Racism and Cardiovascular Disease: Implications for Nursing

Jennifer Jackson, RN, BScN, Elizabeth McGibbon, RN, PhD, and Ingrid Waldron, PhD

Abstract

The social determinants of health (SDH) are recognized as a prominent influence on health outcomes across the lifespan. Racism is identified as a key SDH. In this article, the authors describe the concept of racism as an SDH, its impact in discriminatory actions and inactions, and the implications for cardiovascular nurses. Although research in Canada on the links among racism, stress, and cardiovascular disease is limited, there is growing evidence about the stress of racism and its long-term impact on cardiovascular health. The authors discuss how cardiovascular nursing could be enhanced through an understanding of racism-related stress, and race-based differences in cardiovascular care. The authors conclude with strategies for action to address this nursing concern.

Key words: racism, cardiovascular disease, stress, nursing

Across the multidisciplinary health care arena, there is discussion of risk factors for compromised health, such as premature death and increased susceptibility for disease (D’Agostino, Pencina, Massaro, & Coady, 2013). These risk factors include the social determinants of health (SDH), which are factors in the social, political, and economic environment that exert a potentially modifiable impact on health (Canadian Nurses Association [CNA], 2008). An emphasis on the SDH has drawn attention to the health risks associated with gender, age, race, and other factors (World Health Organization, 2008). Racism has been shown to have a serious impact on health in Canada (Waldron, 2010a). Race, in particular, is consistently associated with increased rates of cardiovascular disease (Thomas, 2008). The experience of racism has been shown to be profoundly stressful (Bryant-Davis & Ocampo, 2005), and the impact of racism-related stress means that minority groups are predisposed to health disparities (Williams, 1997). Nurses are in a key position to recognize the role of racism in cardiovascular disease and to advocate for change. In this article, the authors define the SDH and discuss how race, or more accurately racism, is an SDH. The links are made between racism and cardiovascular disease, and the authors conclude with action strategies to address this health concern. There is limited literature about how cardiovascular nursing may be enhanced with an in-depth understanding of racism. The authors provide a preliminary discussion to raise awareness and further explore this health concern.

Racism: A Social Determinant of Health

The primary factors that shape the health of Canadians are not medical treatments or lifestyle choices but, rather, the living conditions individuals, families, and communities experience (Mikkonen & Raphael, 2010). These factors are known as the SDH: employment and working conditions, income and its equitable distribution, education and early childhood development, housing and food security, age, gender, and race (Mikkonen & Raphael, 2010). The SDH are also related to the extent to which citizens are “provided with the physical, social, and personal resources to identify and achieve personal aspirations, satisfy needs, and cope with the environment” (Raphael, 2012, p. 56). According to the World Health Organization (2008), the SDH are important markers of inequalities in health:

The poor health of the poor… is caused by the unequal distribution of power, income, goods, and services, globally and nationally, the consequent unfairness in the immediate, visible circumstances of peoples’ lives—their access to health care, schools, and education, their conditions of work and leisure, their homes, communities, towns, or cities—and their chances of leading a flourishing life” (p. 1).

Racism is a powerful SDH because it shapes health and well-being, and chances for life opportunities across the lifespan (Galabuzi, 2006; Law, 2008) even in the absence of socioeconomic hardship (Etowa & McGibbon, 2012; Galabuzi, 2006). In order to understand racism, it is important to trace how racism stems from discrimination. Discrimination can be defined as action or inaction based in bias and
stereotyping (McGibbon & Etowa, 2009). When one looks at the role discrimination plays in the SDH, it is noteworthy that discrimination often produces the stressors that lead to health problems, and is a major barrier to access or utilization of health services. Discriminatory practices involve actions that have the effect of limiting individual or group rights to various opportunities and resources due to characteristics such as race, gender and culture. These opportunities and resources may include equitable access to jobs, housing, quality education, and health. The experience of discrimination is a key factor in producing health disparities and poor health outcomes for visible minorities in Canada (Waldron, 2010a; Waldron, 2010b).

There are many forms of discrimination, including those based on age, gender, and race (World Health Organization, 2008). When these discriminatory practices are supported by societal systems, such as the health and education systems, discrimination becomes embedded in these systems and is thus referred to as “systemic”. Therefore, racism is systemic discrimination based on race, where health and social systems support racist policy and practices (Etowa & McGibbon, 2012; Waldron, 2010a). Although one’s race may predetermine genetic differences in health outcomes, such as the incidence of sickle cell anemia in Black people, or the incidence of Tay Sachs disease in people of Jewish ancestry, racism, as defined above, has been shown to be a key SDH (Adelman, 2008). Racism shapes health and well-being, and impacts access to various social institutions, including health services.

The significance of race lies in the way that it is experienced on a subjective (personal) level by individuals and communities, and through its material consequences, such as differential treatment and discrimination. Racism refers to an organized system that leads to the subjugation of some groups relative to others (Williams & Williams-Morris, 2000). Such a system is based on the categorization and ranking of some populations as inferior to other groups. This process leads to negative attitudes and beliefs (prejudices) and different treatment, or lack of treatment (discrimination) (McGibbon, Etowa, & McPherson, 2008). Racism has also been shown to have broad implications for the SDH, such as decreased educational and employment opportunities, which may limit access to adequate housing (Galabuzi, 2006).

Racism has a widespread impact on individuals, families and communities, creating barriers for accessing health care. Studies indicate that when seeking health care, the experience of racial discrimination can range from 50% (Thomas, 2008) to 68% (Peters, 2006). Several Canadian researchers documented that race, along with ethnicity, gender, education level, immigrant status and income level all act as barriers to accessing and using health services (Etowa & McGibbon, 2012; Waldron, 2010a; Whitley, Kirmayer, & Groleau, 2006). Woodger and Cowan (2010) shadowed 30 Black patients, as they navigated the health care system, and found that 20 of 30 reported that they did not receive any follow-up or referral appointments for community services after discharge. The authors concluded that 28 of 30 patients received inadequate communication from the health care team, resulting in inappropriate care and compromised patient outcomes. Female immigrants in Canada identified language and lack of culturally relevant programs as barriers to accessing health care (Stewart et al., 2006). As one participant stated, “Frankly, people who don’t speak English are treated the same way as if they were unconscious” (Stewart et al., 2006, p. 334). In turn, this systemic discrimination creates barriers to accessing health care.

Individuals who experience racism are also at risk for receiving lower level care than those who do not. For example, cardiologists were found to be unaware of the discrepancies in treatment and diagnostic testing, such as cardiac catheterization, offered to patients in racial minorities (Redburg, 2005). Redburg (2005) found that race-related discrepancies could be attributed not only to risk factors facing minority groups, but also to physician bias in prescribing and recommending treatment. LaVeist et al. (2003) found that Black patients with cardiovascular disease in the United States were less likely to obtain specialty cardiac care, such as cardiac catheterization, even after controlling for socioeconomic status and insurance coverage. In patients undergoing coronary artery bypass surgery, being African American or Asian/Pacific Islander is significantly associated with being treated by surgeons of poorer quality (Rothenberg, Pearson, Zwanziger, & Mukamel, 2004). Quality was measured by risk-adjusted mortality rates, and the authors controlled for socioeconomic status and pre-existing comorbidities (Rothenberg et al., 2004). Black men with cardiovascular disease are also more likely to die from the illness than White men, after controlling for age and income (Thomas, Eberly, Smith, Neaton, & Stalmer, 2005).

Although it is tempting to view race as an independent variable in the above cited studies, the nature of racism means that all of the SDH are interdependent and intersect in creating the social, political and economic processes that impact health. For example, articulating how race and gender intersect is useful for understanding how the cumulative effect of systemic racism in their lives puts African Nova Scotian women at an increased risk for various chronic diseases, including high stress, hypertension, and stroke (Thomas Bernard, 2003). One of the main implications is that cardiovascular disease can result because inequities in the SDH often happen together, with racism being a key antecedent factor. As a result, patients experiencing racism who require cardiac care are more likely to receive lower quality care than their peers, and to experience increased morbidity and mortality.
Racism, Stress, and Cardiovascular Disease: How are they Related?

Canadian researchers have recently begun to examine the links among racism, physiological and psychological stress, and the pathophysiology of adrenal fatigue. There is limited Canadian evidence related to the impact of racism on cardiovascular health. Harrell (2000) used the term “micro-stressors” to describe the experiences of African Americans who must deal with everyday injustices due to race and other forms of discrimination. Similarly, Essed (1991) uses the term “everyday racism” to characterize the connection between racism that occurs at the macro level within societal institutions and structures, and micro level forms of racism that occur in everyday interactions between individuals. Everyday forms of racism are traumatic (Carter, Forsyth, Mazzula, & Williams, 2005), and include “cognitive/affective assaults on one’s ethnic self-identification” (Bryant-Davis & Ocampo, 2005, p. 480). Examples include racially motivated verbal attacks, physical attacks, and threats to livelihood; being denied promotions, home mortgages or business loans; being watched by security guards; and being stopped in traffic. It is important to appreciate examples of these everyday forms of racism because they are so pernicious in their impact on mental and physical health and well-being.

Bolton and Wilson (2005) argue that the stress associated with racism may result in significant cardiovascular disease. Although risk factors for cardiovascular disease are similar for both White and visible minority populations, there are differences in age of onset, prevalence, and rates of morbidity and mortality (Bolton & Wilson, 2005). For instance, Black women develop hypertension at a younger age than their White counterparts (Bolton & Wilson, 2005). In other words, although other life stressors may impact health, a growing number of scholars have pinpointed racism as a stress that is crucial to examine in terms of cardiovascular health (Bolton & Wilson, 2005). For example, Black women experience a wide variety of stresses, the particular stress of racism has also been found to significantly increase the overall stress burden on their bodies (Wyatt et al., 2003). Racism results in the activation of the stress response, or fight-or-flight mechanism (Thomas, 2008). Discriminatory treatment is the actual stressor, and the person’s appraisal of the experience as racist produces stress (Peters, 2006). The stress of racism is different than other stressors because it is pervasive within society and is experienced on an ongoing basis (Beagan & Etowa, 2009; Peters, 2006).

Racism has a profound impact on the body’s stress managing systems—the sympathetic adrenal medulla (SAM) and the hypothalamus-pituitary-adrenal cortex (HYPAC) (McGibbon, 2012). Normally, the SAM-HYPAC system regulates our bodies through short-term stressful times and helps us maintain overall wellness. The problem arises when long-term, chronic racism-related stresses, such as those described above, eventually overtax the SAM-HYPAC system (McGibbon & Etowa, 2009).

This response, triggered by chronic racism-related stress, causes a release of catecholamines, such as epinephrine, which has particular relevance in the development of cardiovascular disease. Due to the presence of epinephrine, both blood pressure and heart rate are significantly elevated (Swann, 2011). Racism has thus been shown to influence the prevalence of hypertension through stress exposure and reactivity, and by fostering conditions that undermine health-promoting behaviours (Brondolo et al., 2011). The prolonged elevation of blood pressure subsequently causes myocardial strain and left ventricular hypertrophy in an attempt to compensate for the increased vascular resistance produced by hypertension. This process of sustained sympathetic activation can eventually produce heart failure (Bolton & Wilson, 2005).

Other organ systems also react, with the kidneys responding to systemic hypertension by continuing the fight-or-flight mechanism through the activation of the renin-angiotensin system (Swann, 2011). This process increases vascular resistance, thus compounding the problem. The sympathetic nervous system does not immediately deactivate after a stressor, which prolongs the effects of the event beyond the initial insult (Swann, 2011). When one experiences racism on an everyday basis, the stress response becomes overwhelmed and the body’s adrenal system is unable to maintain physiological balance. This chronic activation compounds the cumulative impact of stress (Swann, 2011). Significant consequences can include hypertension, heart failure, myocardial infarction, and stroke (Bolton & Wilson, 2005; Swann, 2011). Black clients may also respond differently to medications that manage cardiovascular disease, influencing outcomes of treatment (Bolton & Wilson, 2005).

The eventual result of chronic SNS activation is adrenal fatigue (McGibbon & Etowa, 2009). Chronic adrenal fatigue can cause depression, obesity, hypertension, diabetes, cancer, ulcers, chronic stomach problems, allergies and eczema, autoimmune diseases, headaches, kidney and liver disease, and overall reduced immunity (Varcarolis & Halter, 2010). Over time, the hippocampus of the brain can become damaged and prevent the regulation of the stress response. When combined with racism at point of care, there are serious health consequences. People experiencing racism appear to be more likely to develop cardiovascular disease due to the physiological impact of racism, because no significant genetic variants are linked to African Americans and cardiovascular disease (Peters, 2006). There is also insufficient evidence to support coping mechanisms as an effective stress-management intervention for
visible minority populations (Brondolo, ver Halen, Pen-cille, Beatty, & Contrada, 2009). Additionally, the use of coping mechanisms, as a health intervention, places the onus on the victims of racism, and does not address the elimination of racism in society (Brondolo et al., 2009).

Given these factors, nurses are in a key position to enact change in the Canadian health care system. There is also an ethical obligation for nurses to work both individually and collectively toward the elimination of social inequalities (CNA, 2008). Nurses can act as patient advocates, and be a voice for addressing the SDH and racism for individual patients, as well as acting collectively for systemic changes (Bu & Jezewski, 2006). Nurses have an opportunity to be patient advocates due to their educational background, professional philosophy and unique position within the health care system (Bu & Jezewski, 2006). Knowing the impact of racism on Canadians, nurses can take action to address racism within healthcare (See Table 1).

**Strategies for Action**

**Self-Reflexive Practice**

Self-reflexive practice has been consistently described as a strategy to address racism in clinical practice (Gustafson, 2007). However, there is limited literature about how these strategies may relate to cardiovascular nursing in particular. This discussion is meant to introduce these ideas in an effort to initiate further exploration of how nurses may address racism. Ultimately, the aim is to reduce the high incidence of cardiovascular disease in individuals and communities who are subjected to racism.

According to several authors, self-reflexive practice is a key approach to addressing discrimination in clinical practice (Gustafson, 2007; Hooks, 2003; Johnston et al., 2009; Scammell & Olumide, 2011). Self-reflexive practice involves health professionals examining the ways that their own social and cultural backgrounds, experiences, beliefs and attitudes affect practice (Johnston et al., 2009). An integral aspect of being self-reflexive is acknowledging how our own social location (e.g., race, culture, gender, social class, socioeconomic status, disability and other social identities) influences our beliefs, attitudes and the therapeutic relationship. Social locations are very important because they determine the extent to which certain social groups will have access to valuable resources and opportunities (Johnston et al., 2009). Health professionals who examine their social location and, in particular, their privileged status with respect to race are (a) less likely to succumb to racial stereotypes, (b) more likely to attribute the challenges and barriers experienced by visible minority communities to external forces (e.g., disadvantage and racism) than to personal deficiencies, and (c) more likely to gain culturally specific knowledge from their clients (Hays, Dean, & Chang, 2007).

Self-reflexive practice is not so much an activity to be engaged in at any particular time; rather, it is an overall way or strategy of approaching one’s nursing practice. Self-reflexive practice encourages mindfulness about one’s own race, social class and gender and how these social locations continue to impact or impede our capacity for safe, compassionate care. In the policy arena, self-reflexive practice also facilitates the recognition that, in Canada, many mainstream government health initiatives are structured on Eurocentric norms and values, despite the fact that the programs are offered to diverse populations (Stewart et al., 2006; Tomlinson, 2011).

Reflexive practice is a foundation of providing equitable health care (Yee & Shahsiah, 2006). It is important to ask questions such as: “How may racism affect my attitudes, opinions and nursing practice?” (Beagan & Etowa, 2009).

<table>
<thead>
<tr>
<th>Table 1: Strategies for Action: Some Important Questions for Cardiovascular Nurses</th>
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<tbody>
<tr>
<td><strong>Self-reflexive Practice</strong></td>
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<tr>
<td>• How do racism and the SDH impact the cardiovascular health of my clients?</td>
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<td>• Do I know how to integrate racism and the SDH in my assessments, interventions and discharge planning?</td>
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<tr>
<td>• How may racism influence my attitudes, opinions and nursing practice?</td>
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<tr>
<td>• How do my own social location and the social locations of my clients and colleagues shape client-staff interactions?</td>
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<td>• Does my unit provide specific support for self-reflexive practice?</td>
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<td><strong>Transformative Education</strong></td>
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<td>• What specific opportunities (in my workplace or in my education) do I have to reflect critically on my own experiences, practices, assumptions, beliefs, feelings, and mental perspectives?</td>
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<tr>
<td>• What is my understanding of cultural safety and its potential for enhancing safe, competent, compassionate care?</td>
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<tr>
<td>• In my institution and community, what courses and in-services are available on cultural safety?</td>
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<td>• Does my educational or health care institution consistently incorporate social justice principles and the SDH in nursing curricula? Continuing clinical education?</td>
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<td><strong>Leadership and Policy-Making</strong></td>
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<td>• How could I work collectively with my nursing colleagues to advocate for development of anti-racist policies in my institution?</td>
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<td>• Does my union, college or association, or educational institution have specific policies to ensure representation and promotion of a diverse nursing workforce?</td>
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<td>• Does my institution’s commitment to change also extend to websites and other virtual media, which are influential in promoting, or minimizing, racism?</td>
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<td>• How can cardiovascular nurses become leaders in promoting anti-racist nursing practice?</td>
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<td><strong>Nursing Research</strong></td>
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<td>• Has the researcher considered the role of the SDH, including racism?</td>
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<td>• What impact does this research have on visible minority peoples/groups?</td>
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2009). These reflections encourage us to look beyond typical health care labels such as ‘non-compliant’, and to genuinely appreciate a client’s circumstances. It may also be necessary to specifically raise the issue of racism with colleagues in order to understand how it may be affecting a client (Beagan & Etowa, 2009). Nurses are advocates for clients. Advocacy is a process or strategy of actions aimed to preserve, represent or safeguard the rights and best interests of a client (Bu & Jezewski, 2006). Nurses can recognize the impact of racism in health care, advocate for individual clients, and also for change within the health care system (Bu & Jezewski, 2006).

**Transformative Education**

Transformative education includes being able to understand the societal context of learning, such as the socio-political underpinnings of educational content and the potential for positive social change (Dei, 2002). Transformative education also integrates learning by reflecting critically on one’s own experiences, practices, assumptions, beliefs, feelings, and mental perspectives in order to construct new or revised interpretations (Hooks, 2003). Undergraduate, graduate, and continuing nursing education could be strengthened with inclusion of a broader understanding of embedded assumptions about racism and the SDH. For example, Woodger and Cowan (2010) established self-learning groups, comprising health care professionals from a variety of disciplines. The groups, whose members represented a variety of racial backgrounds, worked together to reflect on their own practice, and implement changes throughout the organization. The result was a bottom-up transformation of hospital policy and care delivery. Change in health care practice could be greatly supported with provision of transformative education about racism and anti-racist practices. McGibbon and Etowa (2009) also advocate for nursing education based in a critical social science approach that openly addresses how inequities in the SDH can intersect and overlap to deepen disadvantage.

Education about cultural safety is an essential aspect of transforming nursing practice. Cultural safety can be defined as the self-determination of the client, and reflects the empowerment and upholding of the cultural identity and well-being of an individual (Nursing Council of New Zealand, 2011). However, cultural safety extends far beyond acknowledging factors such as ethnicity and religious affiliation (Drevdahl, Canales, & Dorcy, 2008). For example, cultural safety challenges the standard of cultural nursing through its insistence that Aboriginal patients have the power to define quality of care according to their ethnic, cultural and individual norms (Brascoupe & Waters, 2009). Knowledge about cultural safety is a central aspect of transformative education for nurses. It directs us to acknowledge “that we are all bearers of culture; exposing the social, political, and historical contexts of health care; enabling practitioners to consider difficult concepts such as racism, discrimination, and prejudice; and challenge unequal power relations” (Aboriginal Nurses Association of Canada, 2009, p. 2). When nurses have increased knowledge about all of these aspects of cultural safety, they are more likely to have increased capacity to provide equitable care to patients (Browne & Varcoe, 2006).

**Leadership and Policy Making**

Nurses can critically consider workplace policies and analyze organizational approaches to racial diversity. Health care settings, regardless of location or client population, can develop policies to foster inclusiveness and equity. This commitment to change can also extend to websites and other virtual media, which are influential in promoting, or minimizing racism (Law, 2008). An example is the establishment of an Aboriginal Health Worker role on an inpatient cardiac unit, which led to improved health outcomes and staff insight into the challenges facing Aboriginal peoples (Taylor et al., 2009).

Policy change and targeted funding can address systemic racism and racism at point-of-care, including ensuring minority access to health care services. In order for health policy to be effective, it must be anti-racist, rather than merely multicultural. Anti-racist health policy deals with issues of racism by moving beyond the multiculturalism concern for cultural diversity, sensitivity and tolerance to policy actions that interrogate and seek to reduce negative health outcomes that result from racial inequities within social, economic, political and health institutions (Waldron, 2010a; Waldron, 2002). Anti-racist practice may be defined as practice that is concerned with revealing how bias, inequities, exclusion, discrimination, hatred, and violence are carried out and supported through policies and practices within systems such as health care (McGibbon & Etowa, 2009; Waldron, 2010a; Waldron, 2002). Anti-racist action specifically addresses racism in society through targeted policy, rather than simply presenting a dilute ‘diversity’ message (Law, 2008). It entails identifying environmental factors that contribute to racism and implementing a program to address these factors to create a new environment, rather than reflexively punishing racist acts (Law, 2008).

Understanding how social determinants impact health requires an appreciation for how individuals are impacted by everyday challenges within the family, community, employment, schools, health care and other contexts. Consequently, health policies that validate practical therapeutic approaches, such as talk therapy and peer support, may be better able to understand people and their health concerns within the context of their everyday lived realities.

Health policies must also validate the multiple ways in which visible minorities understand illness and health and
seek help for health problems, many of which may be at odds with Euro-Western medical approaches (Waldron, 2010a; Waldron 2010b; Waldron, 2002).

Woodger and Cowan (2010) advocate a bottom-up approach to policy change and evaluation, with a focus on comprehensive administrative support for changing health care provider practice. A key aspect of change is supporting leadership from nurses who are visible minorities, and exploring their role and experiences within the health care setting. The voices of nurses from visible minorities are an important factor in advocating for organizational change. Recruitment and retention of visible minority nurses is also a key imperative for enhancing the scope of nursing practice in all areas of nursing, including cardiovascular nursing (Beagan & Etowa, 2009). Therefore, the issue of representation remains an important and all-too-often ignored issue in leadership and policy-making in nursing and in health care, in general. Given the increasing diversity of Canadian society, ensuring that diverse knowledge, beliefs, values, and perspectives of visible minority nurses and clients are represented within nursing education and practice, policy, leadership and research (discussed later) is the first and most crucial step in fostering diversity, inclusion, equity and justice within health care settings.

**Nursing Research**

Cardiovascular nursing care could be strengthened with funding for research studies with Canadian populations experiencing racism in their everyday lives and within the health care system. For example, nursing practice could be enhanced with the results of Canadian mixed methods studies about the incidence of cardiovascular disease and the patient care experiences of visible minority Canadians. Priority nursing research areas include barriers in access to cardiovascular care, differences in cardiovascular treatment according to race and other SDH, strategies for implementation of cultural safety protocols in nursing care, the development and implementation of culturally appropriate resources, and investigation into the professional experiences of minority nurses. In their discussion of research, Ostlin, Sen and George (2004) emphasize the need for change in content (racism acknowledged as a contributing variable) and process (research in areas beyond those that generate revenue). It is also important to lobby for change to ensure that minority peoples are represented on research councils that review research proposals and allocate funds (Ostlin et al., 2004). Sample groups in studies about diabetes, heart disease, obesity, and access to services should contain participants from a variety of racial backgrounds, in reflection of Canada as a diverse society. Finally, the credibility and efficacy of cardiovascular research outcomes would be enhanced through identification of the impact of the research process and outcomes on visible minority groups.

**Conclusion**

Racism has a significant impact on the health outcomes of Canadians and there are no simple answers regarding how the practice of cardiovascular nursing can be enhanced with knowledge about racism. Nurses can play a key role in advocating for individuals, families and communities, and taking collective action for creating change in the Canadian health care system. Through self-reflexive practice, transformative education, research, and changes to clinical practice, nurses can work toward the goal of equitable access to the care and equitable health outcomes for patients.

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