Canadian Journal of Nursing Research, 2001, Vol. 33, No. 3, 5–15

Discourse

Research Priorities in Gender and Health

Miriam J. Stewart, Kaysi Eastlick Kushner, and Denise L. Spitzer

This year we witnessed an unprecedented event, the creation and exponential growth of a national research institute devoted to the study of gender and health. The launch of the Canadian Institutes of Health Research (CIHR) Institute of Gender and Health represented the culmination of directions recommended by research- and policy-influencing groups in Canada. Key international and national initiatives that provided a foundation for this Institute were the Canada–USA Women's Health Forum in 1996; the development of five Centres of Excellence on Women's Health, funded by Health Canada in 1996; and the creation of Wyeth-Ayerst and MRC-PMAC Clinical Research Chairs in Women's Health. Guiding documents included *CIHR 2000: Sex, Gender and Women's Health* (British Columbia Centre of Excellence for Women's Health, 1999), *A Women's Health Research Institute in the Canadian Institutes of Health Research* (Working Group on CIHR, Gender and Women's Health Research, 2000), and *Agenda for Research on Women's Health for the 21st Century* (National Institutes of Health, 1999).

Initial consultations across the country elicited input on strategic research priorities. Mechanisms used for these consultations included

---

Miriam J. Stewart, MN, PhD, is Scientific Director, CIHR Institute of Gender and Health, and Professor in the Faculty of Nursing and in Public Health Sciences, Faculty of Medicine, University of Alberta, Edmonton, Canada. Kaysi Eastlick Kushner, RN, PhD, is Assistant Director, CIHR Institute of Gender and Health, and Assistant Professor, Faculty of Nursing, University of Alberta. Denise L. Spitzer, PhD, is Visiting Assistant Professor, Women's Studies Program, and Adjunct Professor, Department of Anthropology, University of Alberta.

brainstorming sessions, information and feedback sessions, meetings with individuals and groups, conference presentations, written submissions, and discussions with the Scientific Directors of all CIHR Institutes and other potential partners.

Priorities for Research in Gender and Health

The key themes and issues emerging from the consultations across the country and from review of the relevant literature were summarized and synthesized. Five major themes were: (1) access and equity for vulnerable groups, (2) promoting health in the context of chronic conditions, (3) gender and health across the lifespan, (4) promoting positive health behaviours, and (5) gender and the environment. The exemplar issues, generated in diverse consultations, were ranked based on a weighting system, to identify priorities for research. The "Top Ten" list (see Table 1) of the research priorities and relevant literature are briefly outlined below.

Gender, Health Equity, and Access to Health Services for Vulnerable Groups

Inequities in health are grounded in disparities in access to health determinants, such as income, social support, and housing, and are exacerbated by experiences of discrimination, the demands of multiple roles, and geographic location (Amaratunga, 2000). Members of marginalized populations may either have limited access to health services or feel constrained in their participation due to their marginalized status. Social exclusion due to income, culture, gender, ability, or geography can also have multiple impacts on health (Buckner, 1988; Nasar & Julian, 1995). Gender-sensitive research should investigate issues of the political economy of health, health equity, and access to health services for visible minority, First Nations, immigrant and refugee women and men, people with disabilities, rural residents, prisoners, intravenous drug users, the homeless, and international populations. The mediation between gender, social environment, psychological well-being, and human physiology is poorly understood; consequently, attention to gender and psycho-social context are perceived to be inadequately addressed in clinical settings. Clinical practice in terms of both prescribing regimes and client-practitioner interaction require further investigation. This research priority focuses on socio-cultural environments and access to, and appropriateness of, health services.

Table 1 *Research Themes and Priorities*

Research Theme	Priority Issues
Access and equity for marginalized groups	Gender, health equity, and access to health services for vulnerable groups Gender, violence, and health across the lifespan
Promoting health in the context of chronic conditions	Gender and chronic conditions across the lifespan Gender and cardiovascular disease
Gender and health across the lifespan	Gender and healthy child development Gender and healthy aging Gender and work, leisure, and health Gender and mental health across the lifespan Gender and reproductive and sexual health
Promoting positive health behaviours	Gender, promoting positive health behaviours, and preventing addictions
Gender and the environment	

Gender, Violence, and Health Across the Lifespan

The physical, physiological, and psychological impacts of violence on females and males interact with socio-cultural contexts to influence their response and help-seeking behaviour (Lenssen, Doreleijers, van Dijk, & Hartman, 2000; Rigby, 1998). The experience of violence increases risk of physical injury, psychological distress and disorders, infectious diseases, and addictions (Saringiani, Ryan, & Petersen, 1999; Taussig & Litrownik, 1997). There is a need to focus on the experiences of survivors of violence, including visible minority women, persons with disabilities, lesbian, gay, bisexual, and transgendered individuals,

and men; the effects of these experiences on survivors and witnesses; and the efficacy of services provided to survivors. Social, cultural, and environmental influences on survivors and perpetrators of violence should be considered in investigations into the social and political contexts and gender and social roles that contribute to the perpetuation of, or abstinence from, violence. In addition, the relationship among gender, socio-economic status, social and cultural identity, and the uptake of services must be explored.

Gender and Chronic Conditions Across the Lifespan

The experience, prevalence, and meanings of chronic diseases and disabilities are influenced by gender, age, culture, sexual orientation, socio-economic status, and geographic location. Help-seeking behaviour, symptom expression, treatment options, and coping strategies are influenced by gender. This can affect relationships with health-care practitioners for diverse people with chronic conditions, including cancer (Nicholas, 2000; Znajda, Wunder, Bell, & Davis, 1999), disabilities (Krause, Kemp, & Coker, 2000), and HIV/AIDS (Sowell, Moneyham, & Aranda-Naranjo, 1999). Although attention to structural factors, such as poverty, gender inequality, and migration, that contribute to disease transmission has increased, further research is needed (Parker, Easton, & Klein, 2000). Sex and gender differences inform vulnerability to, expression of, and response to chronic diseases; however, these variations require further exploration. Research can illuminate the relationships among sex, genetics, and immune response, and can explore sex/gender differences in symptom expression and treatment response. Deployment and efficacy of coping strategies, the influence of the social world, and cultural scripts regarding stoicism and pain expression offer rich areas of investigation that can enhance gender-appropriate health services.

Gender and Cardiovascular Disease

One chronic condition that has received particular attention from a gender perspective is cardiovascular disease. This leading cause of death in Canada is associated with various social factors, including gender, education, employment, socio-economic class, and social isolation (Heart and Stroke Foundation of Canada, 1999). Morbidity and mortality, as well as symptoms, treatment options, and psychosocial adjustment, appear to differ according to gender. Only recently have researchers attended to gender differences in presentation and diagnosis of heart disease, observing that women and men report different

symptoms — the perceived seriousness of which will determine whether they seek medical attention (Beery, 1995; Mendes, 1997). Furthermore, gender appears to affect perceptions of quality of life, physical activity, and impairment of role status (Chin & Goldman, 1998; Heart and Stroke Foundation of Canada); treatment offered (Beery; Mendes); and participation in cardiac rehabilitation (Brezinka & Kittel, 1996). Investigation is required into the relationships among gender, culture, socio-economic context, help-seeking behaviour, and access to and satisfaction with health services.

Gender and Healthy Child Development

From childhood through adolescence, females and males face changing and disparate threats to their health and well-being, including injuries, vulnerability to physical and psychological complaints, and the adoption of risky behaviours (Gabhainn & Kelleher, 2000; King, Pickett, & King, 1998; Kolip, 1997). Social and cultural factors interact with gender to influence growth and development and engagement in health-promoting and health-damaging behaviours. These trends have implications for research on response and access to treatment and prevention strategies. Health promotion programs are necessary for youth to prevent injuries, encourage positive health behaviours, and promote healthy social, emotional, and physical development.

Gender and Healthy Aging

Gender and sex differences in the biophysical consequences of aging have ramifications for longevity, impairment, treatment strategies, adherence to regimens, and the delivery of health services. Female seniors are often economically disadvantaged in comparison to men (Health Canada, Division of Aging and Seniors, 2000); however, males are more likely to adopt negative health behaviours in response to stress (National Advisory Council on Aging, 1999). According to the World Health Organization (1998), "In order to be effective, health research and programs need to recognize gender differences in both health and ways of living. Men die earlier, while women experience greater burdens of morbidity and disability. Women constitute the majority of caregivers; supporting them is a key health policy challenge." The issues of aging, isolation, and poverty from a gender perspective must be studied. Social context and cultural constructs of gender and age influence the potential for healthy aging and require further investigation.

Gender, Work, Leisure, and Health

Gender inequality in paid and unpaid labour, such as the demands of the "double shift" and workplace hazards, and gender discrimination underpin some health inequities between women and men (Emslie, Hunt, & Macintyre, 1999). Women have been burdened disproportionately by the impact of health-care restructuring both in the workplace and as family caregivers (National Coordinating Group on Health Care Reform and Women, 2000). Furthermore, occupational health measurements often do not consider the types of jobs most often performed by women (Messing, Dumais, & Romito, 1993). More research is required on the impact of marginalization, caregiving, other forms of unpaid work, and work stress on women and men. The context of changes in institutional, community, and familial responsibilities resulting from health-system reform, and the impact of work demands on leisure time, should be studied. Research needs to encompass the multiple forms of labour in which women and men engage and to examine the demands of the double shift on health.

Gender and Mental Health Across the Lifespan

Mental health is influenced by the biophysical, personal, and socio-cultural environment (Krause et al., 2000; Rothbard & Azarian, 1998). Gender roles may interact with other stressors to have a differential impact on mental well-being for men and women. Research needs to focus on mental health issues among particular groups, including adolescents, immigrants and refugees, and adult men and women. The relationship between mental and physical health should be explored and special attention paid to the role of spirituality in maintaining mental well-being. Differential treatments and services offered to women and men, and the physical and psychological sequelae of personal violence and trauma, require investigation. Cultural constructs of mental health and its relation to gender roles and well-being must be considered along with culturally grounded coping and healing strategies.

Gender and Reproductive and Sexual Health

Although reproductive and sexual health studies are primarily focused on women's procreative activities, they encompass a range of issues, including disabilities and sexuality, reproductive technologies, environmental influences on male and female reproductive health, sexual minorities, and the impact of sexual and physical abuse (Lensson et al., 2000; Proctor, 2001; Waxman, 1996). Pregnancy-related issues, includ-

ing maternal care, hysterectomies and alternatives, assisted reproductive technologies, and pelvic health, require research. Reproductive and sexual health benefits from a bio-cultural approach to fertility and infertility. Cultural and social constructions of reproductive and sexual health circumscribe the context in which sexual activities and discussions of sexual matters can take place. The demands for health services that are sensitive to sexual minorities need to be addressed.

Gender, Promoting Positive Health Behaviours, and Preventing Addictions

Sex and gender differences are apparent in the engagement of both negative and positive health behaviours. Negative health behaviours, such as smoking and alcohol and substance abuse, have been linked with "gendered" responses to stress, gender role performance, and personal histories of physical and sexual abuse (Barber, Bolitho, & Bertrand, 1998; Roxburgh, 1998). Treatment strategies are differentially effective for women and men (Booth & McLaughlin, 1996). Positive health behaviours, such as physical activity and healthy nutrition, also differ according to gender and age. Women's desires to exercise are balanced against perceived "male" sports, disempowering stereotypes of the female body, familial obligations, and the inability to put personal needs first (Bialeschki & Pearce, 1997; Thomsson, 1999). Research should be launched to investigate the relationships of physical activity, physical labour, or eating disorders with gender. Researchers must delve further into sex-specific physiological effects of tobacco, alcohol, illegal drugs, and the pharmaceutical preparations used to curb addictions to these substances. Gender differences influence the motivation to engage in positive or negative health behaviours.

Gender and the Environment

Health outcomes are the result of individual, communal, and societal interactions with the biophysical, socio-cultural, and political-economic environments (Kettel, 1996). Exposure to environmental toxins can be structured by gender roles and socio-economic status (Falk et al., 1999; Washington, 1999). Research needs to explore how gender, intersecting with variables of class, ethnicity, sexual orientation, and (dis)ability, influences interactions with environments to produce differential health outcomes. Physiological response to, and mitigation of, biophysical and social environmental hazards interest researchers. Social, cultural, and environmental influences are pivotal to understanding and implementing health service delivery.

Concluding Comments

The Institute of Gender and Health was designed to link across national borders and have international impact. From the outset, it was recognized that this Institute would benefit from the groundbreaking work of the Centres of Excellence on Women's Health and Clinical Research Chairs in Women's Health, but that there was likely a wealth of additional expertise on gender and health that may not have been tapped. Consequently, an environmental scan of Canadian capacity to conduct gender and health research was initiated. The Institute reviewed 15 databases of funding agencies, foundations, and organizations to identify researchers engaged in gender and health research. Moreover, consultations with stakeholders in policy, public, practice, and academic realms yielded information. Through these mechanisms, over 1,700 researchers have been identified to date.

The objectives that guide opportunities offered by the Institute are to: (1) *generate evidence* regarding (a) health status, health behaviour, and health services use of females and males across the lifespan; and (b) influence of gender and sex on health status, health behaviours, and health services use, and interactions with other determinants of health (e.g., ethnicity, socio-economic status, education); (2) *provide evidence* to inform design of programs, policies, and practices that enhance health of women, men, girls, and boys in Canada; and (3) *enhance the capacity* to conduct gender and health research in Canada.

The credibility of the Institute of Gender and Health will be enhanced through strategic initiatives that draw attention to gaps in research, address major health-related issues in Canada, and reflect the diversity among women, men, and transgendered individuals across the lifespan. The Institute will continue to launch capacity-building initiatives for researchers and neglected research areas and attract investigators to the study of gender and health. It is hoped that the innovation and scope of this Institute's research will engender enthusiasm among researchers, policy influencers, practitioners, program planners, and the public. Nurses have played a key role in consultations, applications, Institute leadership, peer review, and on the Advisory Board. The Institute provides a vital opportunity for nurses to participate in bringing gender-sensitive health research into the mainstream of health research. This will support the continuing development of innovative interdisciplinary knowledge to underpin nursing and promote the health of Canadians.

References

Amaratunga, C. (Ed.). (2000). *Made to measure: Women, gender and equity.* Halifax: Maritime Centre of Excellence for Women's Health.

Barber, J., Bolitho, F., & Bertrand, L. (1998). Age and gender differences in the predictors of adolescent drinking. *Social Work Research, 22*(3), 164–172.

Beery, T. (1995). Gender bias in the diagnosis and treatment of coronary artery disease. *Heart and Lung, 24*(6), 427–435.

Bialeschki, M., & Pearce, K. 1997. "I don't want a lifestyle — I want a life": The effect of role negotiations on the leisure of lesbian mothers. *Journal of Leisure Research, 29*(1), 113–131.

Booth, B., & McLaughlin, Y. (1996). Barriers to and need for alcohol services for women in rural populations. *Alcoholism, 24*(8), 1267–1275.

Brezinka, V., & Kittel, F. (1996). Psychosocial factors of coronary heart disease in women: A review. *Social Science and Medicine, 42*(10), 1351–1365.

British Columbia Centre of Excellence for Women's Health. (1999). *CIHR 2000: Sex, gender and women's health.* Health Institute Design Grant. Ottawa: Social Sciences and Humanities Research Council and Canadian Health Services Research Foundation.

Buckner, J.C. (1988). The development of an instrument to measure neighborhood cohesion. *American Journal of Community Psychology, 16,* 771–791.

Chin, M.H., & Goldman, I. (1998). Gender differences in 1-year survival and quality of life among patients admitted with congestive heart failure. *Medical Care, 36*(7), 1033–1046.

Emslie, C., Hunt, K., & Macintyre, S. (1999). Problematizing gender, work and health: The relationship between gender, occupational grade, working conditions and minor morbidity in full-time bank employees. *Social Science and Medicine, 48,* 33–48.

Falk, C., Hanrahan, L., Anderson, H.A., Kanarek, M.S., Draheim, L., Needham, L., & Patterson, D. Jr. (1999). Body burden levels of dioxin, furans, and PCBs among frequent consumers of Great Lakes sport fish. *Environmental Research, 80*(2), S19–S25.

Gabhainn, S., & Kelleher, C. (2000). School health education and gender: An interactive effect? *Health Education Research, 15*(5), 591–602.

Health Canada, Division of Aging and Seniors. (2000). *Canada's seniors: Gender differences in income.* Ottawa: Statistics Canada. [Available: www.hc-sc.gc.ca/seniors-aines/pubs/factoids/en/no23.htm (May 28, 2001).]

Heart and Stroke Foundation of Canada. (1999). *The changing face of heart disease and stroke in Canada 2000.* Ottawa: Author.

Kettel, B. (1996). Women, health and the environment. *Social Science and Medicine, 42*(10), 1367–1379.

King, M., Pickett, W., & King, A. (1998). Injury in Canadian youth: A secondary analysis of the 1993–94 Health Behaviour in School-Aged Children Survey. *Canadian Journal of Public Health, 89*(6), 397–401.

Kolip, P. (1997). Gender differences in health status during adolescence: A remarkable shift. *International Journal of Adolescent Medicine and Health, 9*(1), 9–17.

Krause, J., Kemp, B., & Coker, J. (2000). Depression after spinal cord injury: Relation to gender, ethnicity, aging and socioeconomic indicators. *Archives of Physical Medicine and Rehabilitation, 81*(8), 1099–1109.

Lenssen, S., Doreleijers, T., van Dijk, M., & Hartman, C. (2000). Girls in detention: What are their characteristics? A project to explore and document the character of this target group and the significant ways in which it differs from one consisting of boys. *Journal of Adolescence, 23,* 287–303.

Mendes, L. (1997). Congestive heart failure in patients with coronary artery disease: The gender paradox. *American Heart Journal, 134,* 207–212.

Messing, K., Dumais, L., & Romito, P. (1993). Prostitutes and chimney sweeps both have problems: Towards full integration of both sexes in the study of occupational health. *Social Science and Medicine, 36*(1), 47–55.

Nasar, J.L., & Julian, D.A. (1995). The psychological sense of community in the neighborhood. *Journal of the American Planning Association, 61,* 178–184.

National Advisory Council on Aging. (1999). *1999 and beyond: Challenges of an aging society.* Ottawa: Government of Canada.

National Coordinating Group on Health Care Reform and Women. (2000). *Women and health care reform.* Ottawa: Women's Health Bureau, Health Canada.

National Institutes of Health. (1999). *Agenda for research on women's health for the 21st century: A report of the Task Force on the NIH Women's Health Research Agenda for the 21st Century.* NIH Publication #99-4385. Bethesda, MD: US Department of Health & Human Services, Public Health Services, National Institutes of Health.

Nicholas, D.R. (2000). Men, masculinity, and cancer: Risk-behaviors, early detection, and psychosocial adaptation. *Journal of American College Health, 49*(1), 27–33.

Parker, R., Easton, D., & Klein, C. (2000). Structural barriers and facilitators in HIV prevention: A review of international research. *AIDS, 14*(1), S22–S23.

Proctor, G. (2001). Listening to older women with dementia: Relationships, voices and power. *Disability and Society, 16,* 361–376.

Rigby, K. (1998). The relationship between reported health and involvement in bully/victim problems among male and female secondary school children. *Journal of Health Psychology, 3,* 465–475.

Rothbard, A.B., & Azarian, K. (1998). Race influences access and intensity of behavioral health care in a Medicaid managed care program. *Association for Health Services Research, 14,* 83 [Abstract].

Roxburgh, S. 1998. Gender differences in the effect of job stressors on alcohol consumption. *Addictive Behaviors, 23*(1), 101–107.

Saringiani, P., Ryan, L., & Petersen, A. (1999). Prevention of high-risk behaviors in adolescent women. *Journal of Adolescent Health, 25*, 109–119.

Sowell, R., Moneyham, L., & Aranda-Naranjo, B. (1999). The care of women with AIDS — special needs and considerations. *Nursing Clinics of North America, 34*(1), 179–202.

Taussig, H.N., & Litrownik, A.J. (1997). Self and other directed destructive behaviors: Assessment and relationship to type of abuse. *Child Maltreatment, 2*, 172–182.

Thomsson, H. (1999). Yes, I used to exercise, but. . . — A feminist study of exercise in the life of Swedish women. *Journal of Leisure Research, 31*(1), 35–56.

Washington, S. (1999). Gender, technology, and environmental policy. *Bulletin of Science, Technology and Society, 19*(5), 365–371.

Waxman, B. (1996). Commentary on sexual and reproductive health. *Sexuality and Disability, 14*, 237–244.

Working Group on CIHR, Gender and Women's Health Research. (2000). *A women's health research institute in the Canadian Institutes of Health Research: A proposal submitted by the Working Group on CIHR, Gender and Women's Health Research.* Ottawa: Canadian Women's Health Network.

World Health Organization. (1998). *Ageing and health (AHE): Programme directions and partnerships.* Geneva: Author.

Znajda, T.L., Wunder, J.S., Bell, R.S., & Davis, A.M. (1999). Gender issues in patients with extremity soft-tissue sarcoma: A pilot study. *Cancer Nursing, 22*(2), 111–118.

Authors' Note

We wish to acknowledge the contributions of all participants to the consultation process, and the members of the Institute Advisory Board: Jean Gray (chair), Joan Anderson, Penny Ballem, François Béland, Sandra Bentley, Madeline Boscoe, David Hart, Abby Hoffman, Danielle Julien, Ilona Kickbusch, Yvonne Lefebvre, Heather Maclean, Ian Manion, Karen Messing, Barbara Neis, Irving Rootman, Jacques Simard, and Michael Stones. Finally, we wish to acknowledge the role of the CIHR in creating the Institute of Gender and Health.