Les défis sexospécifiques auxquels font face les immigrantes sikh âgées : reconnaître les risques de maladie coronarienne et agir

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Le sexe et l'appartenance à un groupe ethnoculturel peuvent avoir une incidence sur les croyances des gens en matière de santé et leur capacité à modifier leur comportement de manière à réduire les risques. Les auteurs ont entrepris une série d'études théoriques à base empirique visant à décrire et expliquer comment la sexospécificité et l'appartenance à un groupe ethnoculturel influent sur le processus dans lequel s'engagent les personnes qui doivent modifier leurs habitudes de vie pour réduire les risques de maladie coronarienne. Ils décrivent comment les différences sexuelles ont une incidence sur la manière de gérer les risques de maladie coronarienne à partir d'un petit échantillon de femmes sikh âgées avant immigré au Canada. Les données ont été recueillies dans le cadre d'entrevues semi-structurées, avec l'aide d'un interprète lorsque nécessaire. Les entrevues ont été enregistrées sur bandes audio afin de permettre la vérification de l'interprétation et la transcription. On a utilisé la méthode d'analyse des données par comparaison continue. La principale variable qui est ressortie de la série d'études était « relever le défi ». Le processus de gestion des risques de maladie coronarienne incluait le pré-diagnostic ou l'événement, la liminalité ou les changements, et vivre avec une maladie coronarienne. Les facteurs intra-, inter-, et extrapersonnels ainsi que les caractéristiques sociodémographiques influaient sur la capacité des participantes à relever le défi de la gestion du risque de maladie coronarienne. Les fournisseurs de soins de santé et les décideurs doivent travailler avec les communautés ethnoculturelles pour 1) améliorer la capacité des fournisseurs de soins de santé à donner des soins en tenant compte de l'appartenance ethnoculturelle et 2) développer des ressources appropriées sur le plan ethnoculturel pour promouvoir la santé et prévenir les maladies. L'objectif ultime étant d'améliorer l'état de santé des immigrantes sikh considérées comme des membres vulnérables de la société.

Mots-clés : Sikh, immigrantes, femmes, maladie coronarienne

Gender-Based Challenges Faced by Older Sikh Women as Immigrants: Recognizing and Acting on the Risk of Coronary Artery Disease

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Gender and ethnocultural affiliation can influence people's health beliefs and their ability to make behavioural changes associated with risk reduction. The authors undertook a series of grounded theory studies aimed at describing and explaining how gender and ethnocultural affiliation influence the process that people undergo when faced with the need to make behavioural changes to reduce the risk of coronary artery disease (CAD). Here, they describe the gender-based influences associated with managing CAD risk in a small sample of older Sikh immigrants to Canada. Data were collected through semi-structured interviews, using an interpreter when necessary. Interviews were audiotaped to enable verification of interpretation and transcription. Data were analyzed using constant comparative methods. The core variable that emerged in the series of studies was "meeting the challenge." The process of managing CAD risk included pre-diagnosis or event, liminal or changing self, and living with CAD. Intra-, inter-, and extrapersonal factors as well as sociodemographic characteristics influenced the participants' ability to meet the challenge of managing CAD risk. Health-care providers and policy-makers have a responsibility to work with ethnocultural communities in order to (1) enhance the ability of health-care providers to provide ethnoculturally sensitive care, and (2) develop ethnoculturally relevant resources to enable health promotion and disease prevention. The ultimate aim is to improve health outcomes for Sikh immigrants as vulnerable members of society.

Keywords: Sikh, immigrant, women, coronary artery disease, secondary prevention

Introduction

Canada is an ethnic¹ and cultural² mosaic, with more than 18% of the population being first-generation migrants from another country. South

¹ Ethnicity: the common and/or inherited traits and characteristics of people from the same race, ancestry, background, and/or actual or assumed culture (Canadian Ethnocultural Council, 2000; Giger & Davidhizar, 1991; Waxler-Morrison, Anderson, & Richardson, 1990).

 $^{^2}$ Culture: the "values, norms, beliefs and practices of a particular group that are learned and shared and that guide thinking, decisions, and actions in a patterned way" that are

Asians (i.e., people indigenous to India, Pakistan, Bangladesh, and Sri Lanka) are one of Canada's major non-European immigrant groups; currently, Canada has more than 700,000 residents of South Asian origin (Statistics Canada, 2001).

Coronary artery disease (CAD) is a "global health problem" with common risk factors. However, patterns of CAD risk as well as morbidity and mortality differ among ethnic groups (Yusuf, Reddy, Ounpuu, & Anand, 2001). The landmark INTERHEART Study reveals that modifiable risk factors (i.e., smoking, dyslipidemia, diabetes, abdominal obesity, stress, poor diet, regular alcohol consumption, and lack of physical activity) account for most of the CAD risk (as manifested by myocardial infarction) in both sexes worldwide (Yusuf et al., 2004). When residing in their home country, and particularly in rural environments, South Asians exhibit less hypertension, smoking, and dyslipidemias than their North American counterparts (Yusuf et al., 2001), but when they adopt an urban lifestyle or immigrate to a developed country their rates of impaired glucose tolerance, diabetes, central obesity, and dyslipidemias increase exponentially and their rates of CAD become similar to those of people of European origin (Sheth, Nair, Nargundkar, Anand, & Yusuf, 1999;Yusuf et al., 2001).

Rates of CAD morbidity in South Asians while in their home countries are low relative to those of many other ethnic groups. Yet the Study of Health Assessment and Risk in Ethnic Groups (SHARE) revealed that South Asians residing in Canada had the highest prevalence of cardiovascular disease of all the ethnic groups studied (Anand et al., 2000). When South Asians immigrate to developed countries such as Canada they have 1.5 to 4.0 times greater CAD mortality than the indigenous groups (Enas, Yusuf, & Mehta, 1992).

In earlier work (King, Mather, & Sanguins, 2005; King, Thomlinson, Sanguins, & LeBlanc, 2006), we contended that gender³ and ethnocultural⁴ affiliation influence people's beliefs and understanding about health and disease risks, access to health-management resources, and ultimately their behavioural choices concerning change associated with disease risk.

often associated with one's ethnicity but are also associated with the social environment in which one is reared and lives (Canadian Ethnocultural Council, 2000; King et al., 2006; Waxler-Morrison et al., 1990).

³ Gender refers to distinctions between the social and culturally embedded roles that men and women play, as opposed to biological distinctions of males and females (King & Arthur, 2003).

⁴ Ethnocultural: the ethnic and cultural group(s) to which a person belongs but that do not necessarily describe a person's citizenship (Canadian Ethnocultural Council, 2000; Waxler-Morrison et al., 1990).

Given that South Asians are at exponentially greater risk for developing CAD upon immigrating to Canada, it is imperative that more understanding be developed about the influence of gender and ethnocultural affiliation on making behavioural change associated with CAD risk.

Context and Objectives

We have undertaken a series of studies examining the influence of gender and ethnocultural (i.e., urban- and rural-dwelling Euro-Celtic, French, Aboriginal, South Asian, and Chinese) affiliation on the process that people undergo when faced with the need to make lifestyle choices associated with CAD risk (King et al., 2005; King et al., 2006). South Asian advisors to our work identified South Asians as a much less homogeneous group than the other ethnocultural groups included in the series of studies. South Asians, we were told, comprise a variety of religious subgroups (i.e., Sikh, Muslim, Hindu) with characteristics that could influence their choices concerning CAD risk management (Dr. R. Indira, personal communication, September 13, 2003). Thus, only one subgroup of South Asians, those of the Sikh religion, were included in this study. Nearly 300,000 people practise the Sikh religion in Canada (Statistics Canada, 2001).

In this article, we will describe and explain the influence of gender, from women's perspectives, on the process that older South Asian (Sikh) immigrants undergo when managing CAD risk. To appropriately describe the experience of these older Sikh women, we will distinguish their experience from those of Sikh men, the Sikh community in general, and some of the other ethnocultural groups we have studied.

Methodology

Qualitative methods are well suited to research in which the investigators aim to understand culture "as a context that circumscribes humans' daily lives" (Im, Page, Lin, Tsai, & Cheng, 2004, p. 891). The goal of grounded theory, the qualitative method used in this work, is to describe and explain processes of human behaviour (Field & Morse, 1985; Morse & Field, 1995). Grounded theory is rooted in symbolic interactionism; thus its use in research can serve to illuminate the "shared meanings, the foundation of culture" (Milliken & Schreiber, 2001, p. 178) formed by groups of people about particular phenomena (Milliken & Schreiber; Morse, 2001). Use of grounded theory enabled us to undertake an inductive investigation of the process that Sikh women and men undergo when faced with the need to manage their CAD risk.

Sample

Sampling began following the securing of approval from the local Health Research Ethics Board. Our aim was to gain a deep understanding of the gender and ethnoculturally bound issues that may face Sikh immigrants to Canada. Thus, we first sought participants who were deeply embedded in the Sikh community. We thought these people would best exemplify the ethnocultural affiliation of interest.

We learned that there were two Gurdwaras (the Sikh place of worship) in the city in which the study was conducted, with some important differences between the two congregations. Gurdwara A was, on the whole, attended by people who were more recent immigrants or were more fundamentalist in their approach to Sikhism, whereas Gurdwara B was attended by people who had been in Canada for some time and were deemed more "progressive" in their approach to Sikhism. First, we recruited participants through seniors' groups who met at Gurdwara A. Later, we purposively recruited participants, who varied in age, time since CAD diagnosis, and time since immigration to Canada, from both Gurdwaras. Gender-specific presentations were made to female and male seniors' groups by the principal investigator (KMK) at Gurdwara A. Thereafter, a Punjabi-speaking social worker who worked with the community assisted with recruitment. A member of Gurdwara B (who also undertook the translation verification that will be described below) made a presentation about the study during a religious service. Investigators were available after the service to speak with potential participants. Later, some of the participants were able to refer us to other potential participants; this snowball technique was effective.

In order to meet the inclusion criteria, the participants had to (1) selfidentify as having heart disease (this was confirmed during a screening phone call); (2) be first-generation immigrants from India (that is, born in India, emigrating as an adult); (3) declare themselves members of the Sikh religion; (4) agree to participate in at least two audiotaped interviews, (5) be able to express themselves in either English or Punjabi; and (6) be able to provide informed consent. Sampling continued until no new data were found; redundancy was achieved.

We needed to appropriately contextualize the experience of the older Sikh participants. In grounded theory studies, the researcher often seeks data sources beyond the individuals who have had the experience of interest, in order to enrich and further contextualize the data collected from participants (Morse & Johnson, 1991). In this study, such additional sources included secondary informants; social workers who were not of the Sikh faith but practised in the Sikh community; and other Sikh people, of various ages, who did not have heart disease. We had many opportunities to observe members of the Sikh community, such as by frequenting Sikh businesses, attending Sikh Awareness Week at the University of Calgary, and attending (by invitation) various celebrations in Sikh homes and at the Gurdwaras.

Data Collection and Analysis

In grounded theory research, data collection and analysis are essentially simultaneous processes (Schreiber, 2001). All interviews were conducted in person and were audiotaped. For participants who did not speak English, the interview was conducted using a Punjabi-speaking interpreter. The interpreter assisted 12 of the 18 participants (7 women and 5 men) in sharing their experiences. The majority of women chose to be interviewed in their own home, while the majority of men preferred to be interviewed outside the family home.

First, sociodemographic data were collected. Then, questions based on Kleinman's (1980) health sectors and using Spradley's (1979) format for ethnographic interviewing were posed. Use of Kleinman's health-sector model as a basis for questioning enabled us to conduct a thorough investigation of the ethnoculturally embedded factors that could influence the participants' understanding and management of their CAD risk."Grand tour" questions included the following: I understand that you have had some difficulty with your heart. Can you tell me about that? and Once people have been told they have heart disease, they are often asked to take a close look at their lives and make some changes. Can you tell me about that? What have you been asked to do? Who asked you to do it? Has this affected some people around you? If so, how? "Mini tour" questions included the following: What are all the things/changes that have been suggested to you by your... [people in the popular, folk, and professional sectors as described by Kleinman] to help your heart? and What all did you take into account when making choices about changing some things that you might do every day? and Can you tell me all about the impact that making/not making these changes had on you/your spouse/family/other significant people? Interviews generally lasted 1 hour.

To ensure that the interpretation of interviews was accurate and that no systematic mechanism was in place to shine a particular light on the participants, we enlisted a second Punjabi-speaking (and Sikh) person to verify the interpretations. This person, a recent university graduate raised in Canada, was knowledgeable about the research process and aware of the ethical imperative for confidentiality. Also, before beginning any translation we determined that the informant was not known by the translator. Indeed obtaining these second translations was very useful for the process. We gained much deeper insights into the nuances of what the participants were trying to convey. Audiotaped interviews, the extensive notes produced by the second translator, interviewers' field notes, and documentation on the analytic process (i.e., memos) were transcribed into a format compatible with NVivo. From the outset of data collection, members of the research team engaged in data analysis using constant comparative methods. New data were compared to those previously collected, emerging concepts and their linkages were identified, and plans were made for further sampling and data generation (Schreiber, 2001; Strauss & Corbin, 1990).

First-level coding (sometimes called substantive or open coding [Strauss & Corbin, 1990]) involved line-by-line analysis of the text. Pieces of the text that represented common concepts were identified and coded (given a label or name). As many codes as possible were identified; one piece of data could have multiple codes. This work contributed to the process of developing mutually exclusive criteria for categorization of these concepts.

Memoing (literally, writing notes to oneself) was undertaken. This is a process of recording the research team's ideas, insights, thoughts, and feelings about the codings, category development, and emerging category relationships (Schreiber, 2001). Memoing is central to the analytical process of grounded theory methodology, and it allowed us to produce documentation (i.e., an audit trail) on decision-making.

Selective or axial coding was then undertaken. This process involved the categorizing, re-categorizing, and condensing of first-level codes. First-level codes were clustered based on (dis)similarity of the content. Each category was named and mutually exclusive rules for inclusion were generated. Substantive categories were thus inductively generated from the data and attributes were well defined. During the coding of specific statements for categorical assignment, they were compared with other statements in the same and different categories. During this process as well, memoing on potential linkages of these categories generated ideas about the merging theory.

The questions posed about linkages or relationships of categories helped us to identify a core category or variable around which the theory was developed (Strauss & Corbin, 1990). The core category or variable is "the process that (a) is central and is related to as many other categories as possible, (b) continuously occurs in the data, and (c) accounts for the most variation" (Morse & Johnson, 1991, p. 5).

Findings

The participants were women and men of the Sikh religion who resided in a large city (see Table 1). Most of the participants had immigrated to Canada at the age of 50 to 60 years. On average, the time since immi-

Gender		Female (n=8)	Male (<i>n</i> = 10)
Age	Mean (years) Range (years)	67 56–78	70.5 54–86
Time elapsed since immigration	Mean (years)	14.9	25.5
Marital status	Married	7	8
	Separated	1	0
	Widowed	0	2
Habitation	Alone	1	0
	With spouse	1	3
	With spouse and unmarried children/grandchildren	3	3
	With spouse and son's family	3	2
	With son's family	0	2
Education	None	4	3
	Elementary school	1	3
	Junior high school	0	1
	High school	2	1
	College/university/graduate studies	1	2
Household income ^a	Lower middle income	1	0
	Middle income	3	0
	Upper middle income	0	4
	Highest income	1	3
	Did not know	3	3
Occupational role	Returned to full-time work	1	2
	Returned to reduced work	0	2
	Remains retired	0	6
	Returned to homemaking	7	0
Event(s)/treatment(s) ^b	Myocardial infarction	5	7
	Percutaneous coronary intervention (PCI)	2	4
	Surgery: coronary artery	A	(
	bypass graft (CABG)/valve Medical intervention only	4	6 1

^bParticipants may have had multiple events/treatments.

gration was 14.9 years for women and 25.5 years for men. The majority of participants were married and lived with family members (i.e., unmarried children, a married son and his family). More than half of the participants had no formal elementary education. More men (n = 5) than women (n = 1) spoke English. The participants who resided with their son's family were rarely aware of the household (i.e., family) income. Typically, the women were homemakers and the men were working reduced hours or retired. Most participants reported having had a previous myocardial infarction and having undergone an intervention (i.e., percutaneous coronary intervention or surgery).

Core Variable

As identified in an earlier publication (King et al., 2006), "meeting the challenge" was the core variable that emerged from our series of studies. A number of factors, pervasively influenced by ethnocultural affiliation and gender, impacted and shaped the South Asian (Sikh) participants' ability to meet the challenge of managing their CAD risk. These factors were intrapersonal (e.g., personal beliefs as well as understandings about heart disease); interpersonal (e.g., interactions with family members, within social networks, with people in the health-care system who might provide social, informational, or instrumental support); extrapersonal (e.g., system and environmental influences beyond the participant's control such as access to health and transportation resources, place of residence, and weather); and sociodemographic (e.g., education, ability to speak English, household income, habitation). These factors could directly or indirectly (mediated by their knowledge of heart disease) influence the participants' ability to meet the challenge of managing their CAD risk.

The Process of Managing CAD Risk

Through our research with various ethnocultural groups, we have identified three phases of managing CAD risk: pre-diagnosis or event, the liminal⁵ or changing self, and living with CAD (see also King et al., 2006). The major finding of our studies with older Sikh immigrants was that they are limited, relative to members of other groups, in their ability to move through the process of managing CAD risk.

Pre-diagnosis or event. The period before a diagnosis or cardiac event was critical to situating how the participants would meet the challenge of managing their CAD risk. Indeed, the belief system and understanding about heart disease (intrapersonal factors) played a pivotal role. Participants

⁵Liminal: describing a threshold, neither here nor there; betwixt and between; a period of ambiguity in one's social identity; a hinterland between recognized states (Turner, 1969).

in this study had a limited appreciation of "heart disease" as a preventable or chronic illness. Though the Punjabi language includes words for heart disease (*dil dee bimari or dil da roag*) and heart attack (*dil da doara*), a secondary informant suggested that the Sikh people are more receptive to attending to the acute phase of a heart attack than attending to the chronicity of heart disease. This secondary informant said, "Sikhs tend not to be too concerned with a condition until it becomes a problem. [Thus] the term heart attack has a greater effect than heart disease. So, in short, while...the term heart disease does exist in the Punjabi language, it does not really exist in the minds of Sikhs."

We learned that the Sikh community on the whole tends to have a great affinity for socializing. Though the Sikh community is extremely interconnected, it is somewhat isolated from the population at large. Thus interpersonal connections can be limited to immediate family members and others of the Sikh religion. This is particularly so for those who are not employed outside the home, those whose English-language skills are limited, and those who immigrated to Canada later in life. Despite the affinity for socializing, the Sikh community's cultural norms are such that members are very cognizant of "putting on the best face." On the whole, members of this community were extremely reluctant to share personal details with each other — particularly if there were some difficulties. One of the women said:

When I go to...Sikh temple every day for prayer...I do my prayers and come back. There is no, um, interaction as such. Even when there may be opportunity, women are just so happy to get together and talk, talk, talk that they are not talking of problems.

The participants' ability to share their "problems" with each other as a means of seeking support (social, informational, or functional) was extremely limited.

Upon immigrating as older adults, the participants often experienced a change in their social status. We learned that, in their home communities, older family members (i.e., parents) tend to be very well positioned, having financial security and accorded respect based on their senior status in the family and community. Importantly, children tend to yield to the judgement of their parents and more senior family members. However, the dynamics of this relationship change when older people who immigrate to Canada are sponsored by children who have immigrated before them. Rather than being the respected head of the family, the more senior members must yield to the judgement of the son (usually) who acted as their sponsor. The parents are no longer self-supporting and in fact rely on the son and/or other children for support until they become eligible for public pensions.

Extrapersonal factors also played a role in limiting the participants' ability to maintain a healthy lifestyle, as well as their access to information and care during this phase and throughout the process. The change in lifestyle experienced by the participants upon moving to a Canadian city was profound. In their home country, we were told, Sikh women typically walk to the shops daily (often twice daily) for groceries and men walk to central locations to meet. In the new environment, the opportunities for even this amount of exercise were limited because of the location of shops and often the weather. One participant told us, "Here...because of the cold weather, we are so much homebound, can't go anywhere." Further, the types of foods (particularly desserts) served at social gatherings are often laden with fat and sugar. Though CAD is clearly an important health issue for Sikh people (and for South Asians as a whole), there are no widespread mechanisms in place to communicate this information to community members or to help them to modify their diets (such as by avoiding foods high in fat and sugar). Moreover, older Sikh people with heart disease may have limited access to healthcare resources. They may have responsibilities associated with child care and may be reliant on their children (who often face restrictions on their time due to the nature of their employment) for transportation.

Sociodemographic factors, particularly English-language skills, play a critical role in the ability of Sikh immigrants to access information and to appreciate the fact that they may be at risk for CAD. The participants with less than a junior high school education were often illiterate even in their own language. Moreover, many of the participants did not speak English. For those who were illiterate and spoke no English, the difficulty in obtaining information rose exponentially, as their only means of accessing information was family or community members. One participant said, "I had difficulty with language in the hospital to explain things, and I can't read anyway — I'm not literate." This served to perpetuate their lack of understanding about CAD risk, as well as their isolation within and reliance on their own community.

Liminal phase. Following the cardiac diagnosis or event, the participants experienced the liminal (or changing) self, which was associated with their first perceptions of "the challenge." For most of the ethnocultural groups in this series of studies, the diagnosis or event served as a motivator for behavioural change. For many of the Sikh participants, however, it caused profound confusion. While those from the other ethnocultural groups asked "why me?" during this phase, for the Sikh participants the questioning was especially profound and intense having CAD or a cardiac event was not within their frame of reference. One of the participants told us, "I had not a clue that this is heart problem, no, nothing, nothing, absolutely nothing." Another said, "I had never heard, never seen, anybody like this [having a heart attack]... I had never heard about it."

On an intrapersonal level, the participants' identity was further challenged; they were even more vulnerable. Further, they had little appreciation or understanding of CAD as an illness that would require attention over the long term. Those participants who had had a myocardial infarction viewed it as an isolated event that should have resulted in death. "They said, 'You are not going home because you had serious heart attack'," one participant recalled. "And I said, 'If it was so serious why didn't I die?" Faith played a role in their refraining from questioning God's plan. As confirmed by our secondary informants, the participants had a strong sense of destiny and fatalism. This belief system seemed to support the idea that having and managing an illness such as CAD was out of their control. "It is what God has written in your fate," said one participant. "Whether you are male or female, cared for or not, it all depends on your fate."

Relationships with family members as well as with health-care providers who could provide social, informational, or instrumental support were more strained during this phase. Attending to or advocating for the ill person was often a challenge for family members, largely due to their failure to grasp the impact of the illness as well as employmentor family-related time constraints. Health-care providers often relied on family members to act as interpreters for the participant. Yet family members' understanding and translating of the information often resulted in inaccuracies, misinterpretations, and a watering down of the message. "Information was given to son," recounted one participant, "so I don't know what information was given to my son."

The lack of understanding about heart disease in the community as a whole served to reduce the appreciation of those who were receiving information about the importance of and instructions for maintaining health. During this phase, Euro-Celtic participants spoke well of inhospital education classes, abundant written instructions, and availability of cardiac rehabilitation programs (King et al., 2006). This was not the case for the Sikh participants in this study. "The doctor had then taken lots of tests and he gave the medicines," said one participant. "He didn't say anything in particular about how to take care of heart; he just gave the medicines." Many of the participants returned home isolated and without detailed instructions, to frustrated families who did not understand.

The previously described extrapersonal influences (i.e., availability of information) continued to affect the participants' ability to move forward in their appreciation and management of their CAD risk. These influences consistently limited their ability to access additional care and

resources. Our secondary informants suggested that the participants may have been perceived as being non-compliant. In fact, there were practical barriers, beyond their control, that limited the participants' ability to attend to their health.

Sociodemographic factors continued to influence the participants' ability to attend to their CAD risk. Our secondary informants explained that older immigrants usually must wait several years before they are eligible for public health insurance or pensions. Thus the participants' families had to bear the financial burden of expensive prescription drugs such as cholesterol-reducing medications. As we have indicated, the participants' English-language skills immensely impacted their ability to obtain accurate information.

Living with CAD. Over time, the participants seemed to settle into living with CAD, how ever they had come to understand what this meant to them and their families. The common lack of understanding about the CAD process and a faith-based belief in destiny (intrapersonal factors) were the foundations of why the participants did not take up many health-promoting, disease-preventing activities. The participants aimed to accept what had happened and return to life as they knew it, as opposed to engaging in activities that might prevent further illness or another event. One participant said, "From the beginning I just have no interest in it [preventative action]. I just want to help people or get the work done, help my daughter, my son, help everybody. I don't take any interest in it." These beliefs and behaviours were much more pronounced in Sikh participants than in members of the other ethnocultural groups studied.

Having a diagnosis of heart disease posed many interpersonal challenges for the participants. Given the ethnoculturally bound nature of "keeping up appearances," it is unlikely that the participants or their burdened families would publicly acknowledge a problem and ask for support, whether social, instrumental, or functional. Occasionally the participants and their families were greatly challenged to manage the illness, particularly if the participant did not make a quick or complete recovery and was unable to return fully to his or her previous role (i.e., as child caregiver) in the home. The participants were predominantly satisfied with their physicians and compliant with their medication regimens, yet they rarely had an understanding of what the medications would do:

I know how to take medicine, what time and how many. Doctor has given me good instructions... He's a good doctor. He looks after me like my son. Very big major portion of my good health I attribute to my doctor because he's a very good doctor. I will never change...I will never change my doctor.

Adherence to a medication regimen did not affect the participant's return to his or her role in the family. Within the household, the participants were not in a position to make decisions about managing their CAD risk; they were not in charge of determining how money would be spent or grocery shopping for the family. One woman said, "I couldn't go out for a walk due to weather. I wanted a treadmill but my husband would not take the initiative to buy one."

There were extrapersonal factors associated with the participants' access to health care and health information and thus their ability to make heart-healthy choices. It was difficult for the women to adhere to a heart-healthy diet while participating in their religious-based (and virtually only) social network. The culture of eating when at the Gurdwara (which was their meeting place) and their consumption of the traditional foods (particularly desserts) inevitably placed them at risk. They had very little access to culturally appropriate (and language-appropriate) information about a heart-healthy diet and had no access to mechanisms for reinforcement. Many of the women revealed that they did not recognize Western foods and had no way of knowing how their own foods might rate in terms of their health.

Sociodemographic characteristics continued to play an important role in the participants' ability to live with CAD. As found in the earlier studies in the series, these characteristics influenced the participants' ability to access care and to become informed about their disease process. "There isn't information," one woman said. "I like to read but my husband brings books in English for him to read. He doesn't bring any Punjabi books from library for me to read."

Gender-Based Elements

The older Sikh women who participated in the study were for the most part deeply entrenched in their cultural community. They therefore faced particular ethnoculturally bound challenges to the management of their CAD risk. These challenges stemmed from: (1) extraordinary isolation within the Sikh community and from the population at large, (2) lack of autonomy associated with women's role in Sikh social networks, (3) their vulnerability, and (4) obstacles to and perceived consequences of integration.

Isolation. While recruiting participants for this study, members of the research team were frequently told by various immigrant Sikh women that they felt extraordinarily isolated even within their own community. One of the participants compared, through an interpreter, the lot of

women in her community with that of men: "Women don't have support and men have lots of support." Another participant said, "Men tell about their problems, women do not."

Socializing at the Gurdwara and at community celebrations was an extremely important part of the participants' lives. However, due to the culturally embedded value of projecting an image of "doing well" and "having a good family," they often remained "alone"; they could not genuinely share their troubles with those with whom they socialized. One woman described socializing in her community as "all lies, no truth." Another said, "I came to [live with] my in-laws and was living in a very large family. Only I know how hard my life was, but I never complained." A third woman stated, "I never complained about my husband's treatment or behaviour to my brothers or to my father because I did not want them not to respect my husband." Any health or family problems had to be kept within the family.

The women who participated in this study could also be bound to the home by child care, lack of means of transport, or their own poor health, and thus have few opportunities to socialize within the Sikh community or to become acquainted with the population at large. One woman said, "The support during the operation, after surgery and everything....who supported me? ...only God." This isolation was exemplified when, following a meeting of the research team with a group of Sikh women at one of the Gurdwaras, a few women asked (through an interpreter) if they could touch the skin of the principal investigator (KMK) to see if white skin felt different from their own. These women had never touched white skin, yet the mean time since immigration to Canada for the female participants was nearly 15 years. They were out of touch with the larger society into which they had immigrated.

Yet the women participants were curious and excited about having a white woman come to their home for an interview. The researchers were welcomed into the home, introduced to family members, and offered refreshments. These participants reported feeling a sense of importance, being cared for (or about), and being respected when they were asked to share their stories with someone from outside their community. They were more comfortable sharing intimate details of their lives with an outsider than with members of their own community. The women who participated in the study did so in the hope that they would be helping other Sikh women with heart disease and that they would be heard and understood. One woman said, "We just want to be loved and respected."

Lack of autonomy. The Sikh women who we encountered described their societal roles as highly prescribed by the males (and mothers-in-law) in their community. Many of the women from the other ethnocultural groups we studied reported feeling constrained by their traditional

roles. This was particularly so for the immigrant Sikh women. One interpreter said, on behalf of the participant: "He doesn't like her going [out]...because he thinks that she will learn something from outside which is contrary to his beliefs." Another participant elaborated (through an interpreter):

Men want their women in our society to remain illiterate. They don't want them to get knowledge and anything around them...probably because of insecurity within themselves. But they [the women] don't take any steps. By keeping them suppressed and illiterate, they have to keep on taking a lot of the burden of the family and burden of husband. And because she's not literate, she doesn't know how to go, where to go, whom to ask, what to ask, so she's further subjected to the stress.

The participants were often prevented from making independent decisions about their lives. Since girlhood, the women had never been in a position to do so. Many of the immigrant women with whom we spoke shared stories of their arranged marriages. Some had been married as young as 5 years of age, with the young bride moving in with her husband's family and adopting the customs of that household. Typically, before immigration it was the husband's will that predominated in marital, household, and family decisions, while following immigration the sponsoring son (and his wife) assumed the dominant role. Ultimately, the female participants remained in their prescribed, less influential role, unaccustomed to questioning the status quo or engaging in forward thinking. An interpreter described the social norms under which one participant had grown up:

The times have changed. In the times when she grew up, for women it was very hard, for they were not allowed to go and get out of the house, talk to anybody, [or] take any bold steps. A lot of stress was built in, within, because of all the stresses from society and family and culture. Nowadays [younger] women are free. They are able to do a lot of things on their own. They can just take off, no restrictions, and even if there are restrictions they are not going to necessarily obey the way she obeyed.

Often, the women did not have the means to make health-related decisions or to take a proactive stance with regard to their health. The husband of one participant objected to her remaining in hospital: "My husband say no, no, no. I don't want care for her. I want her to come home. Her mother is there. Her children are there. No." Also, the participants, even as the senior women in their homes, did not control the household budget and therefore could not make the decision to purchase the more expensive heart-healthy foods. Moreover, most of the participants were not in a position to influence the family diet; they yielded to

the wishes of the head of the household. The participants resumed their usual role, which was to keep the peace and uphold the status quo.

The participants acknowledged, however, that "times are changing." One participant recalled that "they used to think that if we educated girls they would leave home...so it was better not to educate."The older Sikh women appreciated the vigour of the younger women in their community. The participants expressed the hope that these young women would be able to take steps towards achieving autonomy and would not suffer the personal costs of challenging the status quo — being accused of shaming their families and being shunned by family and community members.

Vulnerability. Many of the participants' cultural norms and belief systems kept them powerless to effect change for themselves or their families; this was a situation the older immigrant Sikh women learned to live with. The lack of understanding of the association between heart disease and heart attack, as well as the belief systems regarding destiny and fatalism, were such that the participants remained vulnerable to heart disease.

As we have indicated, many of the more recent immigrants were financially dependent on their sponsoring family. As a result, the immigrant husbands often suffered psychologically from the loss of their elevated status in the family and community. An interpreter explained on behalf of a participant:

He was saying he had very good job. He was admired. He was praised. Then he was gone out of that job where he had power. He said, "If I am in that chair, that chair is the one which is giving me power." I say to him [the participant] that the power is within him, and he is not seeing that. Theoretically he is seeing that, but it is very difficult for him to agree in real life that, yes, the power is within him. So he says his power is gone. It probably has something to do with...the other family members letting him know...that he is not worth[y] any more.

It was apparent, in conversations with members of Sikh men's groups and during the study interviews, that excessive alcohol consumption is not uncommon among immigrant Sikh men. Some Sikh women revealed (to members of the research team, as outsiders) that their partners' excessive alcohol use increased their emotional and (occasionally) physical abuse. "As far as care is concerned, there is no care or thinking," one participant said of her husband. "I'm not at all ever a priority to him." An interpreter stated the following on behalf of another participant: In fact when she had this, all this episode of the heart attack, admitting, with ambulance in the hospital like that, it took a long time in the hospital to get the bed, like 2:30 in the morning. He [the husband] said, "I'm getting in a taxi. I'm going home." He just went home. The son said to father, "Anything could happen to her! There are so many people they stay with their spouses when they're having heart attack. How could you just leave her there and go home?" But she's quite used to this kind of nature. But she never complained to anybody else that he is like that.

For some women, the abuse began early in their lives. An interpreter said the following for a participant:

When she got married [at a very young age] and he took her to his family, she was subjected to abuse. She should have inherited enormous amounts of wealth from her father but unfortunately she never had the comfort of a single penny. Her husband forged the signatures, got the money transferred on his name, sold property and everything... She got nothing.

During a heart-health presentation to a group of immigrant Sikh women, one woman asked, "Do white women's hearts break when their husbands hurt them?" This question serves to illustrate not only the vulnerability of immigrant Sikh women to mistreatment by their husbands, but also their understanding of heart disease. The Sikh women in the group were only beginning to become aware of the societal intolerance for any kind of abuse and of the resources available in the city where they now lived. Yet publicizing this information within their community would doubtless have serious consequences for their place in the Sikh social network. One woman shared her story of leaving her abusive husband:

How could they [the children] know [that I had wanted to have more control over my life]? Because their father said, "Your mother shamed us because she is living alone." For my children, I have guilty feelings, because I went to live alone [to stop the abuse].

Obstacles to and perceived consequences of integration. Immigrant Sikh women can face tremendous obstacles to reaping the benefits of Canadian health care. Many immigrant women are uneducated, illiterate, and lacking in English-language skills. This greatly hinders their ability to obtain information about their well-being in general, their CAD, and how to take secondary prevention initiatives. When immigrant Sikh women must rely on others who read or speak English, their isolation and the cultural belief system surrounding heart disease is perpetuated. The immigrant Sikh community is very interconnected. We learned that there is a continuum of assimilation into Canadian society that produces both advantages and disadvantages. The Sikh women who were able to assimilate into the dominant culture tended to have immigrated early in life, to have married men who had also immigrated early in life, and to be employed, along with their husbands, outside the home in professional or paraprofessional positions. These women were able to reap benefits such as acceptance into the dominant culture and access to health information and resources:

We [our family members] are very independent, all of us. We are a very different family from the typical East Indian families... That's why we...laugh about it. We think that other East Indians, they get intimidated by us, because they think we are very open-minded, and too opened.

There are strong mechanisms hindering the assimilation of Sikh women who are less educated, who do not speak English, or who immigrated later in life. Members of this community are connected by their way of "being" — through religion, language, food, and socialization. The people who choose to extend their lives beyond the Sikh community can risk being stigmatized for failing to observe Sikh religious customs or for being somehow impure, which can lead to their being mistrusted by the more fundamentalist members of the community. People who begin to move beyond the boundaries of the Sikh community and religion often do so through their employment. The immigrant Sikh women in this study were unlikely to have such an opportunity. There are various strong mechanisms within the community limiting the ability of new immigrants to integrate into Canadian society.

Discussion

There is a continuum of integration of Sikh immigrants into Canadian society. We set out to describe the gender and ethnocultural factors that influence the ability of older immigrant Sikh women and men to attend to their CAD risk. To do so, we focused on describing the experiences of Sikh people who have not integrated into Canadian society and who suffer from CAD. Though the findings of this study do not represent the experience of all Sikh immigrants to Canada, they open a window to the experience of a vast number of Sikh immigrants who remain hidden and silent in our cities.

We have identified several salient issues that threaten the ability of immigrant Sikh women and men to meet the challenge of managing their CAD risk. These include a lack of understanding and appreciation of heart disease, stressors that may increase the risk, and the lack of integration into Canadian society. We have focused on these issues from the gender-based perspective of women.

Understanding of Heart Disease

Generally speaking, health-behaviour models hypothesize that healthrelated action is linked to the perception of risk/vulnerability to a threat (Lefler, 2004). We learned from our participants as well as from our secondary informants that among Sikh immigrants there is a limited understanding and appreciation of the meaning of heart disease. Rankin and Bhopal (2001) surveyed a small sample of South Asian residents of the United Kingdom who were of Pakistani, Indian, and Bangladeshi ethnic origin (n = 334, aged 16–74 years). Overall, 35% of those surveyed did not understand the meaning of "heart disease." Those who had immigrated to the United Kingdom were less likely than those born there to understand the term. Further, 14% of respondents could not identify a cause (or risk factor) and 17% could not identify a preventative measure for heart disease. Studies of mainly Punjabi people living in the United Kingdom report similar findings; 24% to more than 33% of survey respondents were unable to identify one risk factor for heart disease (Bhopal, 1986; Datta, 1985). Though there are no directly comparable Canadian data, the Canadian Heart Health Survey reports that 41% of surveyed Canadians aged 55 to 74 years named smoking as a risk factor for heart disease (Kirkland et al., 1999). Clearly, there is a need for ethnoculturally sensitive means of improving understanding and appreciation of CAD risk.

Stressors

Sikh immigrants face particular psychological stressors that may place them at increased risk for CAD and prevent them from attending to their CAD. Many of the older immigrant Sikh women in this study reported stressors such as isolation, lack of autonomy, and change in social status. Stress has psychological and physiological sequelae that increase the risk for CAD. Recent studies provide clear and consistent evidence that psychosocial stressors contribute greatly to the pathogenesis and manifestations of CAD (Rozanski, Blumenthal, & Kaplan, 1999). The increased risk caused by psychosocial stressors is of similar order to the more traditional risk factors that account for between 58% and 75% of cases of CAD (Beaglehole & Magnus, 2002).

In a British study comparing 173 men and women of South Asian origin with members of the general population, Williams, Bhopal, and Hunt (1994) concluded that CAD rates in South Asians were likely a result of a complex interaction of risk factors, including stress and socioeconomic deprivation. For example, South Asians were significantly more likely than members of the general population to report feeling sad or depressed, to perceive low social support, to live in overcrowded homes, and to endure extraordinarily long (≥75-hour) work weeks.

The presence of high levels of social support is known to promote psychological and physical well-being, whereas low levels of social support have been identified as health risks (Stewart & Tilden, 1995). Mookadam and Arthur (2004) found low levels of social support to be associated with increased (two to three times more) morbidity and mortality in post-myocardial infarction patients — that is, independent of other known predictors such as hypertension, reduced cardiac function, smoking, previous myocardial infarction, age, and female sex.

Sikh women live in a patriarchal system. Parents and then husbands make decisions for girls and women regarding their education, whether they will work outside the home, and so on. "As a result...women develop a tendency to depend upon men. They...start depending on men for all their personal and family decisions" (Bal, 1997, p. 103). When the men on whom Sikh women depend become abusive, the women have access to very few psychological or social resources. Cochrane and Bal (1990) conducted a study with 800 men of Sikh, Hindu, Muslim, and white ethnocultural background living in the United Kingdom. Sikh men were more likely than the others to drink every day and alone. Moreover, they were more likely to drink to excess if they were married or were first-generation immigrants and as they aged. Though no reliable data are available on the rates of reported abuse in the Sikh community, Bal reports "high rates" of mental and physical abuse in Sikh women in Canada. These additional stressors not only can contribute to the women's risk for CAD but can receive higher priority than attending to one's health.

Integration

The older participants in this study were tightly connected to the Sikh community. Chadney (1980) asserts that maintaining cultural (religious) identity is of paramount importance to the Sikh community: "Retention of traditional family values, attitudes, and patterns of behaviour has been extremely influential in the maintenance of a distinct ethnic identity" (p. 31). The criteria under which women are admitted to a country as immigrants can play an important role in the process of integration. In 1962, Canadian immigration policy became based on a point system that included education, training, and skills. Under this system, it was virtually impossible for many women to be accepted as independent immigrants (Bal, 1997). Many of the older Sikh participants in the present study had been brought to Canada as dependants to reunite the family. Women who enter as dependants and have little education are particularly likely

to experience difficulty integrating in their new country (Dion & Dion, 2001). Chadney contends that these people maintain a stronger Sikh identity than professionals, who develop and maintain a professional identity (through language, dress, and their interactions within the dominant society). Yet, as we have seen, there are costs to this lack of integration.

Recommendations

There are tremendous opportunities to improve the ability of older Sikh immigrants to manage their CAD risk. It is imperative that the message about the risk of heart disease get to the often isolated members of the Sikh community. A variety of mechanisms can be used to communicate the message despite the language, literacy, and ethnocultural barriers. Since many older Sikh immigrants (particularly women) lack literacy skills, there is a need for alternative media, particularly those that are verbal and pictorial. The American Heart Association's Search Your Heart program (www.americanheart.org), a church-based educational initiative aimed at African and Latino Americans, might be a viable model for implementation in the Sikh community. Given that the Gurdwara is the chief meeting place for those at risk for CAD and their families, it may be the ideal place to reach the Sikh people. Many communities have Punjabi television networks that could offer heart-health programming. Useful, culturally relevant (not merely translated) materials for Sikh people could be produced with the collaboration of Punjabi-speaking health-care providers (i.e., dietitians, physiotherapists, nurses, physicians). A variety of successful cardiac-rehabilitation and other programs could be extended to Sikh communities with the cooperation of interpreters. Though the Sikh community comprises second- and third-generation Canadians as well as recent immigrants, people from outside the community can and should play a role in implementing these initiatives.

Conclusion

In order to develop appropriate strategies and health policy aimed at improving people's ability to address CAD risk through lifestyle changes, one must first understand the process they undergo when making decisions about such changes. Health-care providers and policy-makers have a responsibility to assist new immigrants by working with ethnocultural communities to (1) enhance the ability of health-care providers to provide ethnoculturally sensitive care, and (2) develop ethnoculturally relevant resources to enable health promotion and disease prevention activities. The ultimate aim is to improve the health outcomes of these vulnerable members of Canadian society.

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