for the labour force and labour market activities questions was based on the date of the interview. It was the most recently completed seven-day period beginning on a Sunday and ending on the following Saturday.

Full-time/part-time work identified whether a person who was employed during the reference week worked full-time or part-time. Status is determined by the usual number of hours per week that the respondent works, excluding overtime. Part-time employment is defined as fewer than 30 hours per week; full-time is 30 hours or more per week (Canadian Council on Social Development 2019).

Job tenure identified the time in months that a person has been working at his/her current job or business. In this analysis, job tenure is classified into two groups: less than one year, and one year or more.

Permanent work indicates whether a person has been working at a job that is permanent or non-permanent (such as a seasonal job, a temporary, term or contract job, a casual job, or not permanent for any other reason).

Occupation was collapsed into three groups using the National Occupational Classification for Statistics (NOC-S) 2006: white-collar (management; business, finance, and administration; natural and applied sciences; health; education/law and social/community/government services; art, culture, recreation and sport); sales or service; and blue-collar (trades, transport or equipment operator; natural resources, agriculture; manufacturing or utilities).

Analytic strategy

Descriptive statistics were calculated for rates of income assistance receipt by demographic factors; distribution of labour market characteristics of Indigenous workers receiving income assistance; and the prevalence of health conditions by income assistance group.

A series of logistic regression analyses for male, female, and the four Indigenous groups were conducted to evaluate the extent to which this variation in the receipt of income assistance (dependent variable) is explained by social-demographic factors (independent

variables) such as age, education level, household type, marital status, and geographic region. Separate analyses were conducted to examine whether specific gender and Indigenous groups have distinctive associations between income assistance and social-demographic factors. Another series of regression analyses was conducted to examine the association between income assistance status and specific health conditions for male, female, and the four Indigenous groups (separate models for the number of chronic conditions; self-perceived poor physical health; self-perceived poor mental health; and high psychological distress) while controlling for the above-mentioned sociodemographic factors.

An ordinal logistic regression, using a proportional odds model, was applied to accommodate the ordinal level of measurement of the dependent variables (1 = no assistance; 2 = assistance as a secondary source of income; 3 = assistance as a main source of income; 4 = assistance as the sole source of income) (O'Connell, 2006). The proportional odds model produces one odds ratio for independent variables. The odds ratio pertains to the comparison of the values at or below one of the response option categories to those above the category (for example,1 vs. 2, 3, 4, and 1, 2 vs. 3, 4, and 1, 2, 3, vs. 4). There is no proportional odds ratio for the last category because there is no group above it. The proportional odds ratios are assumed equivalent for the three other categories (hence there is only one odds ratio for each variable) (O'Connell 2006).

All analyses were performed in SAS version 9.3 using survey weights to account for the complex APS sample design, and a bootstrapping technique was used to calculate estimates of variance.

Results

Income assistance rates by demographic characteristics

Age, gender, regions, Indigenous groups

Overall, among Indigenous people aged 18 to 64, 12 percent were recipients of income assistance, that is, reported provincial/municipal social assistance/welfare as an income source in 2011: Among them, about 29 percent indicated that income assistance was the secondary source of income; 27 percent indicated that it was the main source of income; for the rest, 44 percent, income assistance was the sole source of income (Table 1).

Compared to non-recipients, income assistance recipients were more likely to be younger. The mean age for the recipients was 38, whereas that for non-recipients was 40. Women showed a higher rate of income assistance receipt than men (16 percent vs. 10 percent). This gender differential stayed significant after controlling for other factors such as age, Indigenous group, education, household type, marital status, and region (data not shown).

In terms of Indigenous groups, income assistance was received by 18 percent of Registered Indians (13 percent for men, 21 percent for women); 11 percent of First Nations (eight percent for men, 14 percent for women); nine percent of Métis (seven percent for

men, 11 percent for women); and 22 percent of Inuit people (22 percent for both men and women) (gender-specific data not shown). Compared to other regions, the Territories showed the highest rate of income assistance recipients at 23 percent.

Family-related characteristics

Almost thirty percent of lone-parent families received income assistance in 2011, compared with seven percent of couple families. Moreover, 11 percent of lone-parent families indicated that income assistance was their sole source of income, compared to three percent of couples. Income assistance receipt was high (18 percent) among members living in "other" types of households—including households with other relative(s); or non-family households.

More than 20 percent of never-married Indigenous people received income assistance, compared to six percent of married. For about 10 percent of never-married individuals, income assistance was their only source of income.

Education

Educational attainment is strongly linked to income assistance. One in four respondents with less than high school graduation received income assistance in 2011, compared to eight percent of those with a post-secondary degree. Income assistance was the only source of income for 13 percent of those with less than high school education, whereas that was the case for almost none of those (0.2 percent) with a university degree (data not shown).

Labour and income

As would be expected, those not employed (unemployed or not in labour force) showed higher rates of income assistance receipt: 29 percent of the unemployed and 36 percent of those not in the labour force as compared to only four percent of those employed or in the labour force. As well, compared to other employed workers, those who received income assistance were more likely to have a job with short job tenure (less than one year): 61 percent vs. 23 percent (Table 2). More than one-third of those employed who received income assistance in 2011 were part-time workers or temporary workers, compared with 15 percent of Indigenous workers who did not receive income assistance. The proportion of occupations in sales and services was significantly higher among workers receiving income assistance than among other workers (36 percent vs. 25 percent).

Not surprisingly, higher rates of income assistance receipt were found among individuals who also reported low income. Almost none of those whose personal income was \$30,000 or higher received income assistance, compared to 29 percent of those with income less than \$10,000 (Table 1).

This finding of labour market conditions should be interpreted with caution due to different reference times for two measurements. The income assistance variable was based on information about the past year's income—whether there was income from income assistance. On the other hand, the labour market outcomes measured in this study were for the reference week. As a result, some individuals listed as being on welfare in 2011 may not have been on welfare by the time of the survey.

Health conditions

Health and the receipt of income assistance were highly correlated with each other. Each income assistance recipient group showed lower health ratings than their non-recipient counterparts, for each of the four health indicators included. A higher proportion of income assistance recipients reported having a chronic condition. About 75 percent of income assistance recipients reported having one or more chronic conditions, compared to 57 percent of non-recipients (Table 3). Almost half of those whose only income source was income assistance indicated that they had three or more diagnosed chronic conditions.

Income assistance recipients were much more likely (45 percent) than non-recipients (16 percent) to rate their general health as poor (rather than excellent, very good, or good) as well as their mental health as poor (30 percent vs. 10 percent, respectively). Among the recipients, those who received income assistance as their sole source of income were most frequently in the poor self-perceived health category compared to the other groups. The percentages of poor general health were 52 percent among those receiving income assistance as the sole source of income; 41 percent among those reporting it as the main source of income; and 36 percent among those who received income assistance as a secondary income. Negative self-perceived mental health was reported by 36 percent of those who received income assistance as their sole income, by 30 percent of those who reported income assistance as their main source of income, and by 20 percent of those who received income assistance as a secondary income.

Moreover, 31 percent of Indigenous peoples who received income assistance reported high psychological distress, whereas just 11 percent of non-recipients reported high distress. More than one-third of those who reported that income assistance was their sole source of income were assessed to have a high level of distress.

Comparison with non-Indigenous population

Table 4 presents prevalence rates and odds ratios of receiving income assistance for non-Indigenous and Indigenous people aged 18 to 64. Based on the 2016 Census data (income information from 2015), Indigenous men and women living off-reserve (13 percent for men, 17 percent for women) were more likely to receive income assistance compared to their on-reserve Indigenous (seven percent for men, eight percent for women) and non-Indigenous (five percent for men and women) counterparts.

Findings of age-adjusted logistic regression models showed that Indigenous men and women were more likely to receive income assistance than non-Indigenous people after controlling for age. Even after controlling many demographic (age, Indigenous group, education, household type, marital status, and geographic region) and labour market (employment, full-time status, and occupation) confounders, the differences between Indigenous and non-Indigenous peoples stayed significant. In particular, odds for receiving income assistance were high for Indigenous men (2.3) and women (2.8) living off-reserve.

Results of logistic regression models

A series of logistic regression analyses for male, female, and the four Indigenous groups were conducted to assess the extent to which this variation in the receipt of income assistance is explained by social-demographic factors such as age, education level, household type, marital status, and geographic region. Separate analyses were conducted to examine whether specific gender and Indigenous groups have distinctive associations between income assistance and social-demographic factors. Another series of regression analyses were conducted to examine the association between income assistance and health conditions for male, female, and the four Indigenous groups (separate models for each outcome; the number of chronic conditions, self-perceived negative health, self-perceived negative mental health, and high psychological distress), while controlling for the above-mentioned sociodemographic factors.

A series of ordered logistic regressions (also known as the proportional-odds model) was conducted. The ordered dependent variable included income assistance receipt with values of:

- 1 = no assistance
- 2 = assistance as a secondary source of income
- 3 = assistance as a main source of income
- 4 = assistance as the sole source of income

Higher numbers represented increasing dependence on income assistance. Sociodemographic factors were included in each regression model—age, Indigenous group, household type, education, marital status, and region.

Effects of sociodemographic factors

Findings of ordered logistic regression analyses confirmed the associations between sociodemographic characteristics and income assistance reported by descriptive statistics. Namely, the associations between the receipt of income assistance and education, family status, and Indigenous group stayed significant even after controlling for other confounding factors. For both men (odds ratios=2.8) and women (5.1), having less than high school levels of education increases the likelihood of being more dependent on income assistance receipt compared to those with a post-secondary degree (Table 5). Lone-parent family status increased the odds of receiving income assistance as well. In particular, women in lone-parent families were 3.2 times more likely than their couple-family counterparts to be more highly dependent on income assistance. Never having been married increased the odds of being an income assistance recipient compared to being married for both men and women (odds ratios were 2.3 for men, 2.2 for women). Compared to their Registered Indian counterparts, Inuit men showed higher odds of income assistance receipt (odds ratios=1.5), and Métis and non-status First Nations men and women showed lower odds of receiving income assistance compared to Registered Indians.

Another set of proportional-odds model regressions was conducted for each Indigenous group, and similar results were found. Having an education level less than high school and being single were significantly associated with the likelihood of higher dependence on income assistance for each Indigenous group. For example, non-status First Nations respondents with less than high school levels of education were seven times as likely as those with post-secondary to be in a higher category of income assistance receipt (Table 6). Registered Indian members of lone-parent families were almost three times more likely than their counterparts in couple families to be dependent on income assistance. Nevermarried Métis people were almost four times as likely as married Métis people to have income assistance as a source of income.

Health models

A separate ordinal regression analysis was conducted for each health outcome. Chart 1 shows adjusted odds ratios for being in a higher category of income assistance receipt for individuals with three or more chronic conditions: self-perceived negative health, self-perceived negative mental health, and high psychological distress. All of these health conditions significantly increased the odds of income assistance receipt for both men and women. For instance, Indigenous men with three or more chronic conditions were six times more likely than those with no chronic conditions to receive income assistance after controlling for other factors. Similarly, Indigenous women with three or more chronic conditions were 4.6 times more likely than those Indigenous women with no chronic conditions to receive income assistance after controlling for other factors.

All of the four health conditions significantly increased odds of income assistance receipt for each of four Indigenous groups (Chart 2). For instance, Métis respondents with three or more chronic conditions were almost ten times more likely than their counterparts with no chronic conditions to receive income assistance after controlling for other confounders. First Nations respondents with negative self-perceived mental health were six times more likely than other First Nations respondents to receive income assistance. It is noteworthy that those two Indigenous groups were lower in the rates of income assistance receipt compared to Registered Indians and Inuit groups.

Chart 3 presents predicted probabilities of different levels of income assistance receipt for respondents with health problems based on a series of multivariate ordered logistic regressions. It shows predicted probabilities for four categories of income assistance status for four sub-population groups: people with three or more chronic conditions; people who reported self-perceived negative health; people who reported self-perceived negative mental health; and those withhigh psychological distress; and healthy population with positive self-rated health and mental health, no high distress, and no chronic condition. While controlling for other confounding factors, the predicted probability of receiving income assistance for healthy people was 13 percent (five percent as the only source of income). If one has high psychological distress, however, that individual's chance of receiving income assistance was more than 18 percent—nine percent for income assistance as the only source of income.

Discussion

This study demonstrates multiple dimensions of income assistance receipt for Indigenous peoples. This study identified important associations between sociodemographic factors and income assistance receipt. Higher risks of receiving income assistance were found among those never married; who were female; who had lower than high school levels of education; who were living in lone-parent households; and who reported poor mental and physical health. Those associations remained significant after controlling for other demographic confounders and held or all three Indigenous groups. Also, an additional analysis of the 2016 Census data indicated that Indigenous people living off-reserve were significantly more likely to receive income assistance compared to the non-Indigenous population. Even after controlling for various sociodemographic and labour-market factors, Indigenous men and women living off-reserve were more than twice as likely to have received income assistance in the previous year.

Educational attainment is strongly linked to income assistance: 25 percent of respondents with less than high school graduation received income assistance in 2011, compared to almost none of those with a university degree. The association between low education and income assistance receipt stayed significant even after controlling for other sociodemographic factors in multivariate analyses. This result points to the importance of educational attainment for youth. In fact, this is in line with national priorities to provide adequate employment skills training and to promote opportunities for postsecondary education for Indigenous youth (Indian and Northern Affairs Canada 2007; Bougie, Kelly-Scott, and Arriagada 2013).

Some family-related conditions are important in the receipt of income assistance: household type and marital status. People in lone-parent households demonstrated a higher risk for income assistance receipt. More than one in four lone-parent families received income assistance in 2011, and more than 11 percent of them indicated that income assistance was their only source of income. Regression results show that women in lone-parent families were three times more likely than their couple-family counterparts to be in a higher category of income assistance receipt after controlling for other confounding factors.

This finding is consistent with widespread evidence suggesting that mothers and children in lone-parent families are more likely to need social assistance (Crossley and Curtis 2006; Curtis and Phipps 2004). This group is likely affected by the consequences of both lone parenthood and poverty (Curtis and Pennock 2006). Female members of lone-parent families were three times more likely than those in couple family to receive income assistance. It may be, first, because women's ongoing responsibility for childrearing makes it far more likely that they will be lone parents than their male counterparts; second, women tend to leave paid work more often than men because of childcare responsibilities (Cooke and Gazso 2009). Both conditions would make income assistance an important resource.

There is strong evidence of a link between income assistance receipt and health. Social assistance recipients have significantly higher rates of poor health and chronic conditions.

This finding is consistent with previous research pointing out that income assistance is the main source of income for the most health-compromised group of working-age people (Community Social Planning Council of Toronto, University of Toronto's Social Assistance in the New Economy Project and the Wellesley Institute 2009). Though the cross-sectional data used in this study cannot determine the causal relationship between income assistance and health, it is possible that the association may be bi-directional: individuals may experience falling incomes as a result of ill health or they may experience declining health as a result of low income (Phipps 2003). Undoubtedly, poverty further compromises health and undermines a person's ability to cope with chronic health problems (Community Social Planning Council of Toronto, University of Toronto's Social Assistance in the New Economy Project and the Wellesley Institute 2009).

Thus, income assistance policies promoting employability may benefit from involving strategies of health promotion (Savarse and Morton 2005).

Limitations

As the sample of APS does not include the on-reserve Indigenous population, this study examines the receipt of income assistance only among Indigenous people living off-reserve. The rate of income assistance for those living on-reserve warrants further study (Strategic Research Directorate, Aboriginal Affairs and Northern Development Canada 2015). Also, since the APS did not include non-Indigenous respondents, there was no opportunity for comparisons.

The sample size of income assistance recipients in the 2012 APS was too small to conduct separate gender-specific multivariate analyses for each Indigenous group—Registered Indians, non-Registered Indian, Métis, and Inuit.

As APS provides cross-sectional information, findings are about associations, and no inferences about causality can be made—the relationships described are bi-directional. For example, it is uncertain whether income assistance dependency leads to health problems or vice versa.

Receipt of income assistance and the level of dependence on it were determined by respondents' self-reports. Although the questions regarding income and sources of income were specific and straightforward, there remained potential recollection and/or reporting biases.

Receipt of income assistance may have been underreported. Only one household member typically reports IA as an income source; if a person lives with his/her spouse or common-law partner when the payments are received, the person who has the higher net income has to report all of the payments. As a result, some individuals sampled for this analysis might live in a household receiving IA but not report it as their source of income.

The timing of data collection might have affected the receipt of income assistance or the respondent's level of dependence, especially if they had seasonal employment.

However, adjustment for seasonality was not possible, as APS did not provide specific times of data collection for individual respondents. The current survey was done between February 6, 2012 and July 30, 2012.

Future studies

It is recommended that future studies examine causal relationships between income assistance and its correlates, especially health conditions. It would be important to differentiate specific health factors contributing to the need for income assistance, and the effects of income assistance (and lack of other income sources) on health status. It is also important to understand to what extent income assistance helps individual recipients not just to obtain basic needs, but to make a successful transition to work. Thus, information on the duration of income assistance is important and necessary. Retrospective questions may be helpful in longitudinal or cross-sectional survey analyses. Newly emerging sources of survey data linked with administrative records may also allow for this type of longitudinal analyses.

As well, it is important to study intervening factors between income assistance and health status to make sense of the pathway between the two variables. The connection between low income and poor health may be reinforced by limited health care access and subsequent low satisfaction with health care. Those with low income tend to report higher rates of unmet needs (Williamson et al. 2006; Chen and Hou 2002). Another potential intervening factor may be food insecurity. Household food insecurity caused by low income is significantly associated with adult chronic health conditions (Tarasuk, Mitchell, McLaren, and McIntyre 2013).

Conclusions

The 2012 APS provided self-reported information on income sources, including income assistance, as well as detailed data on sociodemographic factors such as labour market characteristics, education, and marital status. This study suggests that the likelihood of receiving income assistance was associated with lower age, being female, never having been married, levels of education lower than high school, and living in lone-parent households. It is important to note that a considerable number of recipients of income assistance were employed. These "working poor" individuals showed that their job characteristics differ from those not on income assistance—namely, they held jobs of lower quality. Moreover, associations were demonstrated between income assistance and self-reported physical and mental health outcomes. Although results are correlational and causality cannot be inferred, this study points to the "complexity" of income assistance and the number of factors that should be considered by policymakers, researchers, and others who are interested in the living conditions of Indigenous people. Future studies can include longitudinal analysis of newly available sources of survey data linked to administrative records. Such data sources would allow to examine causal relationships between income assistance and its correlates, especially health status and its mediating variables.

Supporting Agencies: Indigenous and Northern Affairs Canada.

References

- Aboriginal Affairs and Northern Development Canada. 2012a. *Expenditure Trend Social Development*. http://www.aadnc-aandc.gc.ca/eng/1335375504662/1335375541047.
- ——. 2012b. *Income Assistance Program*. http://www.aadnc-aandc.gc.ca/eng/110010003
 5256/1100100035257.
- ——. 2013a. Fact Sheet 2011 National Household Survey Aboriginal Demographics, Educational Attainment and Labour Market Outcomes. https://www.aadnc-aandc.gc.ca/eng/1376329205785/1376329233875.
- ——. 2013b. Audit of the Income Assistance Program. http://www.aadnc-aandc.gc.ca/eng/1381490785682/1381490841840#exe.
- ——. 2013c. Backgrounder Income Assistance Reform: Enhanced Service Delivery. http://www.aadncaandc.gc.ca/eng/1371048267592/1371048310299.
- ——. 2013d. *Income Assistance Program Frequently Asked Questions*. http://www.aadnc-aandc.gc.ca/eng/1334599128283/1334599174322.
- ——. 2014. *Income Assistance: Key Facts*. http://www.aadncaandc.gc.ca/eng/136976680 7521/1369766848614.
- ———, Strategic Research Directorate. 2015. "Income Assistance among First Nations Living Off-reserve, Métis and Inuit People: Profile from the 2012 Aboriginal Peoples Survey." Presentation prepared for ESDPP, Aboriginal Affairs and Northern Development Canada.
- Atkinson, M., D. Béland, G. Marchildon, K. McNutt, P. Phillips, and K. Rasmussen. 2013. *Governance and Public Policy in Canada: A View from the Provinces*. Toronto, ON: University of Toronto Press.
- Assembly of First Nations 2015. *Income Assistance: What Is Income Assistance?* http://www.afn.ca/en/policy-areas/social-secretariat/key-issues-activities/income-assistance.
- Baldwin, J. R., and D. Beckstead. 2003. "Knowledge Workers in Canada's Economy 1971-2001." *Insights on Canadian Society*. Ottawa, ON: Statistics Canada, Micro-Economic Analysis Division. Catalogue no. 11-624-MIE No. 0004. http://www.statcan.gc.ca/pub/11-624-m/11-624-m2003004-eng.pdf.
- Béland, D., and P.-M. Daigneault. 2015. Welfare Reform in Canada: Provincial Social Assistance in Comparative Perspective. Toronto, ON: University of Toronto Press.
- Bougie, E., K. Kelly-Scott, and P. Arriagada. 2013. Aboriginal Peoples Survey 2012 The Education and Employment Experiences of First Nations People Living Off Reserve, Inuit, and Métis: Selected Findings from the 2012 Aboriginal Peoples Survey. Ottawa, ON: Statistics Canada.

- Boychuk, G. W. 2015. "Federal Policies, National Trends, and Provincial Systems: A Comparative Analysis of Recent Developments in Social Assistance in Canada, 1990-2013." In *Welfare Reform in Canada: Provincial Social Assistance in Comparative Perspective*, edited by Daniel Béland and Pierre-Marc Daigneault, 35-51. Toronto, ON: University of Toronto Press.
- Caledon Institute of Social Policy. 2015. *Canada Social Report: Social Assistance Combined Summaries*, 2014. https://maytree.com/wp-content/uploads/1062ENG.pdf.
- Canadian Council on Social Development. 2019. "A Profile of the Labour Market in Canada: Fact Sheet #2: EMPLOYMENT." *Stats & Facts.* http://www.ccsd.ca/factsheets/labour_market/employment/index.htm.
- Canadian Institute for Health Information. 2011. "Seniors and the Health Care System: What Is the Impact of Multiple Chronic Conditions?" *Analysis in Brief.* https://secure.cihi.ca/free_products/air-chronic_disease_aib_en.pdf.
- Centre for the Study of Living Standards. 2012. *Aboriginal Labour Market Performance in Canada: 2007-2011.* CSLS Research Report 2012-04. http://www.csls.ca/reports/csls2012-04.pdf.
- Chen, J., and F. Hou. 2002. "Unmet Needs for Health Care." Health Reports 13, no. 2: 23–33.
- Chen, W. H. 2005. "Examining the Working Poor in Canada: Is Working a Ticket Out of Poverty?" Draft. Ottawa, ON: Statistics Canada.
- Community Social Planning Council of Toronto, University of Toronto's Social Assistance in the New Economy Project (SANE) and the Wellesley Institute. 2009. Sick and Tired: The Compromised Health of Social Assistance Recipients and the Working Poor in Ontario. https://www.homelesshub.ca/resource/sick-and-tired-compromised-health-social-assistance-recipients-and-working-poor-ontario.
- Conference Board of Canada. 2011. *Advanced Skills and Innovation*. http://www.conferenceboard.ca/hcp/hot-topics/.
- Cooke, M., and A. Gazso. 2009. "Taking a Life Course Perspective on Social Assistance Use in Canada: A Different Approach." *Canadian Journal of Sociology* 34, no. 2: 349-372.
- Crossley, T. F., and L. J. Curtis. 2006. "Child Poverty in Canada." *The Review of Income and Wealth* 52, no. 2: 237–260.
- Curtis, L. J., and S. Phipps. 2004. "Social Transfers and the Health Status of Mothers in Norway and Canada." *Social Science & Medicine* 58, no. 12: 2499–2507.
- Curtis, L. J., and M. Pennock. 2006. "Social Assistance, Lone Parents and Health: What Do We Know, Where Do We Go?" *Canadian Journal of Public Health* 97, Supplement 3: S4-S10.

- Eisleb-Taylor, S. 2013. First Nations Income Assistance in Perspective: Assimilation, Active Measures and the Way Forward Major Research Paper, Master of Arts in Public and International Affairs. Ottawa, ON: University of Ottawa.
- Federal-Provincial-Territorial Directors of Income Support. 2008. *Social Assistance Statistical Report:* 2008. http://www.hrsdc.gc.ca/eng/publications-resources/social-policy/sasr-2008/page01.shtml.
- First Nations of Quebec and Labrador Health and Social Services Commission. 2011. *Income Security Program*. http://www.cssspnql.com/en/areas-of-intervention/socialdevelopment/income-security-program.
- Galabuzi, G. 2004. "Social Exclusion." In *Social Determinants of Health: Canadian Perspectives*, edited by D. Raphael, 235–252. Toronto, ON: Canadian Scholars' Press Inc..
- Gurstein, P., M. Goldberg, S. Fuller, P. Kershaw, J. Pulkingham and S. Vilches. 2008. Precarious & Vulnerable: Lone Mothers on Income Assistance. Burnaby, BC: The Social Planning and Research Council of British Columbia.
- Hay, D. I. 2006. *Economic Arguments for Action on the Social Determinants of Health*. Ottawa, ON: Canadian Policy Research Networks. http://www.cprn.org/documents/46128_en.pdf.
- Health Council of Canada. 2005. *The Health Status of Canada's First Nations*, *Métis and Inuit Peoples*. http://hcccs.com/docs/BkgrdHealthyCdnsENG.pdf.
- Health Quality Ontario. 2016. *Income and Health: Opportunities to Achieve Health Equity in Ontario.* Toronto, ON: Queen's Printer for Ontario.
- Human Resources and Social Development Canada. 2013. *Financial Security Low Income Incidence*. http://well-being.esdc.gc.ca/misme-iowb/.3ndic.1t.4r@-eng.jsp?iid=23#M_4.
- Indian and Northern Affairs Canada, Audit and Evaluation Sector. 2007. *Evaluation of Income Assistance Program*. CIDM #1174769v11. Indian and Northern Affairs Canada. http://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/eiap07_1100100011749 eng.pdf.
- Johnston Research Inc. 2007. Research Study and Report on Active Measures across Canada with Regard to the Income Assistance Program Draft Final Report. Ottawa, ON: Indian and Northern Affairs Canada.
- Kerr, M., D. Frost, and D. Bignell. 2004. *Don't We Count as People? Saskatchewan Social Welfare Policy and Women's Health*. Project #77 of the Prairie Women's Health Centre of Excellence. Saskatoon, SK: Prairie Women's Health Centre of Excellence. http://www.pwhce.ca/pdf/dontWeCount.pdf.

- Kessler, R. C., P. A. Berglund, S. Zhao, P. J. Leaf, A. C. Kouzis, M. L. Bruce, R. M. Friedman, R. C. Grossier, C. Kennedy, W. E. Narrow, T. G. Kuehnel, E. M. Laska, R. W. Manderscheid, R. A. Rosenheck, T. W. Santoni, and M. Schneier. 1996. "The 12-Month Prevalence and Correlates of Serious Mental Illness." In *Mental Health, United States*, 1996, edited by R. W. Manderscheid and M. A. Sonnenschein, 59–70. Washington, D.C.: U.S. Government Printing Office.
- Kessler, R. C., G. Andrews, L. J. Colpe, E. Hiripi, D. K. Mroczek, S. L. Normand, E. E. Walters, and A. M. Zaslavsky. 2002. "Short Screening Scales to Monitor Population Prevalences and Trends in Non-Specific Psychological Distress." *Psychological Medicine* 32, no. 6: 959–976.
- Kneebone, R., and K. White. 2014. "The Rise and Fall of Social Assistance Use in Canada: 1969–2012." School of Public Policy Research Paper No. 7–5. Calgary, AB: University of Calgary. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2395363.
- Lin, J. 2008. "Trends in Employment and Wages, 2002 to 2007." *Perspectives on Labour and Income*, September, 5–15. Ottawa, ON: Statistics Canada.
- Luffman, J., and D. Sussman. 2007. "The Aboriginal Labour Force in Western Canada." *Perspectives on Labour and Income*, January, 13–27. Ottawa, ON: Statistics Canada.
- Mikkonen, J., and D. Raphael. 2010. *Social Determinants of Health: The Canadian Facts*. Toronto, ON: York University School of Health Policy and Management. http://www.thecanadianfacts.org/.
- Ministry of Community and Social Services. 2012. From Social Assistance to Income Security. http://www.mcss.gov.on.ca/en/mcss/publications/social/sarac/social_security_sarac.aspx.
- Mitchell, C. M., and J. Beals. 2011. "The Utility of the Kessler Screening Scale for Psychological Distress (K6) in Two American Indian Communities." *Psychological Assessment* 23, no. 3: 752–761.
- Moyser, M. 2017. Aboriginal People Living Off-Reserve and the Labour Market: Estimates from the Labour Force Survey, 2007-2015. Statistics Canada Catalogue no. 71-588-X. Ottawa, ON: Statistics Canada.
- Murphy, B., X. Zhang, and C. Dionne. 2012. "Low Income in Canada: A Multi-Line and Multi-Index Perspective." Income Research Paper Series. Ottawa, ON: Statistics Canada.
- Noël, A., and F. Larocque. 2009. "Aboriginal Peoples and Poverty in Canada: Can Provincial Governments Make a Difference?" Paper prepared for the Annual Meeting of the International Sociological Association's Research Committee 19 (RC19), Montréal, August 20, 2009.

- O'Connell, A. 2006. *Logistic Regression Models for Ordinal Response Variables*. Series/Number 07-146. Thousand Oaks, CA: SAGE Publications.
- Phipps, S. 2003. *The Impact of Poverty on Health: A Scan of Research Literature*. Ottawa, ON: Canadian Population Health Initiative and Canadian Institute for Health Information.
- Raphael, D. 2001. Social Determinants of Health: Canadian Perspectives. Toronto, ON: Canadian Scholars' Press Inc.
- Reading, C. L., and F. Wien. 2009. *Health Inequalities and Social Determinants of Aboriginal Peoples' Health*. Prince George, BC: National Collaborating Centre for Aboriginal Health.
- Roy, J., and G. W. Boychuk. 2016. "Explaining Provincial Social Assistance Benefit Rates in Canada, 2000-2011." Prepared for the Canadian Political Science Association 2016, Calgary, June 2016.
- Savarese, J., and B. Morton. 2005. *Women and Social Assistance Policy in Saskatchewan and Manitoba*. Winnipeg, MB: Prairie Woman's Health Centre of Excellence. http://www.pwhce.ca/pdf/incomeAssistanceComplete.pdf.
- Statistics Canada. 2017a. *Aboriginal Peoples Survey (APS)*. http://www.statcan.gc.ca/APS.
- ——. 2017b. *Guide to the Census of Population, 2016.* Statistics Canada Catalogue no. 98-304-X2016001. https://www12.statcan.gc.ca/census-recensement/2016/ref/98-304/index-eng.cfm.
- ——. 2018. Aboriginal Population Profile. 2016 Census. Statistics Canada Catalogue no. 98-510-X2016001. http://www12.statcan.gc.ca/census-recensement/2016/dppd/abpopprof/index.cfm?Lang=E.
- Tarasuk, V., A. Mitchell, L. McLaren, and L. McIntyre. 2013. "Chronic Physical and Mental Health Conditions among Adults May Increase Vulnerability to Household Food Insecurity." *The Journal of Nutrition* 143, no. 11: 1785–1793.
- Torjman, S. 1996. Workfare: A Poor Law. Ottawa, ON: Caledon Institute of Social Policy.
- Usalcas, J. 2011. "Aboriginal People and the Labour Market: Estimates from the Labour Force Survey, 2008-2010." The Aboriginal Labour Force Analysis Series. Ottawa, ON: Statistics Canada. https://www150.statcan.gc.ca/n1/en/pub/71-588-x/71-588-x2011003-eng.pdf?st=BCajVWlT.
- Wiebe, R., and P. Keirstead. 2004. *Surviving on Hope is Not Enough: Women's Health, Poverty, Justice and Income Support in Manitoba*. Project #81 of the Prairie Women's Health Centre of Excellence. Winnipeg, MB: Prairie Woman's Health Centre of Excellence. http://www.pwhce.ca/pdf/survivingOnHope.pdf.

- William, G. B. 1998. *Patchworks of Purpose: The Development of Provincial Assistance Regimes in Canada*. Montreal and Kingston: McGill-Queen's University Press.
- Williamson, D. L., M. J. Stewart, K. Hayward, N. Letourneau, E. Makwarimba, J. Masuda, K. Raine, L. Reutterf, I. Rootman, and D. Wilson. 2006. "Low Income Canadians' Experiences with Health-Related Services: Implications for Health Care Reform." *Health Policy* 76, no. 1: 106–121.
- Wilson, D., and D. Macdonald. 2010. *The Income Gap between Aboriginal Peoples and the Rest of Canada*. Ottawa, ON: Canadian Centre for Policy Alternatives.
- Zhang, X. 2010. "Low Income Measurement in Canada: What Do Different Lines and Indexes Tell Us?" Statistics Canada Income Research Paper Series 75F0002M. http://www.statcan.gc.ca/pub/75f0002m/75f0002m2010003-eng.htm.

Table 1. Income assistance receipt by selected demographic characteristics , Indigenous peoples aged 18-64, 2012

						Perce	ntage (exce	pt for ag	ge)						
	Not as ma	in sou ome	rce of	As main source				only sou	urce of	Tota	al receive	ars	No.	ıssistance	
Mean age (years)	% 36.7			% 35.9	95% 35.5	36.3	% 39.8	95% 39.5	40.2	% 37.9	95% 937.6	CIs 38.1	% 39.7	95% (39.6	39.8
Age group															
18-24	4.0	3.7	4.3	3.4	3.2	3.6	5.8	5.5	6.2	13.2	12.7	13.7	86.8	86.3	87.3
25-44	4.4	4.2	4.6	5.3	5.0	5.5	5.7	5.5	6.0	15.4	15.0	15.7	84.6	84.3	85.0
45-64	2.7	2.4	2.9	1.8	1.6	2.0	6.3	6.0	6.6	10.7	10.3	11.1	89.3	88.9	89.7
Gender															
Male	2.7	2.5	2.8	2.7	2.5	2.8	5.0	4.8	5.3	10.3	10.0	10.7	89.7	89.3	90.0
Female	4.5	4.3	4.7	4.4	4.2	4.6	6.8	6.5	7.0	15.6	15.3	16.0	84.4	84.0	84.7
Aboriginal group															
Registered Indian	4.4	4.2	4.7	4.8	4.5	5.0	8.3	8.0	8.7	17.5	17.1	18.0	82.5	82.0	82.9
Non status First Nations	3.7	3.4	4.0	2.5	2.3	2.8	5.0	4.5	5.4	11.1	10.6	11.7	88.9	88.3	89.4
Métis	2.4	2.3	2.6	2.7	2.5	2.9	4.0	3.8	4.2	9.1	8.8	9.5	90.9	90.5	91.2
Inuit	7.8	7.3	8.3	6.3	6.1	6.6	7.8	7.4	8.2	21.9	21.3	22.5	78.1	77.5	78.7
Region															
Atlantic	2.0	1.8	2.3	1.8	1.6	2.0	5.5	5.0	6.1	9.3	8.8	10.0	90.7	90.0	91.2
Quebec	2.5	2.1	2.9	3.0	2.7	3.3	6.4	5.8	7.0	11.9	11.2	12.6	88.1	87.4	88.8
Ontario	4.2	3.9	4.5	3.6	3.3	3.9	4.3	3.9	4.6	12.1	11.6	12.6	87.9	87.4	88.4
Prairies	4.1	3.9	4.3	4.2	4.0	4.4	6.5	6.2	6.8	14.8	14.5	15.2	85.2	84.8	85.5
British Columbia	2.1	1.9	2.3	2.6	2.4	2.9	6.9	6.3	7.6	11.6	10.9	12.3	88.4	87.7	89.1
Territories	9.1		9.5	7.1	6.7	7.4	7.3	6.9	7.7	23.4	22.8	24.0	76.6	76.0	77.2
Personal income															
Less than \$10,000	4.3	4.0	4.6	7.5	7.0	8.0	17.1	16.4	17.9	28.9	28.1	29.7	71.1	70.3	71.9
\$10,000-\$19,999	7.3	6.9	7.6	7.1	6.8	7.4	8.9	8.5	9.3	23.2	22.7	23.8	76.8	76.2	77.3
\$20,000-\$29,999	1.6	1.5	1.8	0.4	0.3	0.4	0.6	0.5	0.8	2.6	2.4	2.9	97.4	97.1	97.6
\$30,000 or higher	0.6	0.5	0.8	F			F			0.9	0.7	1.0	99.1	99.0	99.3
Education level															
Current students	3.1	2.6	3.6	10.1	8.7	11.6	18.2	15.7	21.1	31.4	28.7	34.2	68.6	65.8	71.3
Below high school	5.0	4.7	5.3	7.4	7.0	7.8	12.7	12.2	13.2	25.0	24.4	25.6	75.0	74.4	75.6
High school	3.4	3.1	3.6	3.0	2.7	3.2	6.3	5.9	6.9	12.7	12.1	13.3	87.3	86.7	87.9
Some college	4.5	4.1	5.0	3.3	3.1	3.6	5.4	4.9	5.9	13.3	12.7	13.9	86.7	86.1	87.3
Post-secondary degree	2.9	2.7	3.1	2.0	1.8	2.1	2.6	2.4	2.8	7.5	7.2	7.8	92.5	92.2	92.8
Labour force status															
Employed	2.2	2.1	2.4	1.1	1.0	1.2	0.8	0.7	0.9	4.1	3.9	4.3	95.9	95.7	96.1
Unemployed	9.0	8.2	9.9	10.4	9.6	11.2	9.6	9.0	10.3	29.0	27.9	30.2	71.0	69.8	72.1
Not in labour force	6.2	5.9	6.6	9.0	8.6	9.4	20.3	19.7	21.0	35.5	34.8	36.3	64.5	63.7	65.2
Household type															
Couple family	2.3	2.2	2.4	1.9	1.8	2.0	2.5	2.4	2.6	6.7	6.5	6.9	93.3	93.1	93.5
Lone parent family	7.9	7.5	8.4	8.8	8.3	9.2	10.8	10.2	11.3	27.5	26.8	28.2	72.5	71.8	73.2
Others	3.6	3.3	3.8	3.7	3.5	4.0	11.1	10.5	11.7	18.4	17.7	19.1	81.6	80.9	82.3
Marital status															
Married/common-law	2.1		2.3	1.7	1.6	1.9	2.5	2.3	2.6	6.3	6.1	6.6	93.7	93.4	93.9
Windowed/separated/divorced	4.8	4.3	5.3	3.4	3.1	3.7	9.8	9.1	10.6	18.0	17.2	18.9	82.0	81.1	82.8
Never married	5.5	5.2	5.7	6.4	6.2	6.7	9.7	9.3	10.1	21.6	21.1	22.0	78.4	78.0	78.9
Weighted N	21,787			21,488			35,617			78,892			518,363		
%	3.4			3.2			5.2			11.8			83.6		
Unweighted sample size	618			665			872			2,155			12,807		

F Suppressed due to CV greater than .333 or cell size <10.

Data source: Aboriginal Peoples Survey 2012

Table 2. Selected labour market characteristics by income assistance status, Indigenous workers aged 18-64, 2012

	Income a	assistaı	nce			
	rece	eivers		No ass	sistanc	e
	%	95%	Cls	%	95%	Cls
Job tenure						
Less than 1 year	61.1 *	58.6	63.5	23.1	22.7	23.5
1 year or more	38.9 *	36.5	41.4	76.9	76.5	77.3
Full-time work						
No	35.1 *	32.8	37.5	14.6	14.3	14.9
Yes	64.9 *	62.5	67.2	85.4	85.1	85.7
Permanent work						
No	35.7 *	33.4	38.0	14.1	13.8	14.4
Yes	64.3 *	62.0	66.6	85.9	85.6	86.2
Occupation						
White-collar	41.5 *	38.8	44.3	50.5	50.1	51.0
Sales and services	35.9 *	33.6	38.1	24.8	24.4	25.2
Blue-collar	22.6	20.9	24.4	24.7	24.3	25.1
Employed sample:						
Weighted N	17,143			404,337		
Unweighted sample size	476			9,706		

^{*}Significantly different from the same category of No assistance at the p≥.05 level.

Data source: Aboriginal Peoples Survey 2012

Table 3. Selected health characteristics by income assistance status, Indigenous peoples aged aged 18-64, 2012

	Not as main source of	source of	As main but not only source of	only sourc	e of									
	income	e	income	ne ,		As the only source of income	rce of in	come	Total receivers	eivers		No assistance	stance	
	%	95% CIs	%	95% CIs	"	%	95% CIs	Cls	%	95% CIs	SIS	%	95% Cls	Cls
Number of chronic conditions														
0	33.0 *	31.2 34.7	29.0 *	27.5	30.5	17.4 *	16.4	18.5	24.9 *	24.1	25.7	42.7	42.4	43.1
1-2	34.4 *	32.7 36.2	32.5 *	31.0	34.0	36.4 *	35.0	37.8	34.8 *	33.9	35.6	40.0	39.6	40.3
3+	32.6 *	30.8 34.4	* 38.6	36.9	40.3	46.2 *	44.8	47.7	* 40.4	39.4	41.3	17.3	17.0	17.6
Self-perceived negative health														
(fair or poor)														
No	63.7 *	61.9 65.4	59.1 *	57.3	8.09	* 48.0	46.5	49.5	55.4 *	54.4	56.3	83.9	83.6	84.2
Yes	36.3 *	34.6 38.1	* 40.9	39.2	42.7	52.0 *	50.5	53.5	44.6 *	43.7	45.6	16.1	15.8	16.4
Self-perceived negative mental														
health (fair or poor)														
No	* 9.67	78.0 81.1	70.4 *	9.89	72.1	* 64.0	62.3	65.7	70.2 *	69.2	71.2	90.2	89.9	90.5
Yes	20.4 *	18.9 22.0	* 5.62	27.9	31.4	36.0 *	34.3	37.7	29.8 *	28.8	30.8	9.8	9.5	10.1
High distress														
NO.	* 47.7	75.8 79.0	65.7 *	63.9	67.5	* 66.5	64.7	68.2	* 4.69	68.4	70.4	89.5	89.2	89.7
Yes	22.6 *	21.0 24.2	34.3 *	32.5	36.1	33.5 *	31.8	35.3	30.6 *	29.6	31.6	10.5	10.3	10.8
Weighted N	22,978		21,573			35,671			80,222			576,304		
Unweighted sample size	631		299			873			2,171			13,850		

*Significantly different from the same category of No assistance at the p≥.05 level.

Data source: Aboriginal Peoples Survey 2012

Table 4. Prevalence rates and odds ratios of receiving income assistance, non-Indigenous and Indigenous people aged 18-64, 2016

		PI	Prevalence		Age adj	Age adjusted model		Ful	Full model*	
		%	95% CI		8	95% CI		OR	95% CI	
	Non-Indigenous									
	Sample size 2,492,700									
	Weighted N 10,340,000	4.88	4.85	4.91	1.00	:	:	1.00	:	:
	On-reserve Indigenous									
Men	Sample size 94,900									
	Weighted N 95,600	7.12	96.9	7.29	1.53	1.50	1.57	1.24	1.19	1.30
	Off-reserve Indigenous									
	Sample size 108,000									
	Weighted N 382,400	12.67	12.45	12.89	2.88	2.85	2.91	2.25	2.21	2.30
	Non-Indigenous									
	Sample size 2,571,600									
	Weighted N 10,620,000	2.08	5.06	5.11	1.00	:	:	1.00	:	:
	On-reserve Indigenous									
Women										
	Weighted N 95,100	7.99	7.82	8.17	1.64	1.60	1.68	1.23	1.17	1.29
	Off-reserve Indigenous									
	Sample size 120,200									
	Weighted N 431,200	16.91	16.68	17.14	3.82	3.79	3.86	2.83	2.78	2.88

*Adjusted for age, Indigenous group, education, household type, marital status, region, employment, full-time status, and occupation.

Data source: Census, 2016

Table 5. Adjusted proportional odds ratios for the receipt of income assistance by sex, for Indigenous peoples aged aged 18-64, 2012

	r	Лen		W	omen	
	OR	95%	Cls	OR	95% (Cls
Age group						
18-24 (ref)	1.00			1.00		
25-44	1.74	1.58	1.91	1.91	1.77	2.07
45-64	1.93	1.73	2.17	1.20	1.08	1.34
Education level						
Current students	1.24	1.11	1.39	0.85	0.78	0.93
Below high school	2.81	2.56	3.09	5.11	4.73	5.53
High school	1.83	1.63	2.06	1.92	1.74	2.12
Some college	1.35	1.19	1.52	1.84	1.68	2.02
Post-secondary degree (ref)	1.00			1.00		
Aboriginal group						
Registered Indian (ref)	1.00			1.00		
First Nations	0.66	0.58	0.74	0.67	0.62	0.73
Métis	0.60	0.55	0.66	0.47	0.43	0.50
Inuit	1.50	1.37	1.65	0.81	0.74	0.89
Household type						
Couple family (ref)	1.00			1.00		
Lone parent family	1.60	1.45	1.76	3.21	2.95	3.50
Others	1.97	1.80	2.15	1.79	1.61	1.99
Marital status						
Married/common-law (ref)	1.00			1.00		
Windowed/separated/divorced	1.48	1.29	1.70	1.64	1.45	1.84
Never married	2.30	2.09	2.53	2.23	2.01	2.48
Region						
Atlantic	0.94	0.82	1.08	0.87	0.77	0.98
Quebec	1.23	1.09	1.39	0.87	0.77	0.98
Ontario (ref)	1.00			1.00		
Prairies	1.24	1.11	1.39	1.25	1.16	1.35
British Columbia	1.37	1.20	1.57	0.79	0.71	0.87
Territories	0.56	0.50	0.62	0.86	0.78	0.94

Data source: Aboriginal Peoples Survey 2012

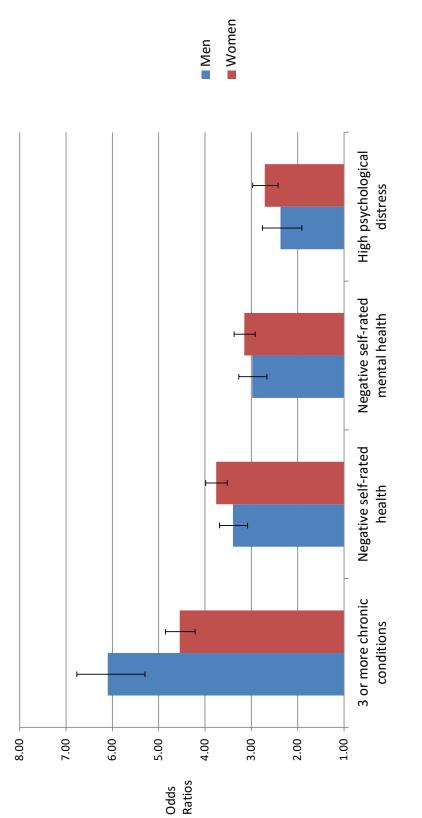
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Table 6. Proportional odds ratios for the receipt of income assistance by Indigenous group, for Indigenous peoples aged aged 18-64, 2012

				N	on Stat	us						
	Regist	tered In	dian	Fir	st Natio	ons		Métis			Inuit	
	OR	95%	Cls	OR	95%	Cls	OR	95%	Cls	OR	95%	6 Cls
Age group												
18-24 (ref)	1.00			1.00			1.00			1.00		
25-44	1.62	1.49	1.76	5.88	4.87	7.09	2.10	1.83	2.40	1.20	0.85	1.70
45-64	1.36	1.21	1.52	2.82	2.24	3.55	2.31	1.96	2.72	0.50	0.29	0.86
Female	1.67	1.55	1.79	1.58	1.39	1.78	1.34	1.23	1.47	1.05	0.79	1.41
Education level												
Current students	1.16	1.06	1.26	1.34	1.12	1.59	0.67	0.58	0.77	0.64	0.33	1.27
Below high school	3.27	2.99	3.58	7.06	6.11	8.16	3.98	3.57	4.44	3.60	2.45	5.28
High school	1.89	1.70	2.11	3.69	3.07	4.45	1.34	1.17	1.54	1.88	1.14	3.10
Some college	1.17	1.06	1.30	2.06	1.64	2.59	2.72	2.42	3.05	1.53	0.92	2.55
Post-secondary degree (ref)	1.00			1.00			1.00			1.00		
Household type												
Couple family (ref)	1.00			1.00			1.00			1.00		
Lone parent family	2.85	2.60	3.13	4.54	3.94	5.22	1.99	1.77	2.23	1.25	0.82	1.88
Others	2.01	1.80	2.25	2.98	2.56	3.48	1.35	1.19	1.53	1.49	0.94	2.37
Marital status												
Married/common-law (ref)	1.00			1.00			1.00			1.00		
Windowed/separated/divorced	1.34	1.17	1.54	1.54	1.29	1.85	2.11	1.83	2.44	1.10	0.51	2.35
Never married	1.96	1.77	2.18	1.92	1.65	2.23	3.79	3.30	4.36	2.24	1.54	3.26
Region												
Atlantic	0.69	0.59	0.80	1.66	1.40	1.96	0.66	0.52	0.83	0.98	0.32	3.05
Quebec	1.33	1.16	1.52	0.88	0.72	1.07	1.04		1.20	0.26	0.10	0.71
Ontario (ref)	1.00			1.00			1.00			1.00		
Prairies	1.63	1.50	1.78	1.41	1.22	1.64	0.78	0.70	0.87	0.78	0.17	3.59
British Columbia	1.20	1.08	1.34	0.82	0.59	1.14	0.74	0.62	0.87	2.04	0.22	18.56
Territories	1.09	0.99	1.20	1.40	0.93	2.09	1.69	1.37	2.07	0.68	0.26	1.75

Data source: Aboriginal Peoples Survey 2012

Chart 1. Adjusted* proportional odds ratios for receiving income assistance for those with negative health conditions, by sex, Indigenous peoples aged 18 to 64, 2012



*Adjusted for age, Indigenous group, education, household type, marital status, and region. Data source: Aboriginal Peoples Survey 2012

Chart 2. Adjusted* proportional odds ratios for receiving income assistance for those with negative health conditions, by Indigenous group, Indigenous peoples aged 18 to 64, 2012

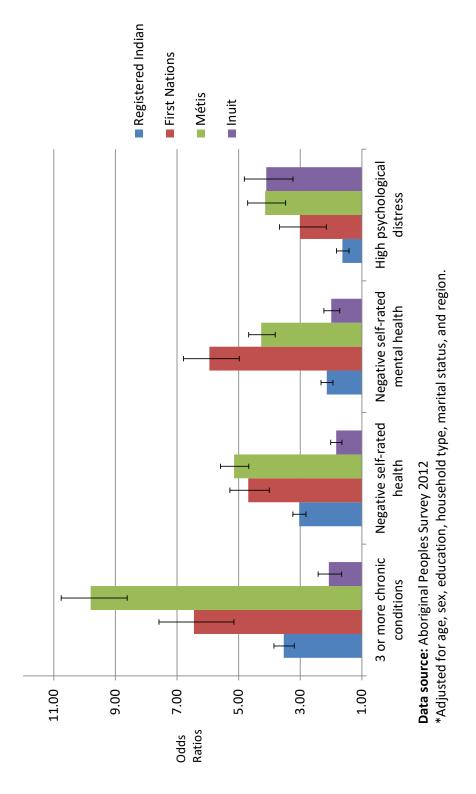
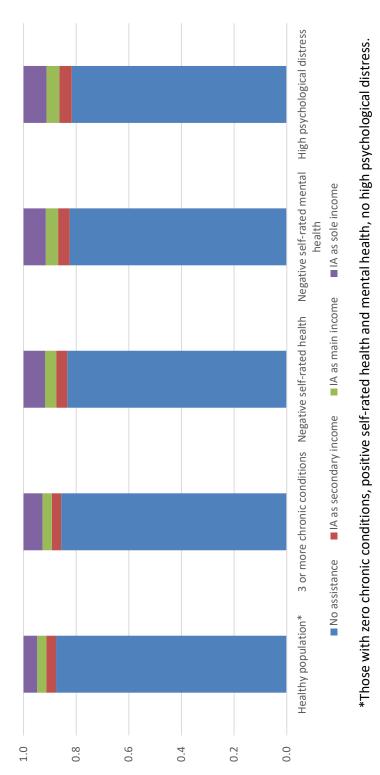


Chart 3. Predicted probabilities of income assistance status by health conditions among Indigenous peoples aged 18 to 64, 2012



Data source: Aboriginal Peoples Survey 2012