The need for gender-based analysis in health research of tuberculosis in Canada: The case of (in)visible minority foreign-born women

Sylvia Reitmanova, University of Ottawa
Denise Spitzer, University of Ottawa

KEYWORDS: SEX, GENDER, HEALTH INEQUITY, TUBERCULOSIS, CANADA, GENDER ANALYSIS, GENDER-RESPONSIVE POLICY

Sex and gender play a critical role in distinct experiences of health and illness between women and men. To highlight health differences and reduce health inequities between sexes and genders, researchers make use of sex-disaggregated data. However, these data are insufficient to comprehensively explain and address health inequities between sexes and genders. Therefore, the inclusion of gender analysis in health research is essential. In this article we exemplify the need for engendering health research that includes and moves beyond the analysis of sex-disaggregated data on tuberculosis in Canada. We show that these data are insufficient to explain the unequal distribution of tuberculosis among women and men from different Canadian populations. The absence of gender-based data masks important experiences of tuberculosis among some groups of visible minority foreign-born women making them thus invisible in the current policies designed to control TB in Canada. Gender analysis in health research of tuberculosis is central for an improved understanding of the gendered context of the disease and development of more effective gender-responsive health policies.

Gender-based Analysis & Health

Sex and gender, two well-recognized determinants of health, continuously gain growing attention in the global health research

1 This article emerged from a larger study conducted by the first author and supported by the Social Sciences and Humanities Research Council of Canada, pertaining to the discourses about immigrant TB in the Canadian press. We are grateful to the anonymous reviewers for their helpful comments. Please forward all comments to the first author. Dr. Sylvia Reitmanova, Institute of Women’s Studies, University of Ottawa, Faculty of Social Sciences, 120 University Social Sciences Building, Room 11002, Ottawa, Ontario, Canada K1N 6N5
community and among health policymakers (Spitzer, 2006; Nowatzki & Grant, 2011). While no clear-cut boundaries exist between these two determinants, sex typically refers to the biological and physiological characteristics that distinguish females from males; while gender is understood as socially constructed roles, expectations, relationships, behaviours, and positions that societies ascribe to, at minimum the dichotomous pairings of women and men (Coen & Banister, 2012). These categories can apply to a host of identities between, within, and beyond those two categories. Health literature provides plenty of examples to demonstrate that women, men, and those with other gender identities, “have different experiences of health, illness, and treatment, have different health care needs, access health care differently and may experience different outcomes from programs and services” (Jackson et al., 2006:1). These differences cannot be simply explained by the variation in the existing biological and physiological characteristics. An international literature review showed that gender-based health differences can be linked to various economic, educational, and cultural barriers that, for example, underpin women’s reduced access both to healthcare services and to fewer benefits from health promotion programs when compared to men (Siliquini et al., 2009). Women’s health can be further undermined by their greater vulnerability to social inequities, work uncertainty, limited professional growth, and lack of social benefits. According to Spitzer (2005), gender roles also determine women’s greater exposure to stress induced from the multiple burdens of paid and unpaid labour, as well as domestic violence and abuse, and to various hazards linked to women’s work environment such as household cleaners, cooking fumes, electronic plants, agricultural industries, or laundry operations. These findings support that sex and gender do not influence health behaviours and outcomes in isolation but in complex dynamic interaction with other social determinants of health such as income, education, or culture—to name just a few (Spitzer, 2005).

The analytical research tool, which systematically integrates the perspectives of sex and gender (and their complex interaction with the other factors) into the development of policies, programs and legislation, as well as planning and decision-making processes is called gender-based analysis (Health Canada, 2003). This analysis provides a more comprehensive insight into how health is experienced by different gender identities and helps ensure that proposed policies, programs and legislation will contribute to reduction of existing health inequities among individuals, groups and communities. A good example of this approach is a unique design and an effective delivery of a community-based sexual health literacy program designed for Indigenous adolescent girls in Canada that attended to and reflected their distinct individual, gendered and cultural realities (Banister & Begoray, 2012).
Health Canada (2003) acknowledged the importance of gender-based analysis and encouraged its incorporation in research and policy development through various learning and evaluation activities; however, its uptake by health researchers has been slow. Unfortunately, the integration of sex and gender perspective in health research design and methods is often limited to the collection of sex-disaggregated data (Nowatzki & Grant, 2011). Although collecting sex-disaggregated data is an important step toward understanding health inequities between women and men, these data alone are “not capable of capturing the full range of social, political, and economic forces that affect health” (Nowatzki & Grant, 2011:265). These authors persuasively argue that gender in sex-disaggregated data is frequently “reduced to the margins of difference between women’s and men’s rates of morbidity, mortality and health services use” (Nowatzki & Grant, 2011:268). For instance, statistical data on sex differences in the utilization of healthcare services do not reveal how equally healthcare resources are distributed among women and men, nor among those whose identities may not be captured by these identity labels. In addition, the available sex-disaggregated data are rarely accompanied by data on differences among women (and men) based on their distinct socio-economic status, ethnicity, sexual orientation or geographic location. Consequently, health policies developed in the absence of gender-sensitive health research data are misinformed and incomplete and therefore incapable of reducing gender health inequities. Doyal (2002:7) offers that “[r]esearchers who ignore these (sex/gender) differences run the risk of doing bad science…Practice based on incomplete or misleading evidence is likely to lead to avoidable mortality, morbidity and disability as well as wasted expenditure of scarce resources.”

Being concerned about incomplete research evidence while actively engaged in health research of tuberculosis (TB) in Canada, in this article, we highlight the need for the inclusion of gender-based analysis in our research field. International TB studies which incorporated sex and gender lens found that health-related needs and experiences of women and men with TB are distinct and require different TB control interventions (Allotey & Gyapong, 2008). The higher TB rates in men are associated with the higher exposure of men to smoking and indoor air pollutants (Lin et al., 2007). The lower incidence of TB among women is linked to the lower diagnostic rates because women are frequently prevented from timely access to healthcare by various economic and cultural barriers, stigmatization, and discrimination (Uplekar et al., 2001; Somma et al., 2004). The HIV/TB co-infection is also known to have important gender implications due to gender-based differences in the rates of poverty but also in the exposure to injecting drug use, commercial sex work, the ability to negotiate safe
sex relationships, and access to adequate nutrition (Hamers et al., 1997; Singer & Clair, 2003). Significant differences between women and men exist in their adherence to treatment, which are linked to the problems of poverty and gender roles (Farmer, 1999; Krieger & Gruskin, 2001). While the adherence among breadwinning men is heavily influenced by the loss of income during travel for treatment and hospitalization (Weiss et al., 2006), women’s willingness to seek treatment can be impacted by the authoritarian healthcare approaches that further undermine the women’s status in society (Diwan & Thorson, 1999).

Unfortunately, Canadian health research on TB misses the similar gender-based approach integrated in the aforementioned international studies. Canadian research data on TB, which are annually collected and published by the Public Health Agency of Canada (PHAC), are limited to sex-disaggregated data on TB incidence and mortality. We argue that these data are insufficient to explain the unequal distribution of TB among women and men from different Canadian populations. The purpose of this article is to demonstrate to the research community and policy makers that the existing research data mask important sex differences in distribution and experiences of TB, which leaves, for instance, some visible minority foreign-born women diagnosed with TB invisible in the current policies designed to control TB in Canada. In our example, we illustrate that sex-disaggregated data are insufficient “to capture the different realities for women and men, and improve the evidence base for health care policy” (Nowatzki & Grant, 2011:268). We suggest that gendered analysis of social determinants of TB is crucial for the full appreciation of the complex social context of TB problem in Canada and develop more effective gender-sensitive and inclusive policies.

**Biomedical & Epidemiological Aspects of Tuberculosis in Canada**

TB is a chronic bacterial disease affecting primarily lungs and lymphatic nodes typically manifested with fever, chills, night sweats, loss of appetite and weight, pallor, and fatigue. The symptoms also include chest pain, a productive chronic cough and the coughing up of blood. TB can be fatal if left untreated. Most often, the infection spreads by inhalation of droplets that an infected person disperses into the air during coughing and sneezing. However, a healthy immune system can contain the infection in the stage of dormancy with no apparent clinical manifestation of disease. It is estimated that 95% of persons infected with asymptomatic (latent) TB will never develop active disease (Public Health Agency of Canada (PHAC), 2007). The remaining 5% will develop the disease when their immunity fails under the influence of the immunosuppressive factors as aging, diseases (HIV/AIDS, cancer, diabetes), medications (corticosteroids), smoking, alcoholism and
substance abuse, long-term institutionalization, and also poverty-driven material deprivation, malnutrition and dreadful living conditions (World Health Organization, 2001).

While globally TB poses an enormous public health challenge with one third of the world’s total population infected and about 2 million people dying each year, the rates of TB in Canada are among the lowest in the world (World Health Organization, 2009). In 2007, a total of 1,547 cases of TB were recorded with the corresponding rate of 4.7 per 100,000 inhabitants (PHAC, 2009). This rate represents the lowest rate recorded in Canada since reporting began in 1924. However, these overall numbers mask the disparities in the distribution of TB across three primary demographic groupings: Canadian-born non-Aboriginal, Canadian-born Aboriginal and foreign-born (as used by PHAC). As of 2007, the rate of TB in the Canadian-born non-Aboriginal population was only 0.7% per 100,000 inhabitants while the rate of TB among foreign-born immigrants was 14.4% per 100,000. The highest rate of TB was reported in the Canadian-born Aboriginal population reaching 25.8% per 100,000. However, in some Aboriginal communities the rates of TB reached 99.2% per 100,000, a number that is comparable to the statistical data from high-burden countries. According to PHAC (2007) the high TB rates in the Aboriginal population are linked to the high prevalence of diabetes, end-stage renal disease, HIV/AIDS, alcohol and substance abuse, as well as poverty-driven malnutrition and overcrowding present in some Aboriginal communities.

In addition to the differences in TB rates, there are significant differences in the proportion of TB attributed to the three main Canadian populations. While the total number of diagnosed TB cases in Canada declined from 2,400 in 1987 to 1,547 in 2007, the proportion of cases attributed to the three different populations has changed significantly (PHAC, 2009). Between 1970 and 2007, the proportion of cases represented by the Canadian-born non-Aboriginal population fell from 70% to 11%. By contrast, in the same time span, the proportion of cases attributed to foreign-born immigrants grew from 18% to 67%. The proportion of cases diagnosed among Canadian-born Aboriginals remained relatively unchanged at 20%. These data indicate that the greatest burden of disease, as measured by the number of cases, occurs in the foreign-born immigrant population.

The long-term increase in the proportion of cases constituted by foreign-born persons is associated with a growing immigration from the world regions with a high burden of latent TB (PHAC, 2007). The highest incidence rate (43.9% per 100,000) was found among immigrants from the African countries with high HIV burden (43.9%), followed by immigrants from South East Asia (31.7%), African countries with low HIV burden (29.7%), the Western Pacific (24.1%), and the Eastern
Mediterranean regions (15.7%). Elsewhere we argued that the immigration from these geographic regions per se does not trigger the reactivation of TB bacillus in an immigrant body several years after their arrival in the country (Reitmanova & Gustafson, 2012a). Because all newcomers to Canada (with the exception of refugees) are required to undergo chest radiography to screen for active TB, the system ensures that immigrants are TB-free at the time of their arrival in Canada (Greenaway et al., 2011). Between 1994 and 2004, 41% of immigrant TB cases appeared within five years of their arrival; however, some developed TB many years after the arrival (PHAC, 2007). However, for refugees the latency period is shorter since the migratory journey itself may have exposed them to the bacillus, or may have contributed to compromised immunity due to overcrowded and unsanitary conditions in transit (Ho, 2003). Perhaps not surprisingly refugees are twice as likely as immigrants to develop active TB in Canada (Greenaway et al., 2011).

TB is an urban disease with about 66% of all active TB cases being reported from large metropolitan areas such as Toronto, Montreal, Calgary, Edmonton, Hamilton, and Vancouver (PHAC, 2007). TB is also widely regarded as a disease of poverty. The poverty rates among immigrants who primarily reside in the impoverished inner cities of these metropolitan areas varied between 50% to 80% (Lee, 2000). For these reasons, medical anthropologists, such as Singer and Clair (2003), argue that social inequalities, poverty-driven material deprivation, malnutrition, and overcrowded housing must inform our understanding of the unequal distribution of TB among distinct demographic groups including immigrants. Regrettably, these factors are only reflected in the policies designed to control TB in the Aboriginal population in Canada (Reitmanova & Gustafson, 2012b).

**Tuberculosis & Sex-disaggregated Data**

The sex-disaggregated TB data provided by PHAC (2009) are limited to quantifying the case of TB incidence and TB-related deaths. The data are further separated by origin and age of women and men diagnosed with active TB in Canada each year. These numbers indicate that out of a total of 1,547 incident cases of TB recorded in 2007, 55% (n=846) were diagnosed in the male population and 45% (n=702) in the female population. The incidence rate in men was 5.2% per 100,000 and the rate in women 4.2% per 100,000. This suggests that men accounted for the larger number of reported cases compared to women. The data recorded between 1987 and 2007 indicate that the number of incident cases and rates of TB in both groups declined. However, there was a gradual decrease in the differential between men and women as the rates of TB in the male population declined by approximately 39% while the rates in the female population fell by only 32% since 1987. PHAC does
not provide any explanation for the faster decline of TB incidence rates in the male population. In a similar vein, no explanation is available for the higher rates of TB-related mortality in the male population. In 2007, out of 127 cases of TB related deaths, men accounted for 69%. The mortality rate for men was higher across all age groups (PHAC, 2009).

The analysis by sex and age group shows that the incidence rate of TB was only slightly higher in the male population in all age groups with the exception of the very young (<1 year of age) and those aged 75 and older. The incidence rate for males in the youngest age cohort was 10 times higher than the rate for females in the same age cohort. The incidence rate for males 75 years and older was almost twice the rate for similarly aged females. By contrast, the incidence rate for females in the 1-4 years age cohort was 0.7 times higher than the rates for males in the same age cohort. PHAC does not provide any explanation for these differences.

The statistical analysis by sex and origin indicates that out of 846 cases reported in the male population in Canada in 2007, 64% were diagnosed among foreign-born men, 21% among Aboriginal men and 13% among Canadian-born non-Aboriginal men. Out of 702 cases reported in the female population, 71% were diagnosed among foreign-born women, 18% among Aboriginal women, and 8% among Canadian-born non-Aboriginal women. These sex-disaggregated data indicate that foreign-born men and women accounted for the greatest burden of disease, as measured by the number of cases. Further analysis shows that in 1,042 cases reported in the foreign-born population women represented 48%. In 307 cases reported in the Aboriginal population women represented 41% of cases. In 170 cases reported in the Canadian-born non-Aboriginal population, women represented 35%. It means that women represented a smaller proportion of the reported cases in all three main demographic populations.

However, these percentages, which indicate that men carry a higher burden of TB, may be misleading. A comparison between the numbers of TB cases represented by foreign-born women and Canadian-born men (both Aboriginal and non-Aboriginal) offers a different perspective. Between 2000 and 2007, the number of cases reported among foreign-born women was consistently higher than the number of cases in the total Canadian-born male population (Table 1). In this time span, 4,173 cases among foreign-born women and 2,456 cases among Canadian-born men were reported. In addition, in 2006 and 2007 (the last two years for which the data are available) the number of cases diagnosed among Aboriginal women was higher than the number of cases diagnosed among Canadian-born non-Aboriginal men. Both datasets challenge the established notion that TB in Canada is primarily a men’s health issue.
Table 1: The number of cases of active TB among foreign-born women and Canadian-born men reported in Canada between 2000 and 2007 (PHAC, 2009)

<table>
<thead>
<tr>
<th>Origin and Sex</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign-born Women</td>
<td>537</td>
<td>522</td>
<td>547</td>
<td>519</td>
<td>556</td>
<td>490</td>
<td>502</td>
<td>500</td>
<td>4173</td>
</tr>
<tr>
<td>Canadian-born men (non-Aboriginal and Aboriginal)</td>
<td>337</td>
<td>367</td>
<td>279</td>
<td>285</td>
<td>280</td>
<td>318</td>
<td>299</td>
<td>291</td>
<td>2456</td>
</tr>
</tbody>
</table>

Table 2: The number of active TB cases by sex, age and origin reported in Canada between 2000 and 2007 (PHAC, 2009)

<table>
<thead>
<tr>
<th>Origin</th>
<th>Sex</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>South East Asia (15-24)</td>
<td>Women</td>
<td>20</td>
<td>22</td>
<td>15</td>
<td>17</td>
<td>22</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td>136</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>15</td>
<td>10</td>
<td>4</td>
<td>18</td>
<td>15</td>
<td>12</td>
<td>31</td>
<td>8</td>
<td>113</td>
</tr>
<tr>
<td>Eastern Mediterranean 15-24</td>
<td>Women</td>
<td>15</td>
<td>12</td>
<td>14</td>
<td>8</td>
<td>18</td>
<td>15</td>
<td>15</td>
<td>17</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>10</td>
<td>4</td>
<td>15</td>
<td>11</td>
<td>9</td>
<td>14</td>
<td>8</td>
<td>7</td>
<td>78</td>
</tr>
<tr>
<td>Latin America &amp; the Caribbean 15-24</td>
<td>Women</td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>11</td>
<td>4</td>
<td>10</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Western Pacific 25-34</td>
<td>Women</td>
<td>52</td>
<td>46</td>
<td>44</td>
<td>43</td>
<td>53</td>
<td>36</td>
<td>34</td>
<td>29</td>
<td>337</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>43</td>
<td>38</td>
<td>39</td>
<td>29</td>
<td>24</td>
<td>23</td>
<td>17</td>
<td>15</td>
<td>228</td>
</tr>
<tr>
<td>Western Pacific 35-44</td>
<td>Women</td>
<td>43</td>
<td>34</td>
<td>52</td>
<td>48</td>
<td>55</td>
<td>38</td>
<td>50</td>
<td>52</td>
<td>372</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>39</td>
<td>44</td>
<td>27</td>
<td>46</td>
<td>42</td>
<td>40</td>
<td>30</td>
<td>34</td>
<td>302</td>
</tr>
</tbody>
</table>

A retrospective examination of the data classified by sex, age, and origin collected between 2000 and 2007 offers an interesting perspective on the distribution of TB cases among some foreign-born women and men (Table 2). (We can use only the total numbers of diagnosed cases because the incidence rates by sex, age and origin are not available). In the age group 15-24 years, the number of cases diagnosed among women from South East Asia (n=136), the Eastern Mediterranean region (n=114), and Latin American and Caribbean countries (n=53) was consistently higher than the number of cases reported among men of the same age and geographic region (n=113, 78, and 24 respectively). As for the Western Pacific region, the numbers of cases reported among women in
the age groups 25-34 years (n=337) and 35-44 years (n=372) were higher than those of men of the same age and geographic region (n=228, and 302 respectively).

The data in Table 1 indicated that foreign-born women carried a higher burden of TB than Canadian-born men. The data in Table 2 suggest that some groups of foreign-born women may also carry a higher burden of TB than foreign-born men of the same age and geographic regions. Therefore stating that: “case reporting and incidence rates have always been higher in males” (PHAC, 2009:9) is misleading. This statement masks the experiences of TB among some groups of visible minority foreign-born women in Canada who remain hidden in the collected statistical data. Therefore, their experiences remain unaddressed by TB policies designed to prevent the spread of TB in Canada.

Tuberculosis & Gender-based Data

The statistical data described in the previous section indicate that the available TB indicators are limited to highlighting the differences only by sex, and not by gender. These data focus only on the health outcomes in terms of sex differences in TB incidence and mortality but they do not explain what systemic, organizational, and social factors account for the unequal distribution of TB between sexes. In Nowatzki’s and Grant’s (2011:268) words, sex-disaggregated data merely represent only “biological and physiological endpoints of disease.” They do not reveal how equally healthcare resources are distributed among women and men or explain how women’s and men’s health is impacted by their distinct socio-economic status, ethnicity, sexual orientation, immigrant status, geographic location, among other factors that contribute to social location.

In the absence of gender-based data on TB in Canada, it is not surprising that current TB policies (which give a special consideration to children, immigrants, Aboriginals, and persons living in long-term institutions) apply the same standards of prevention and care to women and men. In the last edition of the national guidelines on TB control in Canada entitled “Canadian Tuberculosis Standards” the gender-relevant terms appeared only sporadically (PHAC, 2007). In the 450-page-long document (with the exception of references, tables, and appendices) these terms appeared with the following frequencies: “gender” 3 times, “women” 13 times, “men” 1 time, “female(s)” 8 times, and “male(s)” 10 times. The gender approach was mentioned only once when referring to the supervision and treatment of TB which “should be gender-sensitive and age-specific and should draw on the full range of recommended interventions and available support services, including patient counseling and education” (PHAC, 2007:419). We were able to identify
only two sex-sensitive (rather than gender-sensitive) recommendations concerning a deferral of vaccination of pregnant women until after delivery and the provision of careful clinical screening for drug-induced hepatitis and vitamin B6 supplements to both pregnant and breastfeeding women. No further consideration of the implications of gender roles or gender inequities in TB was given in the national TB guidelines.

The inclusion of gender analysis in TB health research and policy in Canada is essential because gender analysis would allow “an exploration of dynamics of vulnerability and disadvantage” in terms of risks associated with acquiring TB among different groups and provide “multiple potential points of intervention for inequalities and disease control” (Allotey & Gyapong, 2008:833). For instance, research studies showed that some groups of foreign-born women in Canada’s large metropolitan areas experience the limited access to sustainable income, social support, quality housing and non-discriminatory, safe and clean environment (Gastaldo et al., 2005; Spitzer, 2012). It is known that similar “poor living conditions among many migrant ethnic minority communities encourage the spread of TB and exacerbate difficulties in detection and treatment” of disease in high-income countries (Allotey & Gyapong, 2008:832). Unfortunately, in Canada no direct research evidence exists that the higher rates of post-migration poverty among visible minority immigrant women and men are causally related to the higher rates of TB reactivation in this population. To date, the information about the socio-economic profile of persons with active TB in Canada is very limited, and thus, no conclusive evidence exists that the immigrants diagnosed with active TB are the same immigrants who live in poverty. However, because poverty significantly contributes to the reactivation of latent TB, it is reasonable to argue that low-income immigrants are at higher risk of TB reactivation than their higher-income counterparts.

We believe that the incorporation of gender-based data could help explain the pathways of the foreign-born men and women to acquiring active TB in Canada. If research studies can provide the evidence that material disadvantages that some foreign-born women and men contribute to the reactivation of latent TB years after immigrating to Canada, then the Canadian TB control policies will need to broaden their focus beyond screening and treatment of immigrants. For instance, if future TB research studies find that a considerable number of foreign-born women with TB in large urban areas are homeless or under-housed, such findings should inform the development of policies that deal with the reasons and solutions to housing issues in Canada rather than focusing on countries of origin of these women. Policies could also support eligible immigrant women and children to participate in
programs designed to offset the negative effects of poverty such as the Canada Prenatal Nutrition Program and Head Start program. We discussed the socio-economic approach to controlling TB in Canada in more detail elsewhere (Reitmanova & Gustafson, 2012a).

CONCLUSIONS

Our review of sex-disaggregated TB health research data indicates that these data are insufficient to explain existing disparities in the distribution of TB burden in Canada. Collection of gender-based data and the inclusion of gender analysis in health research are essential to capture the gendered experiences of TB and the interactions of gender with other critical social determinants of health. Both quantitative and qualitative interdisciplinary data are needed to analyze the complex context of gender and health issues (Nowatzki & Grant, 2011). Health research of TB may benefit from the new requirement set by Canadian Institutes of Health Research (the major federal health research agency) to include the description of how both factors, sex and gender, will be considered in the research proposals of all grant applicants (Coen & Banister, 2012, Spitzer, 2006). Engendering health research of TB in Canada is long overdue.

The incorporation of gender analysis would help Canadian researchers to answer, for instance, the questions why TB is declining faster in the male population and why men have higher TB-related mortality than women. It could also help them understand why the cases of TB among some groups of visible minority foreign-born young women outnumber TB cases among Canadian-born men, and in some instances also the case of TB among foreign-born men. Only gender analysis can illuminate if the sex differences in the distribution of TB are based on gender-based differences in socio-economic factors, or differential access of women and men to screening and therapy. This analysis can further clarify the potential role of racism, sexism and classism in the unequal distribution of TB between women and men of different ethnic origin and colour of skin.

Capturing the gender dynamics behind the distribution of TB is a necessary requirement for an improved understanding of distinct health needs of women and men diagnosed with TB and developing gender-inclusive TB prevention and treatment policies which would address these needs. Effective TB control policies would address the multiple and complex intersectionalities of gender with ethnicity, class, immigration status, and other social determinants of health. Gender-blind policies run the risk of perpetuating the unequal distribution of TB among various communities and groups in Canada. Engendering health research of TB
therefore represents the first critical step toward reducing and eliminating the existing health inequities.

REFERENCES


