

Promoting immigrant women's cardiovascular health:

Redesigning patient education interventions

BACKGROUND

Cardiovascular disease (CVD) is the most common cause of death among women, from low to middle income countries.¹⁻² Low-income countries are those with economies that have a gross national income (GNI) per capita of \$1,045 or less as of 2013; while middle-income countries have a GNI per capita between \$1,045 and \$12,746.³ According to the Women's Heart Foundation,⁴ immigrant women living in North America and Europe are 50% more likely to suffer from CVD and have a 35% increased risk of having a heart attack, as compared to non-immigrant women. This increased risk in the prevalence of CVD among immigrant women may be due to changes in lifestyle related behaviors that include altered physical activities, variations in diet associated with migration and settlement in a new country.^{5,6}

The most common intervention in North America and Europe for individuals diagnosed and living with CVD is that of patient education.⁷ Moderate effect sizes of patient education interventions have been reported with regards to performance of self-care behaviors,⁷ symptom management,⁸ and hospital readmissions.⁹ However, these educational initiatives have been, by and large, designed for and evaluated with samples of 'white' men; thus, their applicability to women, in general, and immigrant women, in particular, is questionable. Using a social determinants of health perspective, this paper provides a discussion of current CVD interventions in relation to their relevance and applicability to immigrant women.

IMMIGRATION, WOMEN, AND CVD

Across North America and Europe, continued immigration is vital to sustain their economic and population growth.^{10,11} Immigration helps to establish and replenish the key demographic labour force, which is between the ages of 20-44 year.¹⁰ This cohort invests in the economy through the purchasing of new homes and contribution to a large portion of the taxation revenue.¹⁰ They also sustain the population growth through childbearing. These important contributions have led to continued interest in immigration across North America and Europe over the last three decades.¹¹ Immigrant women from Asia account for the largest proportion of individuals to migrate to North America and Europe.^{11,12} Not only have the numbers of immigrant women increased over the years (ie., 63% in 2010 compared to 10 % in 1966),¹³ the percentage of women settling in North America and Europe as immigrants has exceeded that of men by 2 to 7 percent. Specifically, between 2000 and 2009, approximately, 50,000 more women migrated to North America and Europe than their male counterparts.^{11,13}

Immigration to a new country can be a difficult transition for many individuals. The stresses related to learning a new language, engaging with and/or transitioning to a different culture, and seeking paid employment, for the first time, in some cases, while also taking care of children and older parents, appear to contribute to an increase in overall stress that have significantly contributed to higher rates of CVD among women following migration to and settlement in a different country.¹⁴ As well, stress may also be present through fractured families (for example, with some family members being left behind in another country).¹⁴ Furthermore, the degree of acculturation and adherence to prior cultural norms and values can also contribute to stress.¹⁴ The overall impact of these stressors may be more significant/severe among women because of their biological/hormonal predisposition (such as their smaller blood vessels and the

drop in estrogen levels as they age),¹⁵ placing immigrant women at a higher risk of experiencing CVD than both their male and non-immigrant women counterparts.

CURRENT CVD INTERVENTIONS

CVD interventions may include drug therapy, behavior modification, diet and fluid control, as well as family support programs. However, the most commonly used intervention across North America and Europe is that of patient education. Patient education has been defined as a process for providing information to patients with the goal of changing knowledge and behaviors aimed at maintaining or improving health.¹⁶ Theoretically, CVD education interventions improve knowledge, which in turn, improve performance of self-care behaviors,¹⁷ resulting in lower rates of hospital readmission and mortality.¹⁷ ‘Typical’ CVD educational interventions provide information on: signs, symptoms, and complications of CVD; self-management strategies to reduce presence and severity of symptoms; and medication management, nutrition management, and performance of activities of daily living.¹⁷ Most CVD education interventions have been designed, delivered, and evaluated using samples of white men. The general underlying assumption in this approach is that these interventions will be effective across people of diverse gender and ethno-cultural backgrounds. This gap in research demonstrates clearly the need for urgent attention in examining existing CVD interventions for their applicability to different segments of the population, such as immigrant women diagnosed and living with CVD.

In the remainder of the paper we will examine critically the existing CVD patient education interventions, in particular, in light of a number of key social determinants of health.

KEY SOCIAL DETERMINANTS OF HEALTH IN MANAGING CVD IN IMMIGRANT WOMEN

Social determinants of health are the social and economic conditions that positively or negatively affect the health of individuals, their families, and communities, and include: income and social status, education, employment and working conditions, physical environments, social environments, social support, personal health practices and coping skills, healthy child development, biology and genetic endowment, health services, as well as gender and culture.^{18,19} More recently, researchers²⁰⁻²² have proposed immigration as a key determinant of health, aspects of which we have discussed next. In addition, we have addressed several other social determinants of health, namely, social support, personal health practices and coping skills, and health services, as having particular importance in improving CVD educational interventions for immigrant women. We do so with the understanding that these are very much shaped by each individual's context, process, and status of immigration as well as the 'host' country and society.

Immigration context

Certain factors pertaining to the post-migration context such as “social isolation, language barriers, separation from family, changes in family roles and norms, lack of information about available resources and unemployment” (pg. 7)¹² are critical to the health of immigrants. In addition, the pre-migration experiences of war and violence are a reality for many refugee women.²³ Refugee women and women of precarious status, in particular, are disadvantaged by immigration status and related discrimination.²³ All of these can have a profound effect on their overall health post migration.¹² Existing CVD education interventions do not address many of these factors. Current CVD education interventions typically consist of

providing information in the form of booklets and/or pamphlets to assist individuals diagnosed and living with CVD, in being able to take care of themselves. This places the onus on the individual, to read and understand the educational materials. Most often, the information provided is not available in multiple languages. As well, retrieving additional information requires having access to working phones and/or computers, and computer and internet literacy.

Social support

Emotional, informational, and instrumental support are key elements of social support.²⁴ Emotional support includes verbal and nonverbal communication of caring and concern through active listening, empathizing, reassuring, and comforting.²⁴ Informational support involves the provision of information about the causes of illness, overall optimism about the future, and the actions that may enhance their overall health and wellness,²⁴ which in turn may enhance the individual's overall perception of control. Instrumental support involves the provision of materials and resources (e.g., transportation to/from clinics, in-home personal support workers, and medical supplies), which may offset the challenges an individual may experience during an illness.²⁴ Social support can affect health directly and indirectly. Direct effects are present in hormonal and neuro-endocrine influences on the immune system.²⁵⁻²⁷ Indirectly, the effects of social support are made visible through changes in lifestyle and health behaviors as well as other aspects of social and psychological functioning.²⁷ Furthermore, social support assists individuals in solving problems and dealing with adversity,²⁸ as the caring and the respect that occurs in social relationship can result in an overall sense of satisfaction and wellbeing, which, in turn, can act as a protective barrier against the onset and/or exacerbation of illnesses. Literature is clear that following migration, women, in general, experience loss of social networks and support.

However, the loss is differently experienced by individuals based on their particular social location (for ex., education, ‘host’ country language skills, financial constraints)²⁹ as well as other factors such as transportation, and weather. Their overall impact may be exacerbated for immigrant women from racialized backgrounds because of experiences of racism.³⁰ As such, these aspects need to be addressed in designing patient education interventions for immigrant women diagnosed/living with CVD.

Personal health practices and coping skills

Personal health practices include actions an individual engages in, and the choices she makes to promote self-care, in order to prevent illness and/or enhance her own health.²⁸ Interventions aimed at enhancing an individual’s ability to cope with stressful illness/life situations require specialized skills to help the individual get through situations at nearly the same level as those who do not have the same amount of stress.³¹ These skills can enhance the individual’s ability to be self-reliant, solve problems, and make informed choices, resulting in improved health.³¹ Immigrant women’s personal health practices and coping skills may not only reflect their individual beliefs, preferences, and practices but also those of family and cultural and religious beliefs and practices. This may be especially important for women who come from ‘collectivist’ societies. However, the literature is clear (across a range of health topics, immigrant communities, and immigrant-receiving settings/countries) that post-migration context can exert a tremendous influence on immigrant women’s health practices and coping skills.^{30, 32-35} Due to financial constraints, language barriers, stress related to adaptation to a new country and culture, new work and family obligations as well as the differences in health care system expectations, many immigrant women are not able to fully engage in personal health practices.^{33,36} As such,

personal health practices and coping skills must be captured in the revision to existing CVD interventions for immigrant women diagnosed and living with CVD.

Health services

Health services are designed to maintain and promote health, prevent disease, and restore health and function as a means of contributing to population health, while taking into account the fact that life challenges differ greatly depending on an individual's economic and social status,²⁸ as well as other life circumstances. Marmot et al²⁸ noted that all levels of health and illness follow a social gradient in which the lower the socioeconomic position, the worse the health. Unequal access to health services both between and within countries are directly related to unequal distribution of power and income. This inequitable dispersion of health services is a direct result of poor social policies and programs.²⁸ As a result, immigrant women often times have limited opportunities to secure appropriate health care resources. Studies conducted on a range of health topics show that immigrant women underutilize health services. This has been attributed to multiple and intersecting barriers faced by immigrant women including lack of familiarity with services, financial constraints, social isolation, inappropriate services and intervention strategies, lack of culturally and linguistically appropriate services, lack of portability and coordination of services, and discriminators and racist practices embedded in services and service delivery.^{33,34,36,37} In recognition of these challenges, nurses must increase their efforts to ensure that CVD interventions are being designed to address as many factors as possible to increase immigrant women's access to and use of health services for CVD management and prevention of complications.

RELEVANCE TO CLINICAL PRACTICE

This section outlines various strategies nurses can use to enrich the support they provide to immigrant women in assisting them to reduce and/or prevent the onset of symptoms and complications associated with CVD.

CVD education interventions that are culturally-relevant, applicable, and informative should encompass: the assessment of patient's previous knowledge, learning abilities, and cognition; assessment of learning needs; planning of educational content based on identified goals and timelines; delivery of individualized educational intervention; and evaluation of effectiveness of intervention in attaining pre-set goals.^{38,39} For example, prior to the start and/or delivery of an intervention, nurses could determine whether or not an immigrant woman has the interest and capacity to engage in self-care in their current (post-migration) context in order to determine the homecare and/or frequent patient follow-up visits to a clinic etc she would require. The immediate financial costs associated with organizing such services are outweighed by the long term benefits to the individual, family, and the society. Similarly, in designing CVD interventions such as patient education and group counselling, nurses must work directly with the woman to identify her preferences for one or multiple intervention strategies to deal with her illness. This approach is in line with the patient centered care practices that has gained popularity across North America and Europe in the last 10 to 15 years. It also requires that nurses incorporate individual's cultural values and beliefs into the design and administration of health care interventions. In other words, it is characterized by the delivery of care that is responsive to the values, beliefs, and preferences of an individual¹⁶ and engages the individual as an influential part of the decision-making process in designing her plan of care.¹⁶ It calls for nurses to transition from their practice of 'usual care' in which health care providers unilaterally design and implement health care interventions.¹⁶

Across the CVD population, interventions in the form of individual coaching sessions^{39,40} have been designed and evaluated. However such sessions have not been consistently implemented nor described adequately in the literature so others may avail themselves of this useful information. This type of intervention consists of coaching individuals to: 1) keep ongoing appointments with their physicians, 2) be informed of results from lab and other diagnostic tests, 3) work with health care providers to identify appropriate targets for lab and diagnostic test results, and 4) design a plan of action to achieve specified targets. The coaching sessions offer an opportunity for the individual to engage with a professional coach. To effectively engage in a coaching based intervention with immigrant women, counsellors will need to establish rapport by creating a safe atmosphere where the individual's cultural experiences are valued and integrated into the coaching session.⁴¹ To more effectively assist in designing a plan of action and assisting in the creation of targets, counselors should ask women about their pre- and post-migration health practices, beliefs, and expectations.

Yakushko and Chronister⁴¹ recommend that counsellors follow the woman's lead in the etiquette of communication and identification of what experiences are open for discussion. They suggest that the initial stages of coaching should be used to test the effectiveness of minor interventions (i.e. providing advice) by observing how the woman responds and revise or continue counselling based on responses. This technique can be used to assess the individual's level of acculturation and general comfort with the coaching session. Furthermore, counsellors should be clear about confidentiality: Thus, both verbal and written information regarding the coaching process and confidentiality should be provided on an ongoing basis throughout the coaching session.⁴¹

In light of the post-migration changes to social networks and support for women, it is important that nurses address emotional, informational, and instrumental social support that the women have and require in order to cope with the expectations of living with and effectively managing their CVD. There has also been a call to include social conflict and reciprocity dimensions of social networks in designing interventions.⁴² Emerging literature highlights the key fact that not all social relationships are positive and that the support one might receive may be conditional or one might not receive the kind of care one needs for the management of the particular illness. As such, it is important that nurses understand the quality of relationships women may have in different social contexts (such as, with family, child's school, neighbors) so that they can work with the women to strengthen the support networks that are critical for women while helping to manage those that may create more stress for the women in managing their health condition. Yakushko and Chronister⁴¹ state coaches "can help women use multiple sources of support as resources in their adjustment to a new culture by working collaboratively with women to set concrete behavioral goals and conduct home visits" (p. 296). Through the strengthening of the relationships, the woman's overall sense of power and control in managing CVD may be increased.⁴¹ Additionally, CVD patient education interventions should offer immigrant women the opportunity to interact with a clinician and/or other women diagnosed and living with CVD in order to create spaces and place for women to interact with other women, and other immigrant women, in particular, to learn from and gain support from each other's' knowledge, skills, and experiences.

It is also important that nurses create opportunities for immigrant women to have access to public computers or be able to use interpreters or translators to obtain information in a language that is most comfortable for the women. This will provide both immigrant women and

their health care providers with the opportunity to take into account the nuances related to factors such as social isolation, language barriers, change in family roles and norms, and any additional information that may not be covered in a patient education booklet. This approach will not only support immigrant women as they recover and/or adapt to living with CVD, but may facilitate the provision of information in a manner that is gender, immigration, culture, and language-appropriate. Finally, interventions that are individualized and tailored to and reflect on personal health practices and coping skills, level of acceptance with their diagnosis, and availability of social support as well as incorporate religion and/or spirituality have been shown to be effective in significantly enhancing coping in immigrant women.³¹ Such interventions include: one-on-one counselling as well as small group interactions facilitated by a trained therapist.

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