WOMEN, GENDER AND HEALTH:
A Review of the Recent Literature

B. L. Janzen

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Contents

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Executive Summary

This study presents a broad overview and synthesis of the recent research literature on the major psychosocial influences on women's health. Part 1 reviews the variability of health among women, with a particular emphasis on diversities in health according to women's major social roles of partner, parent and worker. The context within which social roles are carried out, particularly the socio-economic context, is identified as a critical factor. While research examining women's health within the context of both social roles and material circumstances have produced complex findings, the research reviewed in this study clearly suggests that to appropriately document and understand the variability of health among women, attention to the particular circumstances of women's lives is required. This point is further highlighted in sections describing the health issues of older women, Aboriginal women, and immigrant and refugee women.

Part 2 begins with a review of the research on differences between men and women on various indicators of health and ill-health. Frequently mentioned throughout the literature is the apparent paradox in women's and men's health: men's higher rate of mortality and women's higher rate of morbidity. Recent evidence demonstrating the complexity and variability of gender differences in health is reviewed, suggesting that broad generalizations about health-related gender differences are inappropriate. As a means of clarifying more fully the significance of gender as a determinant of health, gender is examined as it interacts with other social characteristics associated with health and disease, such as socio-economic status, paid and unpaid work, exposure to stressors, and social support. The research that attempts to explain gender related differences in health also is examined, among which social role explanations dominate. Possible reasons for the diminishing longevity advantage of women over men in recent years also is discussed.

While the number of studies concerning women's health has multiplied in recent years, this review of the literature identified a number of general gaps in knowledge, particularly with respect to the Canadian context:

1. More investigations are needed of the relationships among and between social roles, including the influence of particular social role characteristics on health as well as the qualitative experience of these roles.

2. Social roles beyond that of parent, partner, and paid worker need to be incorporated into the broader social roles research literature. One example would be the caregiver role.

3. More research is required on the relationship between women's social roles, socio-economic circumstances and health throughout the life course.

4. There is a need for more research regarding the determinants of healthy aging among women.

5. Studies are required to address the health needs and determinants of rural women.

6. Research is needed to examine the variability of health among Canadian women of Aboriginal origin, including factors associated with positive physical and mental well-being.

7. Research examining the variability of health among immigrant and refugee women is needed. In particular, research needs to explore how social, economic, behavioural and psychological factors are associated with changes in the health status of immigrant and refugee women over time.

8. The investigation of the mental and physical health effects of discrimination as a function of one's gender, race, sexual orientation and/or disability is required, including an examination of how these various statuses interact.

9. Measures of health determinants which more accurately reflect the realities of women's lives (e.g., paid/unpaid work, social support, exposure to stress, socio-economic context) require development.

10. Continued gender-comparative research is critical to understand the influence of gender on health and to identify important differences and similarities between men and women regarding the major determinants of health.

WOMEN, GENDER AND HEALTH: A Review of the Recent Literature

INTRODUCTION

Feminist critiques of psychological theory and research have drawn attention to psychology's history of assuming a male standard for human behaviour, or rather, a "white, middle-class, heterosexual, able-bodied male" standard.[1] Similarly, there has been a growing awareness of the health sciences' neglect of women's health problems and their propensity to generalize from men's experiences to women.[2]

The long history of excluding women as research participants has especially hindered advancement in the area of women's health. Significant health risk factors identified for men have been too readily extrapolated to women, with the consequence that risk factors which may be of greater importance in women's lives have received far less attention.[3] In instances where women were studied,[4] the focus of investigation traditionally has been restricted to their reproductive capabilities.[5] Kriegerr *et al* (1994) noted:

> Women are often discussed as a single group defined chiefly by biological sex, members of an abstract, universal (and implicitly white) category. In reality, we are a mixed lot, our gender roles and options shaped by history, culture, and deep divisions across class and colour lines. Of course, it is true that women, in general, have the capacity to become pregnant, at least at some stages of our lives. Traditionally, women as a group are defined by this reproductive potential. Usually ignored are the many ways that gender as a social reality gets into the body and transforms our biology. (p. 18)

[1]Yoder and Kahn, 1993, p. 846.
[2]Stanton, 1995; Rodin and Ickovics, 1990.
[3]Ruiz and Verbrugge, 1997.
[4]Kitts and Hatcher Roberts, 1996.
[5]Interestingly, according to Walters and Denton (1997), "in seeking to reveal the implications of medicalization and medical dominance, the agendas of feminist scholars have often been shaped by the focus of medicine, that is, reproductive issues" (p. 54).

An androcentric bias also is apparent in the psychosocial health literature. Early research on women and health focused on how family roles related to marriage, childbirth and menopause were associated with women's mental health.[6] Comparable studies of men, however, focused on physical health outcomes, especially the relationship between heart disease and job conditions. Much of this bias is still evident in the research, although the number of women entering the paid workforce has increased substantially in recent years.[7]

Theoretical and research attention in the health sciences literature is focussing increasingly on determinants of health beyond biology and health care, and toward comprehensive frameworks which encompass multiple interacting biological, social, behavioural and psychological imperatives.[8] Recent critiques of the literature on women's health have noted a lack of detailed attention to issues of gender and race/ethnicity.[9] Only recently has the social patterning of health among women been explored in depth and as the primary focus of investigation, rather than as an aside to men.[10]

Women's lives are beginning to be documented more accurately and fully, including the relationship between work (paid and unpaid) and well-being, and other influences on health such as social roles, social class, age and sexual discrimination. Gender also is becoming a much more visible construct in the literature, including the study of its influence on the risk of disease, patterns and quality of health care, and the types of questions researchers choose to ask and investigate.[11] Gender-comparative research is elucidating both commonalities and differences between men and women in the nature of the relationship between psycho-social characteristics and health and disease.[12]

This report reviews and synthesizes the research literature on the major psycho-social determinants of women's health. The current health status of women is described, with an emphasis on the variability of health *among* women according to their social roles and socio-economic status. To clarify more fully the significance of gender as a determinant of health, research on differences in health status *between* men and women is examined—in particular, how gender interacts with other social characteristics associated with health and disease. The research that attempts to explain gender-related differences in health also is considered.[13]

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[6]Barnett, 1997.
[7]Hall, 1989.
[8]Evans and Stoddart, 1990.
[9]Kaufert, 1996; Love *et al*, 1997.
[10]Adler and Coriell, 1997.
[11]Lorber, 1997; Kitts and Hatcher Roberts, 1996.

[12]The influence of gender and other social status characteristics also are being examined in clinical research on physician decision-making (Lorber, 1997; McKinlay *et al*, 1996). For example, some evidence suggests that physicians may not treat women with symptoms of heart disease as aggressively as men with comparable symptoms (McKinlay, 1996). The gender of the physician also may influence the type of treatment prescribed: women are more likely to undergo screening with Pap smears and mammograms if they see female rather than male physicians (Lurie *et al*, 1993). The need to include women in clinical trials also has been increasingly recognized.

[13]This study restricts itself to research published after 1980, with an emphasis on published articles in peer-reviewed journals. Where available and relevant, Canadian research is highlighted. For the sake of manageability, the focus will be on research concerning the adult age ranges.

PART 1 THE DIVERSITY OF HEALTH AMONG WOMEN

While recognition of the heterogeneity of women's lives is becoming increasingly apparent in the health literature, research examining the social and structural patterning of illness and well-being among women is still in its infancy. Much of the literature, particularly in North America, has focused on differences in women's health according to major social roles: wife, mother, and worker. A major shortcoming of this focus has been the lack of a connection to the structural and material context within which women experience these roles.[1]

Many of earlier studies were limited to studying women's occupancy of a single role at a time. Inconsistencies in these research findings led to a growing realization that to examine the relationship between women's roles and well-being appropriately, the diverse and often simultaneous roles occupied by "real-life" women would have to be reflected better in the research (particularly as large numbers of married women with young children entered the workforce).[2]

Several contrasting views emerged in the health and social sciences literature concerning the association between multiple roles and women's well-being.[3] One such view proposed that women's multiple role experiences likely result in role overload and role conflict, leading ultimately to poorer physical and mental health. A second perspective focused on the potential psychological and social support benefits of multiple roles, likely serving to enhance women's physical and mental health.

MARITAL STATUS

Studies of marital status differentials in health report that on average married people tend to experience lower mortality and morbidity rates compared to unmarried adults.[4] While the precise relationship between marriage and health remains to be clarified, it has been hypothesized that healthier individuals may be more likely than their less healthy counterparts to get married in the first place (marriage selection), and/or that marriage itself may contribute to positive health outcomes through increased social support, stress reduction and/or a de-

[1] Macran, 1994; Arber, 1991.
[2] In 1993, 70% of women with children under the age of 16 were in the labour force, compared with 55% in 1981 (Statistics Canada, 1994).
[3] Waldron and Jacobs, 1989.
[4] Waldron, 1997; Arber, 1991.

creased likelihood of engaging in health-damaging behaviours (marriage protection).[5,6] Economic resources also may be particularly important for women. Wyke and Ford (1992) found that ownership of a car, along with social support, explained a significant portion of the difference in health between married and unmarried women. Similarly, Joung *et al* (1997) reported material circumstances to be the most important factor explaining variation in health status between divorced and married women.

Some longitudinal research suggests that marriage itself may exert a protective effect on women's health.[7] Among seriously ill women, marriage has been positively associated with survival.[8] On the other hand, several prospective studies have failed to find statistically significant associations between women's marital status and mortality.[9] Recent attention has focused on clarifying differences in well-being between various statuses of unmarried women (e.g., never married, divorced, etc.) with mixed results.[10] However, Elstad (1996) and Arber (1991) both found that previously-married homemakers were much more likely than previously-married employed women to report a chronic illness.

Particular groups of women may be differentially influenced by the potential positive effects of the marital role. Waldron *et al* (1996), in a longitudinal study of women in their middle years, reported a protective marriage effect only for women who were *not* in paid employment. Also, women who occupied neither the marital nor worker role had especially poor health as compared with their married or employed counterparts. Waldron and Jacobs (1989) similarly found that marriage had a significant protective effect only for women who were not in paid employment—effects which were stronger among white than black women. Cross-sectional studies also have indicated a stronger positive association between marital status and health for non-employed women compared with employed women.[11]

PARENTAL STATUS

Evidence regarding the relationship between women's parental status and health has been somewhat mixed. Some research suggests the presence of children under the age of 18 and living at home has little or no effect on health,[12] or that parenthood contributes positively to women's well-being.[13] Other studies, however, have associated motherhood with higher rates of mental and physical morbidity. Elliot and Huppert (1991) found women with young children most often experienced morbidity, but particularly if they also were working in a full-time paid job. Bird (1997) reported higher levels of psychological distress among women with children than those without, primarily due to increased economic pressures and difficulties with child care arrangements. Luecken *et al* (1997) found that full-time employed women with children experienced higher levels of psychological and physiological stress than working women without children at home, an effect which was independent of income, ethnicity, social support or number of children. Several studies have re-

[5]Waldron *et al*, 1996; Umberson *et al*, 1992.
[6]A third type of effect is indirect selection, which reflect the presence of characteristics which may influence both well-being and the probability of marriage. They are essentially potential confounders which may not have been controlled for in the design or in the analysis of the study (Waldron *et al*, 1997).
[7]Waldron and Jacobs, 1989.
[8]Burman and Margolin, 1992.
[9]Kotler and Wingard, 1989; Hibbard and Pope, 1991.
[10]Waldron *et al*, 1997; Goldman *et al*, 1995.
[11]Arber, 1991; Nathanson, 1980.
[12]Bird and Freemont, 1991.
[13]Ross and Bird, 1994; Walters *et al*, 1997.

ported more symptoms of distress among mothers with partners who did not do their fair share of the housework and/or child care.[14]

Some recent prospective evidence suggests that women who become parents before the age of 21 may experience poorer levels of mental health into their middle years than women who become parents at later ages.[15] Lone mothers report poorer health than either partnered women caring for children, or lone fathers.[16] Martikainen (1995a) reported lone mothers with *more* than one child had a higher rate of mortality than other groups. Also, some research suggests that lone mothers in paid employment report even worse health than lone mothers who are homemakers.[17] To complicate matters further, Macran *et al* (1996) reported that lone mothers with *full-time* employment experienced poorer psychosocial health than lone mothers with *part-time* employment (who, in turn, were similar in well-being to married women with young children). Thus, some evidence does suggest motherhood to be associated with poorer health when in combination with other conditions such as employment, an unequal division of labour at home, age, and lone parenthood.

EMPLOYMENT STATUS

The relationship between health and employment among women is complex. Available evidence suggests that paid work may certainly have a positive influence on women's well-being as a result of increased income, social support, and self-esteem.[18] On the other hand, the potential negative consequences of employment on health also exist, such as stresses associated with the "double day," or the psychological, physical, and/or chemical hazards of a particular work environment. Furthermore, much of the evidence on women, work and health is based on cross-sectional studies, making it difficult to clearly differentiate between "healthy worker effects" and/or employment as contributing to better health.[19] Inconsistent use of physical and/or mental health outcomes also makes integration of the literature difficult.

In cross-sectional research, paid employment has been associated consistently with positive mental and physical health.[20] Walters *et al* (1995), using Canadian data, reported that employed women, compared with full-time homemakers, were more likely to rate their health positively and less likely to indicate activity limitations. Macran *et al* (1994) found that unemployed women looking for paid work were more than one and one-half times as likely as women in full-time employment to rate their health poorly. Several prospective, longitudinal studies (controlling for initial health status) also provide evidence for health benefits of paid employment among women. For example, Hibbard and Pope (1991) reported a 70% greater risk of death among non-employed than employed women (though morbidity was not significantly different between the two groups). Similarly, Ross and Mirowsky (1995) found that full-time employment among women was associated with less rapid declines in self-rated health and in physical functioning with age compared to women without employment—a result which did not significantly vary by race or marital status. Thus, some research does suggest an overall positive influence of employment on women's well-being.

[14] Lennon, Wasserman, and Allen, 1991; Ross and Mirowsky, 1988.
[15] Williams *et al*, 1997.
[16] Macran *et al*, 1994; Popay and Jones, 1990.
[17] Arber *et al*, 1985.
[18] Messias *et al*, 1997.
[19] Repetti, Mathews and Waldron, 1989.
[20] Arber, 1991.

However, in contrast to the findings of Ross and Mirowsky (1995), other research suggests that the effects of employment on a woman's physical and mental health is contingent upon other characteristics and/or involvement in other roles. For example, Waldron and Jacobs (1988, 1989) reported more positive effects of work on health for unmarried than married women, especially among Caucasian women. Among midlife and older women, longitudinal data suggested a similar risk of coronary heart disease for employed and non-employed women, but the risk of developing the disease increased with the number of children among employed women, but not among homemakers.[21] Kotler and Wingard (1989) reported that neither employment nor the number of children was a significant predictor of mortality risk among women. On the other hand, homemakers with four or more children were at greater risk of early death than other women. In her extensive review of work and health among mothers, Romito (1994) concludes employment tends to be associated with better physical and mental health in mothers, though more inconsistent effects are reported with samples of mothers of babies or very young children.

Conflicting findings have been reported regarding number of hours worked and well-being. Some research suggests that part-time employment is more beneficial to women's well-being than full-time hours,[22] particularly for lone mothers,[23] whereas other research has pointed to a general health advantage of full-time over part-time employment.[24] The relationship between number of hours worked and health outcomes has not been sufficiently examined to draw any definite conclusions.

Research also suggests that specific work conditions, such as exposure to health hazards, work pace, work control, and job rewards also may be important in determining the impact of employment on women's well-being.[25] For example, Lennon and Rosenfield (1992) found that women employed in jobs involving high levels of autonomy reported better psychological health compared to women who were homemakers or women whose paid employment had little work-related autonomy. Hibbard and Pope (1993) found that role characteristics such as social support at work and within marriage, equality in decision-making and companionship, were predictive of women's health over time. Along the same lines, Barnett *et al* (1992) prospectively examined the influence of changes in job quality on women's mental health and whether family roles modified the association. Results indicated that among non-partnered women and childless women, levels of psychological distress increased with declining job role quality. However, among women with partners and women with children, job role quality was not related to distress. Research examining the potential interaction between unpaid domestic work (e.g., child care, housework, caregiving, etc.) and paid employment on women's well-being have produced inconsistent findings.[26] More research is clearly needed documenting the unpaid work roles of women and the effects of these roles on physical and mental health.

The belief has been forwarded that as women increasingly combine paid employment with traditional roles of mother and spouse, role overload and conflict will occur, increasing the likelihood of ill-health and earlier death. The studies reviewed to date, however, suggest paid employment generally has positive effects on women's health (although methodological issues preclude definitive conclusions regarding cause and effect). Work may be particularly beneficial

[21] Haynes and Feinleib, 1980.
[22] Hall, 1992.
[23] Macran *et al*, 1996.
[24] Macran *et al*, 1994.

[25] Walters *et al*, 1997; Walters *et al*, 1996; Hall, 1992.
[26] Walters *et al*, 1997; Hall, 1992; Bartley *et al*, 1992.

for particular sub-groups of women such as unmarried women, and those who are fortunate to have a job with favourable characteristics.

Regarding the potential dangers of combining more than one role, most of the evidence suggests occupying multiple roles to either have no or minimal effects on morbidity and/or mortality, or positive effects.[27] The most current research has attempted to relate the finer details of women's work, parent and partner roles, and their interaction, with health. As suggested in the research described above and succinctly summarized by Doyal (1994), the benefits of paid employment can be constrained by the domestic circumstances of the woman and/or by the nature of the job, among others:

> Neither 'women' nor 'work' are homogeneous categories. Factors such as a woman's marital status, the domestic division of labour in her household, her age, the number of her dependents, her skills and her attitudes to employment will all affect the influence of work on her well-being, as will the nature of the job itself .... Hence large-scale studies comparing 'housewives' with women who also are employed outside the home can tell us very little either about the impact of the work experiences on the health of different groups of women, or about sex differences in occupational health. The key question is not whether paid work in general is good for all women, but rather what the conditions are under which specific types of work will be harmful or beneficial for particular women in particular circumstances. (p. 67)

The socio-economic conditions of women's lives are another aspect which needs to be examined when considering the variability of health among women. According to Arber (1997), "many 'role based' analyses have failed to analyze the effects of roles within the structural context of women's lives. It is essential to consider both women's roles and the material circumstances within which those roles are enacted" (p.776).

ROLES AND STRUCTURE

Overall, the research indicates a strong association between social economic status (SES) and a variety of health outcomes—a relationship which occurs at all levels of the SES hierarchy.[28] Compared to research with male participants, the SES health gradient among women has received less attention. However, evidence is accumulating that a similar relationship exists for women as for men, namely, that lower SES increases women's vulnerability to ill-health and death.[29] Particular groups of women may be especially likely to perceive their health negatively, such as those lower in the occupational status hierarchy, the unemployed, lone parents, and those residing in poorer households.[30]

Several national Canadian surveys have shown a positive relationship between women's mental and physical self-rated health and various indicators of SES.[31] A number of health risk factors also may vary according to socio-economic context. For example, Millar and Stephens (1993) reported that women with lower educational attainment were more likely than those with higher education to smoke, be overweight and inactive. The results of recent Canadian research also suggests that women from higher SES groups are more likely than those from lower groups to participate in cervical and breast cancer screening.[32]

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[27] Kolter and Wingard, 1989; Weatherall, Joshi, and Macran, 1994; Hibbard and Pope, 1991, 1993; Martikainen, 1995a; McDonough, 1997.

[28] Adler *et al*, 1994.
[29] Adler and Coriell, 1997.
[30] Macran *et al*, 1994.
[31] Statistics Canada, 1995b; Walters *et al*, 1995.
[32] Edwards and Boulet, 1997; Katz and Hofer, 1994; Snider *et al*, 1997.

Research examining women's health within the context of both social roles and material circumstances have produced complex findings. In a qualitative study of Canadian women, Walters (1993) demonstrated how participants' perceived experience of psychological distress varied according to their social class, labour force involvement, ethnicity, and family characteristics. Arber *et al* (1985) found that for women under 40 years of age, homemakers reported significantly better health than women employed in full-time, lower status jobs. The results of Arber (1997) suggest that living in poor material circumstances may have a particularly strong negative impact on non-employed women compared with other groups. She found that non-employed women living in owner-occupied homes reported much better health compared to non-employed women living in rented public housing. Arber proposes that poor self-assessed health may be associated with a lack of paid employment only when accompanied by disadvantaged material circumstances. Elliot and Huppert (1991) reported that paid employment (particularly full-time) was associated with better physical well-being than that reported by homemakers, especially among women with middle-class husbands. Contrary to Bartley *et al* (1992), no such effect was observed on women's mental health. Haynes *et al* (1980) found that female clerical workers were almost twice as likely as blue- or white-collar women to develop heart disease. Among the clerical workers, single or married women without children had a similar risk of developing heart disease as other workers. However, married clerical workers with children had a much higher risk of disease (especially if married to men with blue-collar jobs) than non-clerical workers with the same family makeup. Arber (1991) reported the highest rate of long-term illness among unemployed, previously-married women living in public housing and belonging to an unskilled, manual class.

The majority of studies generally indicate poorer health among women in more disadvantaged than advantaged economic circumstances. Furthermore, paid work seems to be associated with better health in women of all classes compared with women who are not working. Exceptions also have been reported. Lone mothers, often at the lower end of the SES hierarchy, may experience particularly poor health compared to other women, especially when employed full-time.[33] Moser (1988) reported a slightly higher risk of mortality among employed women occupying full-time, white-collar positions. Similarly, Bartley *et al* (1992) found lower levels of physical and psychological morbidity among employed women compared with homemakers, particularly among women working part-time (and especially with respect to psychological well-being). However, the relationship between employment and health was influenced by SES: a positive effect of paid work was observed among women in clerical and manual occupations, but not among women in managerial occupations. Walters and Denton (1997), in their study of Ontario women, found higher levels of self-reported stress among women in more advantaged than those in disadvantaged material circumstances. Similar findings were reported by Walters *et al* (1995) using data from the 1990 Health Promotion Survey. While Walters and Denton (1997) suggest the need for closer examination of the lives of middle-class women "whose experiences and problems of living we sometimes neglect because they are relatively privileged" (p. 64), they also propose closer scrutiny of the social construction of stress:

> If middle-class women express the problems they experience in terms of stress and tiredness, how do other women articulate related experiences? Has the language of health—and stress—been adopted by women of higher socioeconomic status, while women who are

[33] Arber *et al*, 1985; Macran *et al*, 1996.

> more disadvantaged use another discourse? The challenge we face is also to capture the problems of living of women of lower socio-economic status and to show how these find expression. The language may not be one of health, yet the effects may be increased ill health and earlier death. (p. 64)

Several recent cross-cultural studies have examined whether broader economic and social policies influence the relationship between structural conditions, social roles, and ill-health among women. For example, Arber and Lahelma (1993a) compared two countries in which considerable differences exist regarding women's economic independence and attachment to the labour force. In Finland, most women participate in the labour force full-time. The Finnish state also provides much more adequate day care and parental leave than many other countries. In contrast, British women are more likely to be full-time homemakers or involved in part-time employment (and therefore less independent economically). Results indicated, consistent with previous studies, that British women's family roles and material circumstances (housing tenure) were associated with their health. However, this relationship did not hold true among Finnish women. More specifically, previously-married women (the majority of whom were not in paid employment) tended to experience poorer health in Britain but not in Finland. The authors attribute this difference to the high levels of full-time employment among Finnish women, along with social policies which promote the "continued economic integration and well-being of previously-married women in Finland." The authors conclude that their findings:

> .. . . are consistent with the thesis that paid employment is crucial for both financial and physical well-being, and that British employment and child care policies which do not facilitate the economic independence of women may have adverse health consequences. (p. 135)

Travers (1996) examined the nature of nutritional inequities among economically disadvantaged women in a city in Nova Scotia. Her description and analysis highlighted the socio-economic context and constraints within which the women's domestic role of planning, securing, and preparing of meals took place. The study documented how supermarkets were often geared toward shoppers with money, the availability of a car, and a large enough home to store groceries bought in bulk (which is often less expensive). As well, inner city stores of the same chain were often found to be more expensive than their suburban counterparts. Most of the women participants did not have the extra money to travel further distances to shop at stores with cheaper prices. Many of the women participating in the study were on some form of social assistance, with a limited food allowance which made it difficult if not impossible to purchase nutritious food on a regular basis. As Travers concludes: "In essence, the government policy of fiscal restraint was systematically denying the most disadvantaged members of society adequate resources to achieve optimal nutritional health, and thus was working to actively construct nutritional inequities" (p. 550).

Thus, the literature suggests a complex relationship between women's roles and health, particularly when taking into consideration the socio-economic context. However, recent literature emphasizes the need also to consider more intricate interactions:[34]

> . . . studies that examine either gender or race or class or age will be unable to understand individuals, groups, or social life in appropriately complex ways. Indeed, their conclusions may even be misleading because of the failure to appreciate variation among individuals and within group experience. (p. 584)

[34]Dressel, Minkler and Yen, 1997.

To explore more closely how factors such as age and ethnicity intersect with women's roles and structure to influence well-being, the next sections will focus on the health of several groups of women: older women, women of Aboriginal origin, and immigrant women.

OLDER WOMEN

As a result of normal aging processes, the prevalence of physical health problems generally increase with age. The proportion of Canadian women over the age of 55 reporting an activity restriction, physical limitation, or a need for assistance with daily activities is positively associated with age.[35] Older women are much more likely than their younger counterparts to report life-endangering conditions such as heart and lung disease, and chronic diseases, particularly arthritis and osteoporosis.[36] Older women are less likely than younger women to rate themselves as healthy.[37] On the other hand, the majority of women over the age of 55 (and over the age of 75) rate their health as "good" or better.[38]

Decreases in emotional health, particularly depression, are associated with the emergence of chronic health problems and disability.[39] However, aging in and of itself is not necessarily associated with a higher risk of distress. Walters *et al* (1995) found women in mid-life to report a more stressful life than either females in their teens or in their retirement years. Similarly, using data from the 1994/95 National Population Health Survey, Wade and Cairney (1997) reported that the prevalence of depression among women generally decreased with increasing age, after controlling for various socio-demographic factors.

[35]Rosenberg and Moore, 1997.
[36]Denton and Walters, 1997.
[37]Walters *et al*, 1995.
[38]Rosenberg and Moore, 1997.
[39]Roberts *et al*, 1997.

As is the case at younger ages, the health of older women is a result of the complex interaction between a variety of social, psychological, and biological imperatives.[40] Unfortunately, this perspective is not considered consistently in the research literature, perhaps a result of "an ageist image of elderly people as a homogeneous group."[41] Research on women's roles and well-being has been largely restricted to the study of young and middle adult women. Recent critiques of the multiple role literature have drawn attention to the lack of inclusion of roles that women may take responsibility for during their later years, such as care of elderly relatives.[42] Some research has indicated that informal caregiving responsibilities can lead to decreases in emotional well-being, particularly the development of depressive symptoms.[43]

Results from a recent cross-sectional survey in Ontario indicated higher rates of psychological disorders, mental health service utilization, and disability among caregivers (the majority were women) than non-caregivers.[44] Another critical issue involves the potential impact that caregiving may have on women's employment patterns and thereby on their short- and long-term financial security. For example, a recent study found that women involved in caregiving were more likely to work fewer hours as a consequence, or to quit work entirely.[45] Further, the hours of paid employment forfeited were not recovered when caregiving responsibilities ended.

On the positive side, some evidence suggests an association between the caregiving role and positive psychological well-being. For example, Adelmann (1994) reported that women's involvement in the caregiver role, in combination

[40]Payne *et al*, 1997.
[41]Arber and Ginn, 1993, p. 33.
[42]Doress-Worters, 1994.
[43]Parris Stephens, Franks, and Atienza, 1997.
[44]Cochrane, Goering and Rogers, 1997.
[45]Pavalko and Artis, 1997.

with other roles, was associated with fewer symptoms of depression and higher levels of perceived control and life satisfaction. Several studies also have indicated that women's involvement in caregiving does not significantly lessen their participation in other voluntary, personal, family and community interactions.[46] Similarly, Hong and Seltzer (1995), in their longitudinal study of women over the age of 55 who took care of an adult child with mental disability, found that holding multiple roles was associated with lower levels of depression.

Whether the caregiving role is positively and/or negatively associated with women's health requires closer scrutiny. Some research has already suggested the likely complexity of the relationship; that is, how caregiving is experienced may be influenced by a broad array of factors, such as previous psychological well-being, social integration, timing and duration of the caregiving[47] and the nature of the care recipient's impairment.[48] Unfortunately, studies of employed women as elder carers have mostly appeared in the gerontological literature, but have been largely absent in the broader literature on multiple roles. According to Doress-Worters (1994), "such integration is essential to framing a research agenda which can adequately assess the cumulative and separate effects of the full range of women's roles over the life course on women's overall mental well-being" (p. 83). The socio-economic context of the caregiving role also needs to be examined, and whether the potential health impact of caregiving varies according to indicators of advantage/disadvantage.

According to 1995 statistics from the National Council of Welfare (1997), approximately 23% of women in Canada over the age of 65 live below the poverty line, compared with 18% of adult Canadian women. Particular groups of older women, that is, elderly women living alone, may be especially vulnerable to ill-health given their disadvantaged economic position.[49] In Canada in 1995, 43% of unattached women over the age of 65 reported an income below low-income cut-offs.[50]

While there is a tendency in research to group all unattached women together as "unmarried," recent research suggests important differences in economic well-being between different classifications of unattached women. Using Canadian data, McDonald (1997) found retired, widowed women to have a lower average income than ever-single, divorced, or separated women. Almost one-half of retired widows reported poverty-level incomes:

> Widows under the Low Income Cut-Off are the most disadvantaged of the disadvantaged. They are the oldest, they have only grade school education and low occupational prestige; they are the most likely to be alone and the most likely to have previously worked in the periphery of the economy. Widows below the Low Income Cut-Off are the least likely to have planned for retirement and are the least likely to have carried out any retirement preparations. In light of this information, it is no surprise that widows below the Low Income Cut-Off have an average annual income of ten and a half thousand dollars—an amount that many would deem unacceptable. (p. 578)

While studied much less frequently than younger samples (and men), research suggests the existence of an SES-health gradient among older women. Arber and Gin (1993) examined the degree to which differences in health among older women in Britain were associated with their position in the social hierarchy (based on occupation prior to retirement), and their material resources. Results suggest that although par-

[46] Farkas and Himes, 1997.
[47] Moen, Robison, and Dempster-McClain, 1995.
[48] Starrels *et al*, 1997.
[49] Rosenberg and Moore, 1997.
[50] National Council of Welfare, 1997.

ticipants had retired many years prior to the study, women who had been employed in higher occupational classes rated their health more positively and reported less functional disability than women from lower occupational groups. Current living conditions also exerted an influence, with elderly women in advantaged material circumstances reporting significantly better health than those in more disadvantaged conditions, after controlling for age and class. Level of functional disability, however, was not influenced by current material circumstances. Relatively few Canadian studies have examined the SES-health gradient among older people, particularly women.[51]

ABORIGINAL WOMEN

Conclusions regarding the well-being of Canadian women of Aboriginal origin are difficult to draw given varied geography, culture and experiences. Available information often refers to specific groups of Aboriginal women, and therefore, generalization is not always possible. As noted by Dion Stout (1996), "it is important to remember that Aboriginal women do not all suffer the vagaries of ill-health equally and always. In the final analysis, the diversity and ingenuity of Aboriginal women cannot be ignored" (p. 1).

Approximately 4% of all women in Canada in 1991 were of Aboriginal origin.[52] While research specifically examining the well-being of Canadian Aboriginal women is limited, available statistics indicate that, on average, their health status is considerably poorer than non-Aboriginal Canadian women.[53] The life expectancy of registered Indian women in 1991 was approximately seven years shorter than that of the total population of Canadian women.[54] **TABLE 1** illustrates the diversity of life expectancy estimates among Canadian Aboriginal women and the overall female population. According to these figures, Inuit women have the shortest life expectancy, followed by registered North American Indian women on reserves.

TABLE 1
ESTIMATED LIFE EXPECTANCY AT BIRTH OF CANADIAN FEMALES
Total and Aboriginal Populations, 1991

Total Population	**80.9 yrs.**
Total North American Indians	**74.9**
Registered North American Indians	**74.0**
On-reserve	69.6
Non-reserve, rural	75.0
Non-reserve, urban	79.0
Non-Registered North American Indians	**77.9**
Rural	75.5
Urban	79.0
Métis	**76.9**
Rural	75.0
Urban	78.0
Inuit	**68.8**

Source: M.J. Norris et al., "Projections of the Aboriginal Identity Population in Canada, 1991-2016," research study prepared by Statistics Canada, 1995. In Report of the Royal Commission on Aboriginal Peoples, 1996, Vol. 3 Gathering Strength, p. 121.

Aboriginal women have higher all-cause mortality rates compared to the general Canadian female population.[55] While the major causes of death are similar for both groups, differences emerge in the proportionate importance of each cause of death.[56] Registered Aboriginal women are more likely than the general population of

[51]Cairney and Arnold, 1996.
[52]Statistics Canada, 1995a.
[53]MacMillan, MacMillan, Offord, and Dingle, 1996.
[54]Statistics Canada, 1995a.
[55]Mao, Moloughney, Semenciw, and Morrison, 1992.
[56]McBride and Bobet, 1992.

Canadian women to die as a result of injuries, respiratory diseases (e.g., pneumonia, bronchitis), infection, and "other" causes, while death resulting from circulatory problems (e.g., heart disease, stroke) and cancer are proportionately less common (see **TABLE 2**).[57] With regard to morbidity, sub-groups of the Aboriginal female population are more likely than the total population of Canadian women to experience a variety of health conditions including tuberculosis,[58] respiratory infections,[59] diabetes mellitus[60] and injuries.[61]

While some research suggests Aboriginal women may have a lower overall incidence of cancer than non-Aboriginal women, elevated risks for specific types of cancer among Aboriginal women have been reported, such as cancer of the cervix, gallbladder, and kidney.[62] Some research also suggests that the risk of cancer is increasing among Aboriginal women. For example, in a study examining Saskatchewan cancer trends over a 20-year period, registered Indian women were found to have a similar overall risk of cancer to that of the general female population by the end of the study period, primarily due to increases in lung, breast and cervical cancers.[63, 64]

TABLE 2
SELECTED CAUSES OF DEATH AS A PERCENTAGE OF ALL DEATHS
Canadian Females, 1992

CAUSE OF DEATH	REGISTERED INDIAN POPULATION	TOTAL POPULATION
Circulatory Diseases	26.7	47.2
Other Diseases(†)	27.4	5.2
Injuries	18.2	5.2
Cancer	15.9	32.2
Respiratory Diseases	9.8	9.3
Infectious Diseases	2	0.9

(†) Includes endocrine/metabolic/immunity disorders; diseases of blood/blood-forming organs; mental disorders; diseases of nervous system and sense organs; diseases of digestive system, genito-urinary system; complications of pregnancy/childbirth; diseases of skin and subcutaneous tissues, musculoskeletal systems; congenital anomalies; conditions from perinatal period; symptoms/signs and ill-defined conditions; and others.
Source: Health Canada, Medical Services Branch, May 1995. In *Report of the Royal Commission on Aboriginal Peoples*, 1996, Vol. 3 Gathering Strength, p.122.

Tobacco use is associated with increased risk for many diseases, and women of Aboriginal origin are far more likely than the general female population to smoke regularly. Approximately 21% of women in Canada reported smoking daily in 1990[65] in contrast to 41% of North American Indian women, 48% of Métis

[57]Overall rates can obscure significant variations within a particular category of death. For example, in a study of British Columbian women, the rate of death due to cervical cancer was much higher among Aboriginal (33.92 per 100,000 population) than non-Aboriginal women (8.14 per 100, 000) (Band, Gallagher, Threlfall, Hislop, Deschamps, and Smith, 1992).
[58]Wilkens, 1996.
[59]Kashuba *et al*, 1994; Fraser-Lee and Hessel, 1994.
[60]Pioro, Dyck, and Gillis, 1996; Young *et al*, 1990.
[61]MacMillan *et al*, 1996.
[62]Mahoney and Michalek, 1991.
[63]Gillis *et al*, 1991.
[64]Aboriginal women's higher rate of cervical cancer has been attributed in part to unsuccessful efforts to include more Aboriginal women in cancer screening programs. For example, Hislop *et al* (1992) reported that the participation of Aboriginal women in cervical cancer screening in British Columbia was much lower than non-Aboriginal women.

[65]Millar, 1992.

women, and 64% of Inuit women in 1991.[66, 67] Disability rates also are higher among Aboriginal women than Canadian women overall. Based on results of the Aboriginal Peoples Survey, approximately one-third of women of Aboriginal origin reported some type of disability, compared with 13% of the total Canadian female population.[68] As shown in **TABLE 3**, differences in disability between Aboriginal females and the general female population are largest among younger women.

Relatively few studies have systematically examined mental health issues among Aboriginal women. Higher rates of emotional ill-health among Canada's Aboriginal population has often been inferred indirectly from statistics on injury-related morbidity and mortality, homicides, incarceration and suicide.[69] The rate of suicide among Aboriginal females is approximately three times that of the overall Canadian female population.[70] Young Aboriginal women in particular appear to be at a higher risk for suicide: in a recent study in Manitoba, the suicide rate among women aged 15 to 19 years was over 23 times greater among Aboriginal than among non-Aboriginal women.[71] However, among older Aboriginal women (55+ years), the suicide rate was lower than among non-Aboriginal women in the same age category.

In a recent study of psychiatric service usage by Inuit women from the Baffin Island region, Abbey *et al* (1993) found depression, suicidal ideation and attempts, familial relationship problems, physical or sexual assault, and grief among the most common reasons for their referral for services. **TABLE 4** documents the extent to which Aboriginal women believe particular issues to be problematic within their communities—issues which no doubt impact on emotional and social well-being.

TABLE 3
PERCENTAGE OF WOMEN WITH DISABILITY(†) BY AGE
Canada, 1991

	Aboriginal Population	Total Canadian Population
Women 15+	32.8	12.8
15-24	23.2	7.1
25-34	24.8	8.7
35-54	37.0	13.7
55+	68.5	36.6

(†) Disability is defined as any self-perceived sensory, mobility, agility, or other physical/psychological limitations which have been present or will be present for at least 6 months. Source: *1991 Aboriginal Peoples Survey* and *1991 Health and Activity Limitation Survey*; in Ng (1996).

In a report by the Northwest Territories government, Aboriginal women also identified a number of influences on their emotional well-being (in addition to many of the ones listed in Table 4) including lone parenthood, loss of traditional values and spirituality, acculturation stress, poor self-esteem, unsatisfactory housing, poverty, effects of residential school abuse, grief, depression, and fetal alcohol syndrome.[72]

[66] Gill, 1995.
[67] Data on Aboriginal women's smoking are based on the 1991 Aboriginal Peoples Survey (APS). It is important to note that incomplete data are a limitation of the APS as a number of Aboriginal communities decided not to participate in the APS or the 1991 Census (Ng, 1996).
[68] Ng, 1996.
[69] Canada, Department of Health, Medical Services Branch, Steering Committee on Native Mental Health, 1992.
[70] McBride and Bobet, 1992.
[71] Malchy *et al*, 1997.
[72] In the Federal/Provincial/Territorial Working Group on Women's Health, 1993.

Aboriginal women's lower life expectancy and higher rates of morbidity compared with non-Aboriginal women have been attributed, in part, to the fact that Aboriginal women are more likely to live in disadvantaged economic and social circumstances. At the extreme, patterns of ill-health among some groups of Aboriginal people on reserves reflect grossly inadequate living conditions related to unsatisfactory sanitation facilities, inadequate water supplies, poor ventilation, no central heating, and poor air circulation.[73] The housing of Aboriginal people who move to urban centres also have been documented as often seriously substandard.

Clatworthy (1996) found that Aboriginal families, especially female-headed, lone parent families, were unable to obtain affordable housing large enough to meet their space needs. Williams (1997) recently investigated the socio-economic conditions of Aboriginal women in Toronto, noting the impoverished social and economic conditions within which some Aboriginal women lived, particularly non-partnered women with children.

Approximately one-third of women of Aboriginal origin in Canada have incomes below standard low-income cutoffs.[74] Low incomes are particularly prevalent among young Aboriginal women between the ages of 18 and 24 years. In 1990, 41% of Aboriginal women within this age range lived in a low income position, compared with 22% of the general population of Canadian women. The inequalities continue: compared with their non-Aboriginal counterparts, Aboriginal women, on average, have less formal education, higher levels of unemployment, are less likely to be employed in professional positions, and have less average employ-

TABLE 4
PERCENTAGE OF WOMEN REPORTING THEY FEEL SOCIAL ISSUES ARE A PROBLEM IN THE COMMUNITY WHERE THEY ARE LIVING
Canada, 1991

SOCIAL ISSUE	NORTH AMERICAN INDIAN WOMEN ON RESERVES OR SETTLEMENTS	NORTH AMERICAN INDIAN WOMEN OFF RESERVE	MÉTIS WOMEN	INUIT WOMEN
Unemployment	77.8	60.4	67.8	73
Alcohol Abuse	73.8	56.9	59.4	59.5
Drug Abuse	60	43.6	46	49.9
Suicide	36.5	21.6	23.6	42.8
Family Violence	46.6	38.2	42.4	45.5
Sexual Abuse	31.6	23.8	26.2	38.8
Rape	18	14.8	16.7	27.7

Source: Aboriginal Peoples Survey, 1991, special compilation; in Gill (1995).

[73]Young *et al*, 1991.
[74]Statistics Canada, 1995a.

ment earnings.[75, 76]

While connections between the health of Aboriginal people and broad indicators of socio-economic standing are made consistently in the health literature, relatively little systematic research has been conducted, particularly in regards to women. Young (1994) also points to a gap in knowledge regarding the impact of other social factors on the health of Aboriginal people, such as social support, social networks and stressful life events. Research which more clearly demonstrates the variability of health among Aboriginal women is also needed, particularly factors associated with positive mental and physical well-being.

IMMIGRANT WOMEN

Approximately 16% of the Canadian female population in 1991 were immigrants to Canada.[77] Relatively few large scale epidemiological studies have examined the health status of Canada's immigrant population. However, recent data suggest that immigrant women are, on average, healthier than their Canadian-born counterparts. As shown in **TABLE 5**, immigrant women, compared to those born in Canada, have a longer life expectancy, particularly those originating from a non-European country.[78] Canadian immigrant women also are more likely than non-immigrant women to live longer without disability or dependency.[79]

Consistent with a longer life expectancy, immigrant women, on average, tend to be in better health than Canadian-born women.[80] According to results of the 1994/95 National Population Health Survey, immigrant women were less likely than their Canadian-born counterparts to report having a chronic health condition, long-term disability or dependency due to a health problem. As with life expectancy, differences were widest between Canadian-born women and immigrant women born in non-European countries. Consistent with the above findings, a recent survey of newcomers to Ontario reported relatively few participants with life-threatening physical problems, chronic illness, or activity limitations.[81]

TABLE 5
LIFE EXPECTANCY BY ORIGIN
Females, Canada 1991

	LIFE EXPECTANCY AT BIRTH (Yrs.)
Canadian-born	80.4
European immigrants	81.6
Non-European Immigrants	85.7

Source: 1991 Census; Canadian Vital Statistics Data Base, 1990-1992; in Chen, Wilkins and Ng (1996).

Some researchers have used the term "healthy immigrant effect" to describe the greater likeli-

[75]Statistics Canada, 1995a.
[76]Adding to the economic hardship of Aboriginal women is the burden of lone parenting. Among women between age 15 and 64, Aboriginal women are much more likely than other Canadian women to be lone parents (15% vs. 7%), and are almost twice as likely to have at least three children. A similar relationship holds true among senior women (14% vs. 6%) (Statistics Canada, 1995a).
[77]Statistics Canada, 1995a.
[78]Chen, Wilkins and Ng, 1996.
[79]Chen, Wilkins and Ng, 1996.
[80]Chen, Ng and Wilkins, 1996.
[81]Matuk, 1996.

hood of healthier individuals to emigrate than those poorer in health.[82] As noted by Beiser *et al* (1995), the Canadian government also requires a certain standard of health for potential immigrants, and all must submit to a medical examination. Another contributing factor may involve differences in the prevalence of smoking—immigrant women are less likely than Canadian-born women to report tobacco use and thus may be at a lower risk of developing smoking-related illness.[83,84]

Methodological issues also may play a role in the findings. As noted by Chen *et al* (1996), self-reports of health and use of health services may be influenced by one's culture, and the method of data collection used may not be cross-culturally equivalent. Furthermore, the backgrounds of Canada's immigrants are varied. Thus, the European/non-European comparison in these two particular studies may have obscured finer, within-group differences. As commented by Estable (1986), "race, class and language intersect as significant factors to determine the specific quality of any immigrant women's life" (p. 1).

Compared with research on physical health, more research has focused on the mental and emotional well-being of immigrant people, and has tended to yield some inconsistent results. Walters *et al* (1995), using data from Canada's 1990 Health Promotion Survey, found minority group membership (as indicated by language) to be associated with an increase risk of stress. Similarly, Palacios and Sheps (1992) reported significantly higher rates of depression and anxiety among immigrant Hispanic American women living in Vancouver (28.6%) compared with Canadian-born women (5.5%). On the other hand, Noh *et al* (1992a) found a rate of depression among Korean immigrant women in Toronto that was similar to the general female population of women. Bagley (1993) also found few differences in psycho-social well-being between young elderly Chinese immigrants compared with several non-immigrant comparison groups.

The problem with many of the studies investigating the well-being of immigrant populations is that they tend to include too few variables to adequately capture the complex interplay of factors which likely influence their mental and physical health. Many studies simply do not have large enough samples to conduct more detailed analyses. According to Beiser *et al* (1995), a mistaken assumption is that "change inevitably creates a mental health risk." The decade-old report by the Canadian government which described numerous pre- and post-migration characteristics which may impact on the mental well-being of immigrant women and men is still often cited.[85]

Research with mental health clients suggest that a large number of immigrants who came to the host country as refugees may experience severe psychiatric symptoms attributable to experiencing multiple traumatic events, such as rape and

[82] Chen, Wilkins and Ng, 1996.
[83] Chen, Ng, and Wilkins, 1996; Millar, 1992.
[84] Millar (1992) reported that 24% of non-immigrant women over the age of 15 years, compared with 11% of Canadian, immigrant women smoked cigarettes every day. Foreign-born women were much more likely than Canadian-born to have never smoked, or, among smokers, to have smoked fewer and weaker cigarettes.

[85] Health Canada, 1988.

torture, prior to emigration.[86,87] Some research has tended to ascribe differences in health or health behaviour between immigrant and non-immigrant women to differences in cultural beliefs, another type of "pre-migration" factor. For example, research suggests that some immigrant women in Canada may be less likely than Canadian-born women to participate in cancer screening programs. In a study of the health status of Hispanic American immigrants in Vancouver, immigrant women with lower educational attainment were less likely than Canadian-born women to have had a Pap smear in the previous year, and also were more likely to report not knowing how to conduct a breast self-examination.[88] Similarly, in an analysis of Pap smear utilization from the Ontario Health Survey, Goel (1994) found that recent immigrants and women who could not speak an official language were less likely to have had a Pap smear.

While Edwards and Boulet (1997) found no significant differences in the breast-screening patterns of immigrant and non-immigrant women in Ontario, Maxwell *et al* (1997), using data from the National Population Health Survey, found that women reporting a birthplace in Asia (and to a lesser extent in South America/Africa) were less likely to report ever having a mammogram. While Maxwell *et al* (1997) caution readers not to rule out alternative explanations, they also suggest that "the increased risk of never being screened evident among Asian born women living in Canada is of interest given the potential role that unique cultural beliefs and attitudes about cancer risk and prevention may play in determining mammography participation" (p. 349). Thus, the focus is on internal, pre-existing characteristics of the group of women in question.

Another approach, such as that taken by Anderson *et al* (1995, 1993, 1991), has examined the structural conditions which might influence whether women are able to appropriately manage their health given their circumstances. Anderson *et al* (1993) has described how the management of diabetes by a group of Chinese immigrant women was influenced by the realities of their daily lives, particularly their often inferior position within the labour market:

> A woman's place in the lower echelons of the work force influences how her illness is managed in the workplace....For the most part, the immigrant woman was in a less privileged position than women from the Canadian mainstream. Without job security, many were forced to conceal their chronic illness. This can have deleterious effects on health. For example, they were reluctant to test their blood sugar at work or to inform co-workers about the signs of low blood sugar. To understand the immigrant women's experience with chronic illness, we must locate it within the context of her history as a woman (usually a woman of colour), and as a foreigner in a host country whose health care system is geared to the needs of the dominant majority. (p. 16-17)

The experiences of immigrant women can vary greatly in different areas of the country, depending on availability of services. For example, a recent study concerning the access of Vietnamese refugees to health services described problems obtaining needed psychological and employment assistance as a result of being in a smaller Canadian city lacking a large enough

[86]Beiser, 1989; Chi-Ying Chung and Kagawa-Singer, 1993; Kroll *et al*, 1989.
[87]Determination of mental health status based on service utilization has been criticized for being more of a reflection of help-seeking behaviour as opposed to an accurate indication of the nature and prevalence of mental health problems among immigrant groups.
[88]Palacios and Sheps, 1992.

ethnic population to provide the needed informal and formal social support.[89] Other research emphasizes the importance of the availability of social support by persons of similar background in the host country.[90]

Studies directly and systematically examining the relationship between immigrant women's physical and mental health and various social characteristics is lacking. Some research has been conducted which emphasizes the importance of various socio-demographic and post-migration factors, particularly as they relate to mental health. For example, Westermeyer, Neider and Vang (1984) found improvements in the mental health of Hmong refugees in the United States to be associated with job training and English language instruction, as well as the ownership of material possessions.

Many social factors which have been found to be associated with health in the general population of Canadians also emerge as significant with samples of immigrant Canadians. For example, Beiser *et al* (1993) found an association between risk of depression and job loss in a sample of Southeast Asian refugees in Vancouver. Westermeyer *et al* (1990) also found a relationship between receiving social assistance and level of psychiatric symptomatology. In the study by Chen, Ng, and Wilkins (1996), higher rates of chronic conditions and disabilities were reported among immigrants of lower SES, as reflected by lower household income and education. Unfortunately, results are not often presented separately for men and women. A notable exception is a study by Noh *et al* (1992b) of Korean immigrant women in Toronto. Noh and colleagues found depression to be significantly more prevalent among employed than non-employed immigrant women—a finding which is in contrast to a number of studies suggesting either no relationship between mental health and work or a positive one. As observed by the authors, "the salience of social roles and risk situations including employment may vary considerably across cultural and subcultural groups, hence the investigation of the mental health implications of these factors and situations should be most fruitful within cultural or multi-cultural perspectives" (p. 581).

More information is available regarding the economic well-being of immigrant women in Canada. Relatively few overall differences exist between immigrant and non-immigrant female Canadians with respect to educational attainment, percentage employed, and average income.[91] Canadian-born and immigrant women also are as likely to be employed as managers and professionals. However, potentially vulnerable subgroups of immigrant women also have been identified. Approximately one in five immigrant women living in Canada has an income which falls below Statistics Canada's low income cut-offs (in contrast to 16% of other Canadian women).[92,93]

Low levels of education and inability to speak English or French are other factors which have been identified as potentially influencing the economic situation of immigrant women, and hence their physical and emotional well-being. Several studies have documented the paid labour experiences of women who did not speak

[89] Stephenson, 1995.
[90] Lynam, 1985

[91] Statistics Canada, 1995a.
[92] Statistics Canada, 1995a.
[93] A much higher proportion of female immigrant children (37%) than their Canadian-born counterparts (17%) live within a low income situation. Senior immigrant women (26%) also are more likely than non-immigrant senior women to report low income (22%).

one of the official languages, characterized by poor earnings and long hours at physically demanding jobs, often in factories or various service industries.[94] Bolaria and Bolaria (1994) describe the low wages and often harmful work exposures that many Canadian immigrant women experience due to their higher concentration than non-immigrant women in farm, domestic and clothing industry employment.[95] Legault *et al* (1997), in their study of young immigrant families in Montreal (all respondents were women), noted that participants prioritized their social settlement problems in the following order: unemployment problems, communication problems, job access problems, financial problems, housing problems, discrimination and immigrant status. Other studies have identified perceived racial discrimination in the host country to be associated with higher levels of emotional distress among immigrants.[96, 97]

Various studies have suggested a relationship between length of time since emigration and health. For example, Chen, Ng and Wilkens (1996) reported that immigrant women who lived in Canada for less than eleven years were healthier than women who had been residents for a longer period of time. While such as association may be partly a function of country of origin (for example, if recent immigrants are more likely to originate from particular countries), research also needs to examine the extent to which various factors—behavioural, social, psychological and/or economic—are linked with changes (both positive and negative) in the health status of immigrant women over time.

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[94]Boyd, 1990; Seward, 1990.

[95]In 1991, 16% of employed immigrant women worked in construction, product fabrication or primary and processing occupations in contrast to 10% of Canadian-born women (Statistics Canada, 1995a).

[96]Moghaddam *et al*, 1990; Pernice and Brook, 1996.

[97]The majority of women who are in a visible minority in Canada are immigrants. Approximately 79% were 15 years of age and older in 1991 (Statistics Canada, 1995a). Visible minority women, despite higher education, are less likely than other Canadian women with similar education to be employed in administrative positions. Visible minority women also are more likely than the general population of Canadian women to have higher levels of unemployment and low incomes.

PART

2

GENDER DIFFERENCES IN HEALTH STATUS

Much of the gender and health research has documented differences in rates of mortality, illness, and use of health care services between men and women. Frequently mentioned throughout the literature is the apparent paradox in women's and men's health: men's higher rate of mortality and women's higher rates of morbidity. Canadian health figures, similar to data from much of the industrialized world, reveal that males have a high er rate of death than females at all ages.[1] However, the size of this difference varies throughout the life span, with the largest discrepancy between men and women emerging in early and middle adulthood, where death from external causes (e.g., motor vehicle accidents) occurs at a much greater rate for men. One consequence of these gender-related mortality rates is a longer life expectancy for women: in Canada in 1993, the average life expectancy at birth was 74.9 years for men and 81.0 years for women.[2]

Over the last several decades, numerous clinical and epidemiological studies using a variety of methods have concluded that women experience higher rates of morbidity than men, particularly those related to acute conditions and non-fatal chronic diseases.[3] Crude indicators of morbidity, such as health service utilization and drug prescription rates, also have suggested, on average, higher rates of ill-health among women than men.

Preliminary data from the recent Canadian National Population Health Survey support some of these general patterns.[4, 5] In regard to mental health differences, while women are more fre-

[1]Wilkins, 1995.

[2]Aboriginal women have a shorter life expectancy than non-Aboriginal women—a life expectancy which resembles non-Aboriginal Canadian men (McBride and Bobet, 1992, . Among non-Aboriginals in Manitoba, Malchy *et al* (1997) reported that the ratio of men to women who commit suicide is approximately 4.2:1. In contrast, the gap between Aboriginal men and women was much smaller, 2.3:1.

[3]Bird and Freemont, 1991; Cleary *et al*, 1982.

[4]Statistics Canada, 1995b.

[5] Results indicated a higher prevalence of most chronic conditions among women than men and double the rate of depressive symptoms. Under the age of 65, men had a higher injury rate than women, whereas among seniors, women reported higher rates. Women also were more likely than men to report use of medication. While women were more likely than men to see physicians and nurses, similar proportions of men and women consulted with other health professionals such as dentists, physiotherapists and occupational therapists and psychologists. In general, the use of alternative medicine was more common among women than men with the exception of those aged 15 to 19 years, during which time use of alternative medicine was similar.

quently diagnosed with affective disorders, men are more often diagnosed with schizophrenia, personality disorders and alcoholism.[6]

According to Ruiz and Verbrugge (1997), the higher mortality rate and lower life expectancy among men compared to women, have led some to the mistaken conclusion that women experience superior health status relative to men, a "perspective [which] completely ignores the fact of the higher prevalence in women of non-fatal chronic conditions which negatively affect their functioning and well-being during their adult years, including the extra years of life" (p. 107). Recent attempts to incorporate both quality and quantity of life into a single indicator results in a diminished life expectancy advantage of women over men.[7] Others have argued that the focus of research has been too much on the view of older women as a social problem, ignoring many of the positive aspects of women aging, such as their longevity, extensive social networks and coping skills.[8]

MacIntyre *et al* (1996) contend that much of the social epidemiological research in the last decade has been guilty of both over-simplifying and over-generalizing gender-related differences in health. According to these authors, their recent analysis of several survey data sets, along with a detailed review of gender differences health research over the last ten years, suggested a considerable degree of variability in both the direction and strength of sex differences as a function of life stage and the symptom/disease under investigation. They found that a higher level of psycho-social distress among women than men was one of the few consistent ill-health gender differences across all age groups.

Similar results were reported by Safran *et al* (1997) who found that with respect to a variety of health status measures, approximately one-half of the indicators suggest no significant differences between men and women. Other researchers such as Wingard *et al* (1989) and Verbrugge (1985, 1990) have emphasized the importance of outcome when considering gender differences. Verbrugge (1990) has drawn attention to the fact that men and women experience much the same types of ill-health and what differentiates the genders most is the "frequency of those problems and the pace of death."

Verbrugge (1990) also emphasized the variability of the gender differential according to age. For example, gender gaps in health status are typically largest in young adulthood and smallest for seniors. For adults between the ages of 17 and 44, reproduction-related events are a major cause of women's greater use of health services. Similarly, Sweeting (1995) in a recent review of gender differences in childhood and adolescent health, reported a male excess of chronic illness in childhood, followed by higher female rates in early to mid-adolescence. Adolescence also indicated an emergence of higher rates of psychological disturbance among girls than boys, a pattern which was in contrast to the much higher rate of "acting out" disorders among boys during childhood.

A deviation from expected gender patterns also has been observed for health services utilization rates. For example, Marcus and Siegel (1982) found that women were more likely to use physician services for chronic illness, although no significant sex differences were reported in use of physician services for acute conditions. In a study of service utilization among older adults (>62 years), females actually reported significantly fewer physician visits than males.[9] Similarly, some researchers claim that previous esti-

[6]Compared to men, women receive approximately two to four times more diagnoses of major depression and dysthymic disorder (Cuthbertson, 1997; Sprock and Yoder, 1997).
[7]Wolfson, 1996; Kaplan *et al*, 1991.
[8]Gibson, 1996.

[9]Counte and Glandon, 1991.

mates of women's greater use of mental health services may have been overestimated, in part, because of a non-representative sampling of treatment sites used to determine utilization rates. Some evidence suggests that while women may be more likely than men to seek assistance for a mental health problem within the general medical sector, few gender differences have been found in the use of mental health specialty services.[10]

In light of the emerging complexity of gender differences in health status, MacIntyre *et al* (1996) appropriately recommend that:

> ...to make progress towards understanding the processes (whether social, psychological or biological) which produce or maintain gender differences in health, it is important to pay attention to the social and historical context of our observations, and to take a more differentiated age-specific and condition-specific view of 'health' when examining differences between the sexes. (p. 624)

GENDER AS A DETERMINANT OF HEALTH

As a means of clarifying more fully the significance of gender as a determinant of health, gender will be examined in this next section as it interacts with other social characteristics associated with health and disease, including socio-economic status, exposure to stressors, paid and unpaid work, and social support.

A. SOCIO-ECONOMIC STATUS

The research literature has demonstrated a robust relationship between SES and health status. Until recently, the main focus of such inquiry involved comparisons between extreme groups, such as those below the poverty line with those in much more advantaged circumstances (Adler *et al*, 1994). However, there is evidence that the association of SES and health occurs throughout the hierarchy; that is, individuals lower in the SES hierarchy, compared with those above, generally experience higher rates of morbidity and mortality.[11] Traditional indicators of SES (such as education, occupation or income) purportedly reflect individuals' access to and control over resources which influence on well-being, resources "that can be used to avoid risks or minimize the consequence of disease once it occurs . . . resources that include money, knowledge, power, prestige and the kinds of interpersonal resources embodied in the concepts of social support and social network."[12] The consistency of the relationship between SES and health over time, despite changing intermediary factors, have led Link and Phelan (1995) to contend that SES is a "fundamental cause of disease."

Gender is related to socio-economic position. In Canada in 1995, the rate of poverty among women was 18.2%, compared with 14.3% among men.[13] Of all family types, the highest rates of poverty were found among single-parent mothers, followed by unattached senior women, and then by non-partnered women under the age of 65.[14] In 1995, more than double the percentage of senior women (22.6%) as senior men (10.2%) lived in poverty. According to 1993 Statistics Canada data, most employed Canadian women work within the service industry, "a sector generally characterized by higher levels of part-time work, lower rates of unionization, lower wages and poorer working conditions."[15] Furthermore,

[10] Leaf and Bruce, 1987.

[11] Mustard *et al*, 1997; Sorlie, *et al*, 1995.
[12] Link and Phelan, 1995, p. 87.
[13] National Council of Welfare, 1997.
[14] According to figures compiled by the National Council of Welfare (1997), much of the difference in poverty rates between the genders can be attributed to the high poverty rates of these three female-headed family types.
[15] Wilson, 1996, p. 83.

there remains a discrepancy in pay between women and men occupying the same work roles.[16] Women also are more likely than men to experience extended interruptions in their labour force membership—a pattern largely tied to their traditional role of "natural" caregivers.[17] On average, therefore, women are more likely than men to fall at the lower reaches of the SES gradient, and are thus more vulnerable to ill-health.[18] As noted previously, certain groups of women may be particularly vulnerable to the experience of ill-health, such as those in unskilled occupations, the unemployed, lone mothers and/or those residing in low-income housing.[19]

Health status may be poorer for disadvantaged women than for disadvantaged men in equivalent economic circumstances.[20] Popay *et al* (1993) found that both women and men in the least advantaged social positions reported higher rates of psychological and physical symptoms than those in more privileged circumstances. However, *within* these social positions women consistently reported higher rates of ill-health than men. As Popay *et al* (1993) point out:

> . . . we need to ask why the experience of living on a low income for example or of being previously married or of being in full-time employment would have a different meaning for women than for men and in what ways these differences might explain the higher rates of morbidity that women report . . . [O]ne place to start would be to move beyond the traditional but artificial distinction between paid and unpaid work when considering the conditions of labour that may be relevant to our understanding of gendered patterns of ill-health. What is needed is a reconceptualisation of labour conditions to take account of women's unpaid work; of the possible interactions between formal and domestic labour; and of both the material and the psycho-social aspects of labour conditions. (p. 31)

Along the same lines, Kaufert (1996) notes,

> When gender interacts with other factors—such as a low level of education, race/ethnicity, or being a parent with children but no partner—then women are often doubly or triply disadvantaged, ending up at the very bottom of most socio-economic gradients. Men may be in the same position, particularly if disadvantaged within the hierarchies of race/ethnicity and social class. The difference is that their gender identity usually serves them as an advantage rather than as an additional liability.

While women are clearly over-represented among low-income individuals and families, the nature of the association between SES and women's health status is not well understood. One reason might be that analyses of SES differentials in health status among women usually have been examined in combination with those of men, and therefore, were likely not considered to be of primary importance. Much recent attention has focussed on determining the most accurate measure of socio-economic status/social class for women, as some contradictory findings have been reported using traditional indicators of SES (indicators based largely on the life, work, and educational experiences of men). For example, several studies have reported smaller SES mortality differences among women than men,[21] though a recent study by McDonough *et al* (1997) found a similar gradient among men and women using income measures as a reflection of SES. The measurement of occupation has been especially problematic for women. According to Arber (1990),

[16] Statistics Canada, 1994.
[17] Fast and Da Pont, 1997.
[18] Paltiel, 1988.
[19] Macran, 1996.
[20] Gijsbers van Wijk *et al*, 1995; Popay *et al*, 1993; Arber, 1991.
[21] Stronks *et al*, 1995; Koskinen and Martelin, 1994.

> . . . a distinction that is often not explicitly recognized in studies of women's health is that class is used to measure two conceptually distinct aspects of material explanations of inequalities in health. *First*, the material circumstances of the women's household influences her health, and *second*, the nature of her paid employment may have a direct influence on her health. For men, these two aspects of material position work in concert to increase inequalities in health, since a man's occupation is assumed to be both a primary determinant of his material circumstances and has a direct bearing on his health. Greater class inequalities in health status are found for men than women probably because a man's occupational class provides a better measure of his household's material circumstances than is the case for women, and material conditions are the major factor influencing health status. Women's health status measured by the conventional approach shows a pattern that is similar but weaker then for men. Among married women, likely her own occupational class would not have as profound an influence on health. There may be some direct effect of her own paid employment on her health, but the major effect of material conditions is likely to be better captured by other measures of material circumstances. For women it is necessary to separately theorize and measure the effects of a woman's material circumstances from any effects of her own employment status and nature of her own occupation (p.427).

Relatively robust SES gradients have been found in several studies, while others report relatively weaker associations than those obtained for men,[22] and in some studies, occupation has been unrelated to mortality for women.[23]

Analyses of socio-economic mortality differentials have tended to pay little attention to the potential effects of women's marital and unpaid work roles.[24] Some researchers have speculated that the combination of paid and unpaid stresses encountered by women may lessen the positive health influences of higher occupational standing. However, Tomiak *et al* (1997), in a study of middle and senior administrators in the Canadian public service, found women and men in equivalent occupational groupings to similarly report good health, though women reported more stress than men in achieving their advantaged position.

Traditional measures of SES also have failed to accurately reflect women's patterns of paid employment. For instance, occupational status may be less strongly associated with health status among married women and women with children whose ties to paid labour may be weaker than unmarried and/or employed childless women.[25] As a result, the current occupations of some women may not be an accurate indication of education, skills or training. Also, many of the traditional occupational classifications do not differentiate adequately between the jobs that the majority of women occupy.[26]

Whether due to problems of measurement and/or structural power differentials between men and women, recent research suggests that the social patterning of ill-health among women might best be captured by a method which incorporates work and family roles, in addition to indicators of structural circumstances, such as housing tenure and car ownership. Education also appears to be a more appropriate reflection

[22] Arber, 1991.
[23] Hibbard and Pope, 1991; Passannante and Nathanson, 1985.
[24] Martikainen, 1995b.
[25] For example, Koskinen and Martelin (1994) found marital status to confound the relationship between education and mortality. That is, the distribution of marital status across educational categories varied by gender, with most of the very educated men being married and many of the very educated women being unmarried. The result was a reduction in mortality differences by education for women and an increase between education groups for men.
[26] Macran *et al* 1994.

than occupation of women's standing in the SES hierarchy.[27] Among men however, indicators of financial, employment and/or material circumstances may be sufficient.[28]

B. EXPOSURE TO STRESSORS

Stress is a condition of physiological and emotional arousal which develops in response to circumstances which challenge the usual adaptive capacity of the individual.[29] The environmental stimuli which have the potential to elicit such response in the individual are referred to as stressors. According to Thoits (1995), as stressors accrue, "individuals' abilities to cope or readjust can be overtaxed, depleting their physical or psychological resources, in turn increasing the probability that illness, injury, or disease or that psychological distress will follow" (p.54). While the precise pathways are unknown, considerable evidence indicates that perceived stress is associated with a variety of negative physical and mental health outcomes.[30] Further, rather than being simply isolated random events, some stressors may be distributed systematically according to one's social position and social group membership.[31]

Studies examining whether women are more likely than men to experience stressors have yielded contradictory results.[32] Traditional measures of life events and chronic strains have been criticized for failing to reflect fully the contexts and realities of women's lives.[33] One consequence has been a tendency to over-attribute higher rates of distress among women than men to women's greater "internal" vulnerability to stressors, as opposed to the possibility that women may experience more frequent exposure to stressful events. Gender-related differences in the types of social roles occupied, and in the nature of experiences within the same social roles influence the types of stressful circumstances to which women and men are exposed.[34] Moreover, "these structured differences have their origins not in the psyches of individual women and men . . . but in the sex stratification of the social system" (p. 76). The finding of Turner *et al* (1995) that higher levels of stress exposure were observed among women only when events occurring to significant others were considered is consistent with some previous research suggesting that women may be more likely than men to experience stressors related to their social network.[35]

One group of stressors that women are much more likely than men to experience are sexual assault and domestic violence. A history of sexual assault has been associated with a range of mental and physical health problems[36] and poorer self-rated health.[37] Research also indicates that the types of sexism women experience may vary significantly according to social class and race/ethnicity.

Few studies have examined the potential health consequences of subtler, everyday types of sexism. A notable exception was a recent study by Landrine *et al* (1995) who found that a measure of more commonplace, sexist discrimination (e.g., exposure to sexist jokes, a lack of respect) was a significant predictor of women's psychological and physical symptoms beyond that which was accounted for by stress items of a

[27] Arber, 1997.
[28] Arber, 1997; Arber and Lahelma, 1993b; Arber, 1991.
[29] Aneshensel, 1992.
[30] Turner, Wheaton, and Loyd, 1995.
[31] Stronks, Van de Mheen, Looman and Mackenbach, 1998; Turner *et* al, 1995.
[32] Thoits, 1995.
[33] Banyard and Graham-Bermann, 1993.
[34] Aneshensel and Pearlin, 1987.
[35] Shye, 1995; Kessler and McLeod, 1984.
[36] Resnick *et al*, 1997.
[37] Golding *et al*, 1997.

more generic nature. As Landrine *et al* suggest, " . . . this in turn suggests the need for models of women's symptoms that highlight the role of generic, sexist and other types of gender-specific stressors (role-related and brutal/physical) and explore causal links among the various stressors and symptoms." In contrast to these findings however, Walters *et al* (1997) did not find measures of sex discrimination at work to be associated with various measures of well-being among a sample of Canadian nurses. Clearly more work needs to be done in this area, with a cross-section of women of differing socio-demographic characteristics.

C. PAID AND UNPAID WORK

Physical health research has focussed on the impact of chronic stress within the work environment. Several prospective studies indicate that exposure to chronic job strain is related to the development of illness, particularly coronary heart disease.[38] Several studies suggest that jobs more often occupied by lower SES individuals tend to be characterized by fewer chances to learn and develop skills, higher psychological workload, and less job variety—characteristics which are associated with a greater risk of ill-health.[39] Also, one's placement within the occupational hierarchy as an indicator of SES is associated consistently with health status—at least for men.

Similar to research examining the SES-health gradient, much of the research on the relationship between job and work setting characteristics and health status has centered on the work of men.[40] According to Messing (1997), the exclusion of women from occupational health research has contributed to a " . . . circular situation where there is evidence of health problems only among men, leading to a reluctance to study women because of an impression that not many women get occupational disease" (p. 41). Further, the frequent failure to include women in such research has led to an over-reliance on theories and models based primarily on male samples without further verification with women (e.g., Karasek's questionnaire on job demands). For example, theories and measures of workplace stress usually concentrated on jobs within male-dominated sectors (e.g., manufacturing).

The possible influences of workplace discrimination, harassment and domestic work on well-being have largely been ignored. This point may be particularly pertinent given the statistics presented earlier which suggest that women and men may find themselves occupying qualitatively different types of work within the labour force. Roxburgh (1996) found that levels of job autonomy, work hours and substantive complexity were significantly lower among women's than men's jobs—characteristics which have been strongly associated with ill-health.[41]

Messing (1997) also cautions against assuming that women and men with identical job titles have identical exposures. For example, research with managers have shown that while men and women in comparable work roles have some stressors in common, women managers may be more subject to other employment-related stressors such as discrimination, stereotypes, interpersonal isolation, and work/family spillover.[42]

Several studies have reported strong similarities between women and men with respect to the type of work characteristics which affect well-

[38] Kaplan and Keil, 1993.
[39] House *et al*, 1986; Marmot *et al*, 1991.
[40] Hunt and Annendale, 1993.

[41] Fortunately, research is beginning to detail some of the specific occupational hazards confronted within jobs largely occupied by women—and thus previously ignored in the research—such as secretaries, nurses, and daycare workers (Messing, Neis, and Dumas, 1995).
[42] Korabik, McDonald and Rosin, 1993.

being. Loscoco and Spitze (1990) found both men and women were affected similarly by characteristics of job demands, deprivations and rewards. Other gender-comparative studies have pointed to striking similarities in the reactions of men and women when exposed to similar work circumstances (e.g., the reactions of blue-collar women and men to the closing of their plant):[43]

> The results obtained here may be exactly what researchers should expect when a comparison between men and women is made within class, within occupation, and within condition of current employment. In contrast, to compare stress for employed men with distress for either housewives or women who work in quite different jobs may load the dice in favour of finding gender differences. This is precisely because what we know of gender is in large part a set of prescriptions about what people are supposed to do for a living and how they are supposed to do it. (p. 835)

On the other hand, Pugliesi (1995) found that measures of social integration in the workplace had a significant effect on women's distress levels and happiness but were unrelated to men's emotional reactions. This suggests that women may be more vulnerable to some aspects of the work environment. Examining gender differences in exposure to job stressors, Roxburgh (1996) found no gender differences with respect to job routinization and job demands. However, consistent with other research, she found that levels of job autonomy, work hours and substantive complexity were significantly lower among women's than men's jobs. Further, women were somewhat more vulnerable than men to perceived demands and job routinization. Roxburgh notes, however, that much of the variance in her measures remained unexplained, and suggests the need to explore, among other things, differences in exposure and vulnerability to home stressors.

[43]Broman *et al*, 1995.

As reviewed in the previous section, women's simultaneous roles appear to be important when considering their well-being. Despite women's increased involvement in paid work, responsibility for domestic work remains primarily with women.[44] However, relatively little research has explored the job hazards of homemakers.[45] Walters *et al* (1997) comment on the difficulties in attempting to explore the relationship between well-being and domestic work:

> Perhaps because work in the home has for so long remained invisible and because it has been women's work, there is no history of research that helps to conceptualize its components. Even though there is a body of theory that defines this labour as both productive and reproductive, contributing to daily and generational reproduction, its constituent elements have not been so well identified. Nor have measures been developed to capture variations in domestic labour. (p. 84)

In contrast to the literature on paid work with largely male samples, the majority of role research studies have been conducted on female-only samples. Very few studies have systematically compared the paid work conditions of men and women.[46] Typically, paid employment has been viewed as the prevailing influence on men's health, while for women the emphasis has been on the potential health effects of combining domestic and labour force roles. Consequently, relatively little is known about the details of women's specific work conditions, or the effect of domestic roles on men's health.

While it is important to document the paid and unpaid work experiences of women and their relation to women's well-being, the failure to

[44]In 1992, women in paid employment spent approximately two hours more per day than comparable men on household tasks (Statistics Canada, 1994).

[45]Some research suggests that certain (paid) job-related stresses may be relevant to understanding homemakers work experience such as quantitative overload and underutilization of skills (Houston *et al*, 1992).

[46]Hunt and Annendale, 1993.

address the same questions in male and female samples precludes a better understanding of the relationship between gender, work, and health.

In response to these shortcomings, some recent studies are beginning to compare men and women in the relationship between work, unpaid work, and health. Both similarities and differences are emerging from this gender-comparative research. For example, Hall (1992) investigated the relationship among domestic responsibilities, work environment characteristics, and psycho-social symptoms with men and women. While a number of differences in the lives of men and women were found (women were more likely to do housework, feel home stress, work part time, and experience symptoms of strain), gender was not predictive of psychosomatic strain after controlling for home and work characteristics. Without controlling for these factors, women were almost twice as likely as men to experience symptoms of psycho-social strain. As Hall notes:

> . . . these findings suggest that differential exposure among women to some of the basic structures of daily life could be producing strains that heretofore were believed to be a matter of 'sensitivity' or 'hardiness' or the 'willingness to assume the sick role.' An alternative hypothesis is that women and men are exposed to different sets of role-related demands and strains that could be producing related psychosomatic strain and symptoms (p. 253).

Hall (1992) also looked at differences in the individual and combined effects of home and work on men and women's health. A number of work variables (psychological job demands, social support and job hazards) and a number of home variables had the same impact on strain for both men and women. Differences also were reported. Among women and men in a similar combination of home and work circumstances (unmarried, no child care, felt home stress, low work control, physically demanding work, working more than 20 hours per week) women were more likely than men to experience symptoms of psychosomatic strain "suggesting that the role of spouse and parent involve different stresses and obligations according to gender" (p. 255). Walters *et al* (1996), in a study of the health of male and female nurses, reported that job characteristics related to overload and hazard exposure had a similar, significant impact on the well-being of both genders. On the other hand, demands in the domestic sphere had a stronger influence on women than men. In particular, time pressures and caring for dependent adults were positively associated with health problems among women but not among men. However, the presence of children was associated with a decrease in health problems for both men and women.

A recent study of rural couples reported that men's self-rated health was more strongly affected by work satisfaction, whereas for women, parental satisfaction had the largest impact on their perceived well-being.[47] In contrast, other research has found that work and parental identities may have similar health effects for men and women. In their study evaluating the influence of parental and occupational stress on depressive symptoms among dual-earning couples, Windle and Dumenci (1997) found that social role stress (occupational, parental) was significantly associated with depressive symptoms for both genders. Barnett and Marshall (1993) reported that among men who occupied marital, parental and worker roles, parental concerns had a stronger impact than job concerns on their physical health. Similarly, Walters *et al* (1997) reported that family and work roles are significant predictors of positive well-being among male nurses. Barnett *et al* (1995) found that changes over time in job role quality in dual-income couples were significantly associated

[47] Wickrama *et al*, 1995.

with change over time in distress for both genders. However, full-time employed married women were more likely than their partners to experience distress as a result of changes in marital role quality.

D. SOCIAL SUPPORT

Variation in response to stressors may be explained, in part, by individual differences in access to internal and/or external coping resources. Some evidence suggests that coping resources, like exposure to stress, may be distributed systematically according to a variety of social status characteristics.[48] That is, as a result of life experiences, certain groups may have experienced more (or less) of an opportunity to develop the resources needed to protect themselves against the potential ill effects of stressful circumstances.

Research suggests that social support, measured in a variety of ways, is associated with lower risks of morbidity and mortality.[49] However, the relationship between social support and health status is influenced by gender. Several studies have paradoxically reported higher levels of social support among particular groups of women to be associated with greater mortality.[50] Studies on marital status (a frequently used indicator of social integration) and mortality suggest a fairly consistent relationship for men: that is, unmarried men are more vulnerable to earlier death than are married men. Again, however, this same relationship appears to be either weaker or absent for women.[51] Compared with mortality studies, less research has examined morbidity, gender and social support, and the data that do exist also demonstrate inconsistent results.[52]

Several reviewers have pointed to numerous methodological limitations of the gender and social support literature.[53] Discrepant results may be due in part to methodological issues. Many of the largest studies (regarding physical well-being) have often either failed to include women or included too few to adequately assess the effects of social support on health. Even in studies which included both men and women, gender differences were often not reported. Further, inconsistencies across studies in health and social support measures along with population characteristics make integration of the literature a difficult task.[54] It also has been suggested that the instruments used to measure social support may be less sensitive to the social support and stress experiences of women than men.

Inconsistences in the relationship between gender, physical health and social support, particularly the findings that some women with higher levels of social support may exhibit a corresponding increased risk of ill-health and/or mortality "may reflect differences in the meaning of social support for men and women, as well as gender differences in the provider and recipient roles in supportive exchanges."[55] It has been suggested that given some evidence that women are engaged in larger networks and invest more time and emotion in their networks than men, women's interactions may involve positive as well as negative effects. This is supported in a recent study by Turner (1994) who found women reported receiving more emotional support than men, but in addition, also reported more frequent negative interactions with network members than did men.

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[48] Turner and Marino, 1994.
[49] House *et al*, 1988.
[50] Shumaker and Hill 1991.
[51] Goldman *et al*, 1995.
[52] Shumaker and Hill, 1991.
[53] Mathews *et al*, 1997; Shumaker and Hill, 1991.
[54] According to Mathews *et al* (1997), a major shortcoming of epidemiological investigations into social support is the reliance on overly simplistic measures of social support. In contrast, more sophisticated measures of social support can be found in the psychological research, but this also is limited, as a result of small samples and a focus on mental health rather than physical health.
[55] Mathews *et al*, 1997, p. 298.

One way in which social support is thought to influence health is through the reduction of unhealthy behaviour. That is, an individual may act as a form of "social control" over the health risk behaviour of another. Social control behaviour is consistent with aspects of the traditional feminine gender-role and it is not surprising that women are more likely than men to occupy such a role within families and within their broader social networks.[56] Thus, women may be more likely to give than receive the indirect benefits of social support (eg. a reduction in mortality via improvements in health behaviour and health status). In contrast, men, appear more likely to be on the "receiving end"of social support.[57] Dean (1989) found that social network support variables were of greater importance for self-care with men than women.

Consistent with the social control hypothesis, Shye *et al* (1995) reported indirect effects of social support on mortality among elderly men but not among elderly women. Their results also suggested that compared to women, men may reap the protective benefits of social support at lower levels of network size. The authors conclude that their results:

> . . . of gender differences in the pathways by which social support affects mortality confirm the need to model the relationship between social support and mortality differently for men and women, rather than simply to control for sex . . . . Our findings suggest a gender-specific threshold effect, with men enjoying protection from mortality risk at a lower level of network size than women. Thus, our findings are consistent with the view that the costs of women's gender-linked caregiving role must be offset (by a higher level of social network support) before they can enjoy the protective effects of such support. (p. 943)

Turner and Marino (1994) found women tended to report higher levels of both social support *and* depressive symptoms compared to men. Interestingly, for both men and women, social support was associated with lower levels of distress. The authors conclude that if women in their study did not report such high levels of social support, their rates of depression would have been even greater. Umberson *et al* (1996) also described similar associations and draws much the same conclusion as Turner and Marino. Umberson *et al* also stress that while differences existed in the nature of men and women's relationships in their sample, the genders were quite similar in the manner in which social support appeared to influence distress. These authors contend that:

> The quest to identify gender differences may sometimes impair our ability to accurately understand social phenomena. We find that men and women are similar in their psychological reactions to the nature and quality of their relationships, a finding that contradicts much sociological theory and suggests that much previous research on gender and relationships may have overemphasized gender differences. However, we find substantial gender differences in the form and content of relationships, which suggests that men and women have different relationship experiences. It is important to recognize gender differences and gender similarities in order to integrate theory and research into a coherent picture of "gendered" reality. (p. 855)

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[56] Umberson, 1992.

[57] Some evidence suggests that women may experience less adverse health consequences from widowhood than men. One possible reason is women's more extensive and intimate social networks, which perhaps provides them with an alternative source of support in the event of their partner's death. On the other hand, men in a comparable situation may lose their only source of support. Joung *et al* (1997) found that psychosocial variables were the most important intermediary factor in the explanation of marital status differences in self-reported morbidity for men, but material circumstances were the most important factor for women.

CHANGES IN GENDER DIFFERENCES IN HEALTH STATUS OVER TIME

Considerable evidence suggests that the longevity advantage of women over men has been diminishing in recent years in a number of industrialized countries.[58] In Canada, for example, between 1921 and 1978, life expectancy increased for both genders, but more for women than men. The result during this time period was a gradually widening of the life expectancy gap in women's favour from 1.8 to 7.5 years. In contrast, since 1978, greater life expectancy gains for men than for women have reduced the gender gap from 7.5 to 5.9 years.

As women began entering the labour force in increasing numbers, some researchers hypothesized that it would progressively expose them to more stress and occupational hazards, ultimately contributing to the detriment of women's health over time. Further, advocates of this view argued that with women's increased engagement in paid work, not only would work-related stress increase, but also, the likelihood of adopting risky, masculine behaviours such as smoking and drinking alcohol. As Chapman Walsh *et al* (1995) contend:

> . . . writings on gender and health have often implicitly assumed that the 'liberation of women'—improvement of their social and economic standing vis-á-vis men—will somehow deprive them of whatever it was that shielded them against earlier death. The historical image of women as the weaker sex, in need of extra protection against the brutalities of worldly life and the related view of disease as a consequence for women who deviate from cultural norms, have been axiomatic in Western culture. Much of the fascination with gender differences in health, then, either emanates from or struggles to debunk deep-seated prejudice about women's limited native capacities and circumscribed "natural roles." (p. 133)

The proposed link between women's decreasing longevity advantage and employment trends has not received much empirical support. As reviewed previously, paid employment tends to be positively associated with well-being for many women (although this may not hold true for particular groups of women such as lone-parent women working full-time). Several cross-sectional studies also have evaluated relationships between labour force participation and gender differences in health at a macro-level of analysis and have come to similar conclusions.[59]

What has contributed to a narrowing of the gender mortality gap? In Canada for example, changes in the rates of some of the major causes of death have played a significant role.[60] Between 1979 and 1995, the rate of death due to cardiovascular disease decreased for both for men and women, though the decline was faster for men. In addition, the gender gap in lung cancer deaths decreased, largely a result of a sharp increase in rates among women. During this time there also was a greater reduction in injury-related mortality among men than women.

Changes in several behaviours between 1979 and 1995 are thought to largely account for the narrowing of life-expectancy differentials for men and women.[61] During this same period, rates of smoking among adult men and women became more alike.

Waldron (1993), in her investigation of trends in the sex differences in mortality across more than twenty nations, reported a significant role for

[58]Trovato and Lalu, 1996.

[59]Haavio-Mannila, 1986; Passannate and Nathanson, 1987.
[60]Nault, 1997.
[61]Nault, 1997.

smoking. In addition, decreases in ischemic heart disease mortality contributed to greater decreases in total mortality for men since it constitutes a greater proportion of total mortality for men. Several mortality trends favoured females. In the majority of countries studied, the suicide rate increased or decreased less among males than females. In addition, men showed worse mortality trends than women for AIDS.

These trends, however, do not necessarily lend support to the assumption that paid employment is causing women to "behave more like men" and, as a result, suffer the consequences of ill-health. Higher rates of smoking are not more characteristic of employed than non-employed women. Furthermore, employed women may have lower rates of other risk factors for earlier death such as being overweight.[62] On the other hand, Waldron (1991b) does see an indirect connection between changes in women's employment and changes in women's smoking:

> In the early twentieth century relatively few women smoked, in large part due to strong social pressures against women's smoking. It appears that the social pressures against women's smoking were part of a general pattern of restrictions on women's behaviour. These restrictions reflected men's greater social power and ability to regulate women's behaviour, due in part to men's greater labour force participation and consequent greater economic power. As women's labour force participation and economic power increased during the mid-twentieth century, restrictions on women's behaviour decreased, social acceptance of women's smoking increased, and sex differences in smoking decreased. Thus, the changing sex differences in labour force participation may have indirectly influenced the changing sex differences in smoking, and these in turn have had a major influence on the changing sex differences in mortality. (p. 23)

Recent trends in cigarette smoking also exhibit intricate patterns by gender, education, and other indicators of socio-economic standing. Smoking, once a behaviour that cut across all income groups is increasingly concentrated in less-advantaged social groups, particularly among men.[63] Recent Canadian trends in quitting smoking indicate that between 1977 and 1994, men's rate of smoking declined across all income groups, whereas the smoking rate among women declined mainly among those with a university education. Canadian women with the least amount of education exhibited the smallest declines in smoking rates. Other Canadian research also has documented the higher rates of smoking among economically and socially disadvantaged women, such as Aboriginal women and lone-parents.[64] Consistent with those findings, Graham (1994) in a survey of British women with young children described how smoking is inextricably linked to their social roles and material circumstances:

> Looking at their lives as mothers, heavy smokers were caring for more children and for children in poorer health. They were also more likely to be caring alone and to be carrying extra responsibilities for the care of family members who needed help with health tasks. Looking at their lives as working class mothers, a higher proportion of smokers were dependent on benefit-level incomes and were caring on less than they needed to meet the basic necessities of their families. They were more likely to be caring for their children in a physical environment which contained health dangers. They were less likely to live in a neighbourhood which they regarded as a good one in which to bring up children.. (p. 697)

[62] Ross and Bird, 1994; Waldron, 1991a.

[63] Millar, 1997.

[64] Stewart *et al*, 1996; Walters *et al*, 1995; Greaves, 1996.

CONCLUSION

This study has presented an overview of the current research literature on the determinants of women's health. The diversity of women's health was emphasized, as was the complex relationship between social roles, social class and health status. Gender as a determinant of health was examined within the context of socio-economic status, stress, and social support. The importance of women's paid and unpaid work on well-being was evident, as was the need for research to continue to document the intricacies of women's lives. Research attempting to explain gender-related differences in health status also was described, with a focus on women's and men's roles and placement in the social and economic hierarchy. The determinants of women's health are no doubt complex, likely arising from a combination of interacting economic, social, psychological, and biological forces. While the number of studies concerning women's health has multiplied in recent years, this literature review identified various general gaps in knowledge, particularly with respect to the Canadian context. These gaps are outlined below.

1. More investigations are needed of the relationships among and between social roles, including the influence of particular social role characteristics on health as well as the qualitative experience of these roles.

2. Social roles beyond that of parent, partner, and paid worker need to be incorporated into the broader social roles research literature. One example would be the caregiver role.

3. More research is required on the relationship between women's social roles, socio-economic circumstances and health throughout the life course.

4. There is a need for more research regarding the determinants of healthy aging among women.

5. Studies are required to address the health needs and determinants of rural women.

6. Research is needed to examine the variability of health among Canadian women of Aboriginal origin, including factors associated with positive physical and mental well-being.

7. Research examining the variability of health among immigrant and refugee women is needed. In particular, research needs to explore how social, economic, behavioural and psychological factors are associated with changes in the health status of immigrant and refugee women over time.

8. The investigation of the mental and physical health effects of discrimination as a function of one's gender, race, sexual orientation and/or disability is required, including an examination of how these various statuses interact.

9. Measures of health determinants which more accurately reflect the realities of women's lives (e.g., paid/unpaid work, social support, exposure to stress, socio-economic context) require development.

10. Continued gender-comparative research is critical to understand the influence of gender on health and to identify important differences and similarities between men and women regarding the major determinants of health.

Appendix

NOTES ON THE POTENTIAL CONTRIBUTIONS AND LIMITATIONS OF THE NATIONAL POPULATION HEALTH SURVEY (NPHS) IN ADDRESSING RESEARCH GAPS

~ Prospective research on women's health is lacking. The longitudinal nature of the NPHS will provide an opportunity for the prospective research needed to help clarify the relationship (and direction of association) between various social roles, SES and various indices of health and disease among women.

~ The NPHS also includes questions which will allow for exploring women's health along an SES gradient using a variety of different indicators of SES. Data also are available which would allow for a cross-sectional view of women's health across the life course (at least from 15+ years).

~ The NPHS can identify occupancy of various social roles. However, few questions are included regarding the quality of those roles (with the exception of some questions within the stress section which might relate indirectly to the quality of roles indirectly via questions regarding marital, work, and parenting stresses).

~ The NPHS would not be able to elaborate our knowledge regarding the details of women's unpaid work (e.g., hours spent, the hazards and benefits, basic description of housework, caregiving, volunteer work, etc.). Details regarding caregiving experiences are notably absent.

~ The health of immigrant women could be explored in more detail using NPHS data, particularly multivariate analysis, if sample sizes allow (according to one source, the General file of the NPHS includes 3,600 women, but only 1,300 for the Health file). Unfortunately, the NPHS does not distinguish between immigrant and refugee status, which may be particularly critical in terms of health and well-being. The author is uncertain whether the NPHS has been validated cross-culturally.

~ The health and well-being of Canadian Aboriginal women could be explored in more detail, particularly with respect to characteristics such as SES, social supports, social networks and stress. The NPHS also would allow for identification of Aboriginal women who are healthy and the characteristics associated with good health. A limitation, however, is that Aboriginal people on reserves are not included in the sample.

~ No information on the NPHS examines subtler forms of discrimination at work or elsewhere Also, no questions on sexual orientation are included.

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