



CHAPTER SIX

Use of Health Services

With some understanding of what promotes or inhibits good health in Manitoba women now established in this Profile, Chapter Six is an examination of women's use of health services, and how well health services are able to meet women's needs.

Manitoba women use provincially funded physician and hospital services, and many women also seek care from providers and make use of other treatments that are currently outside of the mainstream. Using the data available, we look at what services women use and why. We follow with an examination of women's use of Manitoba's long established and comprehensive Home Care system, and the prescription drugs they use, concluding with a brief investigation of women's use of emergency and cataract services.

This chapter includes information about:

1. Use of Physician and Hospital Services
2. Use of Alternative Health Services
3. Home Care
4. Women's Use of Prescription Drugs
5. Emergency Medical Services
6. Cataract Procedures





Use of Physician and Hospital Services

Introduction

Balancing the needs of a diverse population for appropriate access to publicly-funded health services within the challenges of escalating costs for care, reflects a strongly held social value of Canadians and a fiscally responsible goal of provincial health authorities.

Access to health care services is a key determinant of health, for which effects on health status have been demonstrated. In Canada, despite guaranteed universal access to health care provided by the *Canada Health Act*, real access to health services is a growing problem [1]. The 2002 Romanow Commission acknowledged that timely access to health care in Canada is a serious problem in every province and territory, while also recognizing the distinct challenges for women, rural residents and Aboriginal people [2].

A gender-based analysis of women's use of health services is important because women have distinct health needs, stemming from biological and social differences from men. Women's barriers to service access are also distinct, reflecting the status of women in Canadian society, women's roles and values, and gender relations within the family, community and health care contexts. Thus, the following analysis does more than consider health service usage alone, but relates women's care to issues of gender bias, appropriateness of care for women, women's unmet needs and satisfaction with services, and women's participation in the health service system.

Manitoba Women's Use of Health Service¹

Visits to Physicians²

Females in Manitoba are more likely than males to consult with a medical doctor, and they do so more frequently. During the 2003/04 fiscal year, over 85% of females and 79% of males had at least one ambulatory physician visit for any reason (including prenatal visits). Females averaged 5.4 physician visits, while Manitoba males averaged 4.4 visits during the year. Although prenatal exams are excluded from the ambulatory visit rate, a portion of the male/female difference is attributable to sex-specific conditions of the genitourinary system and breast, which accounted for 7.1% of all visits by females and 3.9% of all visits by males. Even when visits for sex-specific causes are excluded, visit rates for females remain higher than for males due to higher rates for several other causes, including mental illness, respiratory, musculoskeletal, and nervous system conditions.

Rates of ambulatory physician visits vary over the life course. Among males, the rates are high for young children (over five visits per year), drop dramatically among youth (slightly over 2 visits per year), remain

¹ Unless otherwise noted, data presented in this section was derived from Fransoo et al., Manitoba Centre for Health Policy, *Sex Differences in Health Status, Health Care Use, and Quality of Care*, 2005 [3].

² Visits to physicians were attributed to the RHA of residence of the patient, not to the area where the visit took place.





low for young adults, and increase sharply with age to reach over 10 visits per male resident by the age of 80. Among females, the rates are similarly high for young children, drop only briefly in childhood (ages 5-14 years), but escalate sharply in the teen years, and steadily throughout adulthood. Young and middle-aged women average two visits more per year than men of the same age, though rates converge by age 70.

Residents of Winnipeg, both males and females, visit physicians more often than residents of rural and northern Manitoba (see Figure 1). Although physician visit rates appear very low in the Churchill district, this likely reflects an undercount of services, as many residents in the region receive services from nurse practitioners, events which are not recorded in medical claims data, or from salaried physicians, who are not required to submit claims information [3].

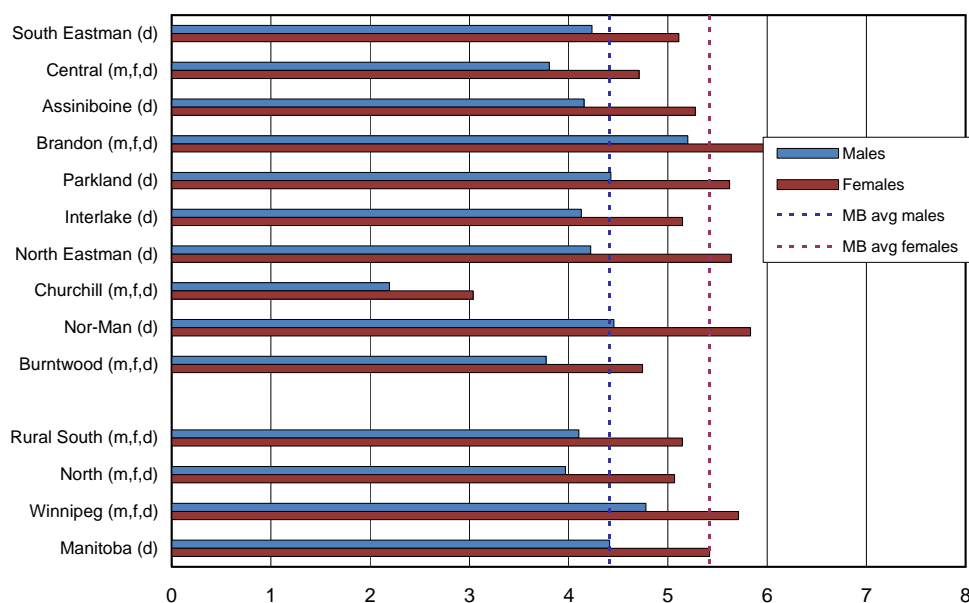
Some measures of physician service use:

Use of physicians is the percentage of residents who had at least one ambulatory (excluding in-hospital) visit to any physician (e.g. general physician, family physician, and specialist) during the fiscal year, for any reason, including prenatal care.

The **ambulatory visit rate** is the average number of visits to all physicians for all Manitoba residents during one fiscal year, excluding hospital in-patients and prenatal care for women. It includes almost all contacts with physicians: office visits, walk-in clinics, home visits, personal care home (nursing home) visits, visits to outpatient departments, and some emergency room visits (where data are recorded).

The **ambulatory consultation rate** includes only consultations by physicians, a subset of all ambulatory visits which occur when a patient is referred to another physician (usually a specialist or surgeon) because of the complexity, obscurity or seriousness of the condition, or when the patient requests a second opinion. The consultation rate is used as an indicator of access to specialists [3].

Figure 1: Ambulatory Visit Rates by Sex & RHA, 2003/04
Age-adjusted annual rate of ambulatory visits to all physicians, per resident



Source: Fransoo R, Manitoba Centre for Health Policy, 2005.





Since health and income are related, in the absence of barriers to service one would expect to find that those with lower socioeconomic status had more physician visits than those with higher socioeconomic status. This is true for urban, but not for rural males and females in Manitoba [3]. Thus, the provision of physicians' services is not well matched to need in rural and northern settings.

Access to Specialists for Consultations

Overall, Manitoba females are more likely to see specialists than are men. The average ambulatory consultation rate over the 2003/04 fiscal year for females was 0.33 visits per year, compared to 0.29 for men, a statistically significant difference ($p < .001$) (see Figure 2). However, there is considerable variation among women and men according to age, area of residence and income.

Among children, the rate of consultation for females and males was similar, whereas among teens and young adults women's rates were higher, particularly during the childbearing ages. Older women (age 75+) were less likely than men of the same age to receive a consultation (see Figure 3).

Regional comparisons found that residents of rural areas, both women and men, had lower than average consultation rates. In northern regions, men were less likely to consult with a specialist than the average male in Manitoba, whereas women's rates of consultation were not significantly lower than the provincial average for women (see Figure 2).

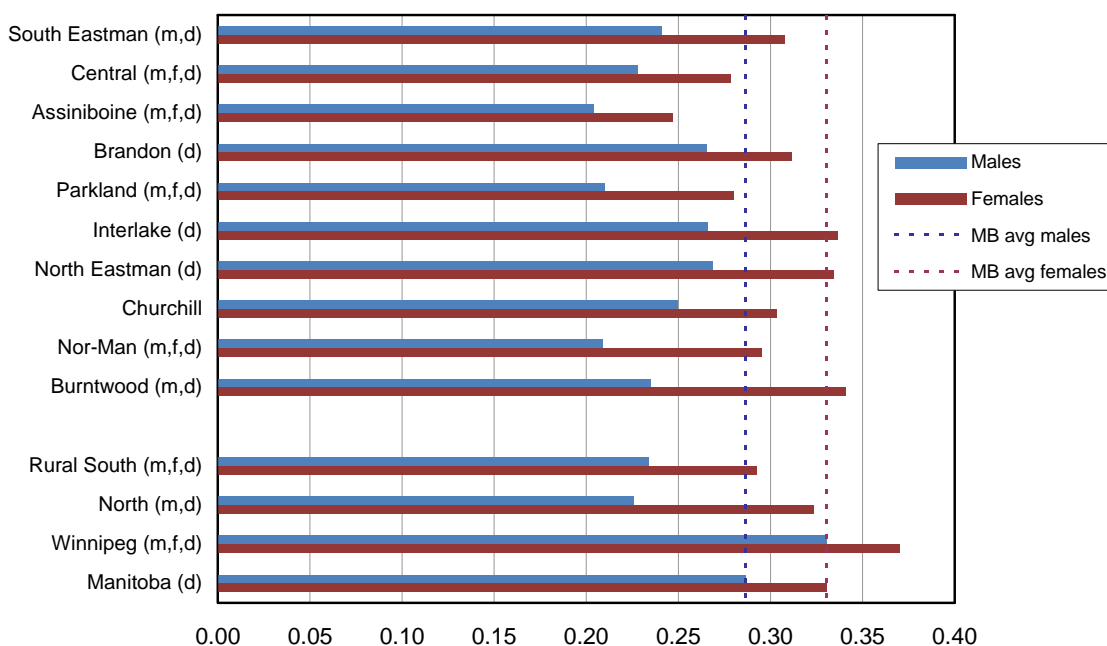
Not surprisingly, urban residents show a clear advantage over rural women and men in their access to specialists, reflecting the concentration of specialists in urban areas. In rural areas, a strong relationship was evident between consultation rates and area-level income for both women and men, which was not found in urban areas (see Figure 4). This suggests that limited income has a greater effect on access to specialists for women and men in rural areas than for residents of urban centres, which likely reflects the greater costs for rural residents to travel to appointments with specialists. The income disparity in consultation rates raises concern since, as we have seen in this *Profile*, residents of low income areas tend to have poorer health than those in higher income groups. Where low income and rural residence coincide, specialists' services are then more poorly matched to the needs of women (and men).





Figure 2: Ambulatory Consultation Rates by Sex & RHA, 2003/04

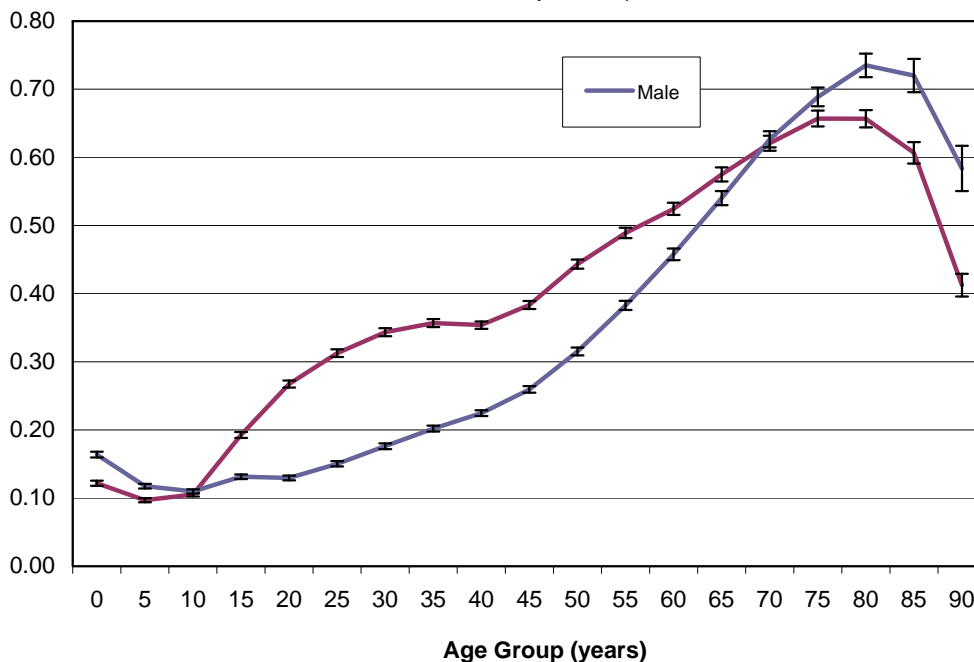
Age-adjusted annual rate of ambulatory consults per resident



'm' indicates area's rate for males was statistically different from Manitoba average for males
 'f' indicates area's rate for females was statistically different from Manitoba average for females
 'd' indicates difference between male and female rates was statistically significant for that area
 Source: Fransoo R, Manitoba Centre for Health Policy, 2005.

Figure 3: Ambulatory Consultation Rates by Age and Sex, 2003/04

Crude annual rate of ambulatory consults per resident



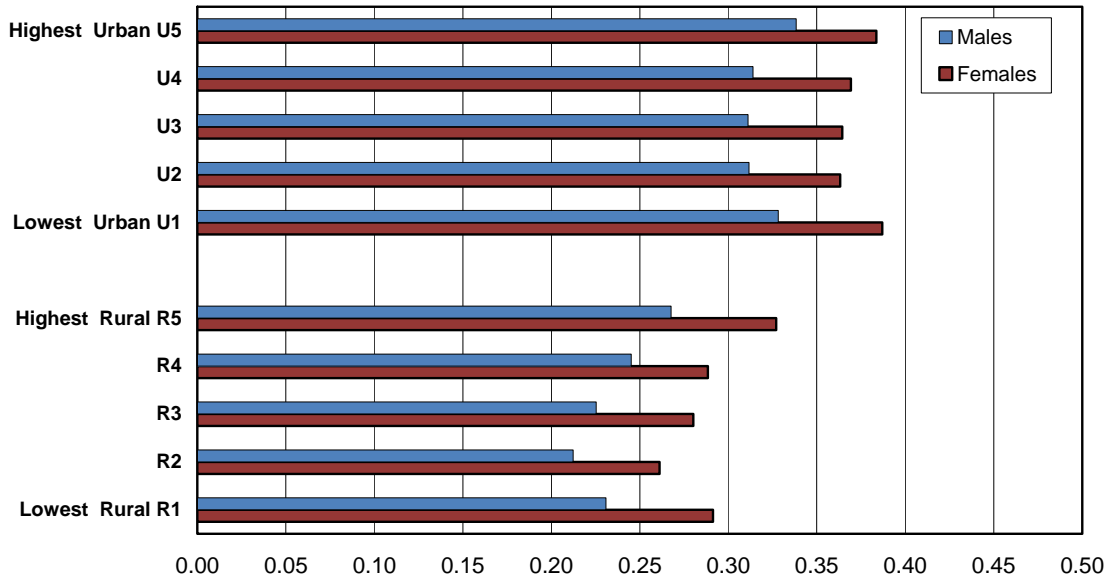
Source: Fransoo R, Manitoba Centre for Health Policy, 2005.





Figure 4: Ambulatory Consultation Rates by Sex and Income Quintile, 2003/04

Age-adjusted annual rate of ambulatory consults per resident



Linear Trend Test Results

Female: Urban: Not Significant Rural: Significant ($p < .001$)

Male: Urban: Not Significant Rural: Significant ($p < .001$)

Source: Fransoo R, Manitoba Centre for Health Policy, 2005 [3].

Hospitalization³

According to the MCHP, for most indicators of hospital use, Manitoba females have higher rates of service use than males. In the 2003/04 fiscal year, Manitoba females were hospitalized at a significantly higher rate than were males (162.0 versus 126.6 per 1,000; $p < .001$), and higher rates for females were found in all regions (see Figure 5). Though females also appeared to have longer stays in hospital than males, the difference did not reach statistical significance for provincial level comparisons. However, in the Rural South and North, females did have significantly longer hospital stays than males. Consistent with other findings, and with health reform trends, the MCHP analysis demonstrated a continued trend toward fewer days spent in hospital by both females and males in Manitoba [3, 4].

Measures of hospital service use:

Total hospital separation rates are the number of hospitalizations, that is, discharges from hospital, per 1,000 area residents. Inpatient cases and day surgery cases are counted, as well as hospital stays related to childbirth or reproductive health issues for women. (Note that this is different than for the measure of ambulatory visits). Multiple admissions of the same person are counted as separate events. Emergency room treatments not resulting in hospital admission are excluded.

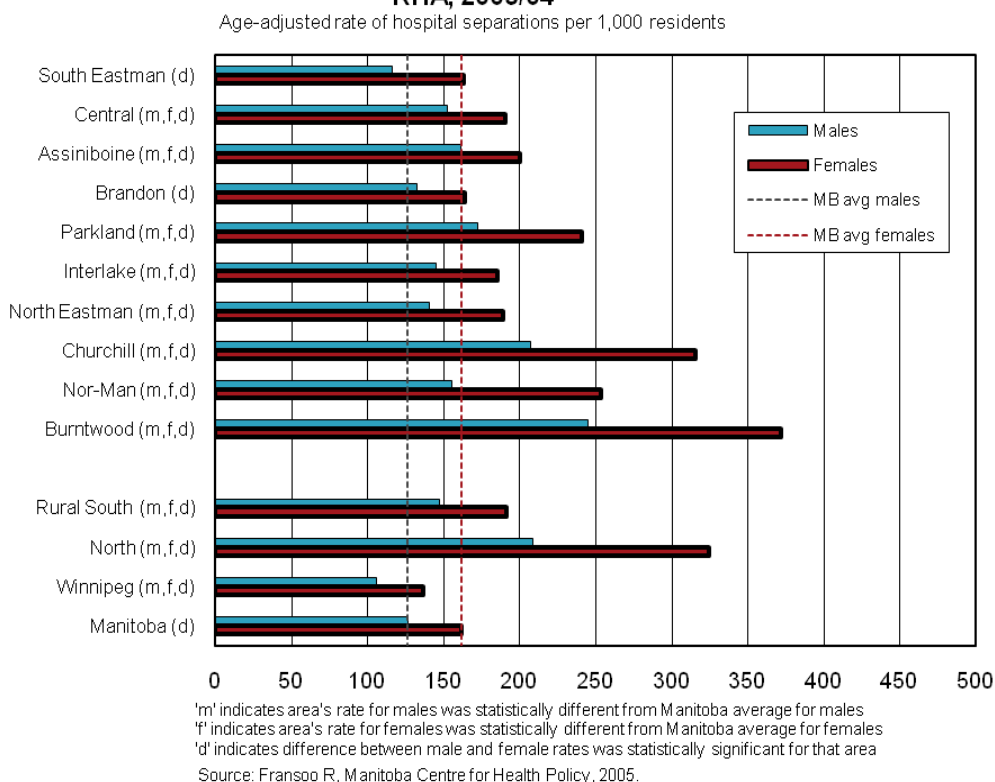
Total hospital days sums all days spent in hospital by residents, expressed as a rate per 1,000 population [3].

³ All hospitalizations were attributed to the RHA of residence for patients, regardless of where the hospitalization took place. Hospital separations and days of stay in hospital reflect use of acute care hospitals. MCHP excluded chronic care or long-term care facilities from the analysis.





Figure 5: Total Hospital Separation Rates by Sex and RHA, 2003/04



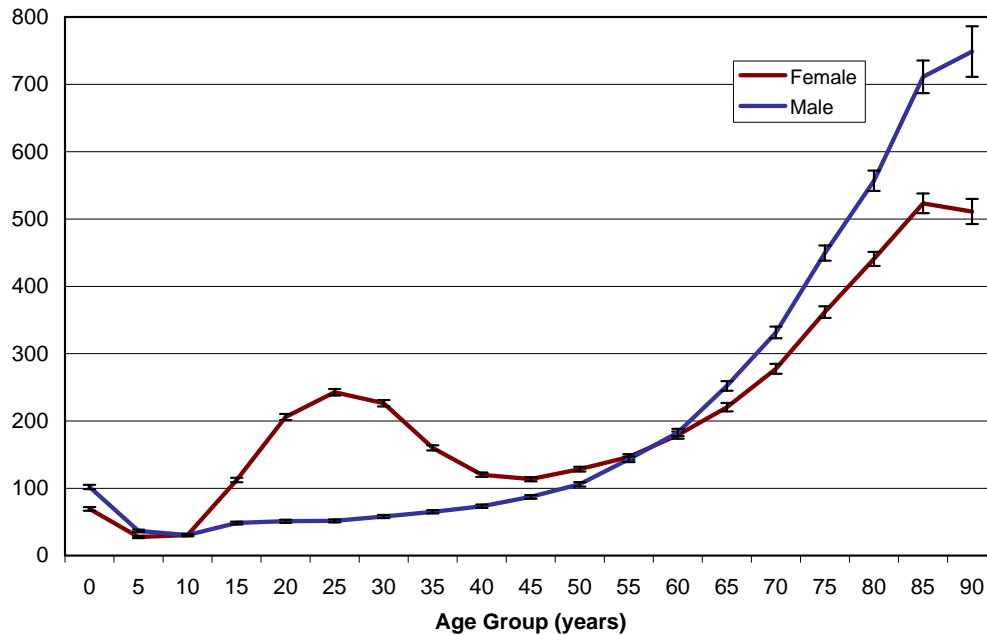
Residents of the Rural South and especially North regions had high rates of hospitalization relative to provincial averages for females and males. Northern females had twice the rate of hospitalization as Manitoba females overall (324.5 versus 162.0 per 1,000). As well, northern residents spend considerably more days in hospital than their southern rural and urban counterparts [3].

Predictably, rates of hospitalization vary by stage of life (see Figure 6). Among seniors (65+) hospitalization rates escalate with advancing age. Younger women's (age 15-40) rates of hospitalization far exceed those of men, while the reverse is true among the elderly. After age 60, men's rates exceed those of women by an increasing margin. The higher rate of hospitalization for females overall may be attributed to their higher rates during peak years of childbearing, which represents a larger proportion of the population than the senior age range, and thus carries greater influence on the overall rate.





Figure 6: Total Hospital Separation Rates by Age and Sex, 2003/04
Crude rate of hospital separations per 1,000 residents



Source: Fransoo R, Manitoba Centre for Health Policy, 2005.

Analysis of hospital separations by length of stay and cause provide further indications of the reasons for the age-sex pattern. Though the rate of short term hospitalization is significantly higher for females than males, rates of long-term hospital stays are similar for the sexes. In fact, for short-term stays in hospital, female rates were lower than for males when hospitalizations for sex-specific causes, including pregnancy and birth, and genitourinary and breast disorders were removed (100.6 per 1,000 females versus 109.6 for males)⁴. Pregnancy and birth events accounted for approximately one in four (24.8%) short-term hospital stays for females and genitourinary and breast disorders were the second leading cause of short-term stays (10.2%) for females.

Again, there was a strong relationship between area-level income and the rate of hospitalization. In both urban and rural areas, higher rates of hospitalization were found among female and male residents of low income than high income areas, consistent with generally poorer health in low income areas, reflecting the benefit of the universal medicare system. As well, the results by regions were also consistent with health needs, as regions with a higher burden of illness reported higher hospital use.

Other Indicators of Health Service Usage by Sex

In addition to the indicators reviewed in the data analysis above, the literature provides further evidence of sex differences in health service utilization. Because research has shown that the continuity of care influences health outcomes [1], population health surveys have gathered information on regular access to a

⁴ This difference may be statistically significant, but was not tested (R. Fransoo, pers comm. Sept 11, 2008).





physician. According to the 2007 CCHS, Manitoba females (age 12 and older) are significantly more likely to have a regular physician than are males (89.6% versus 79.3%) [5]. As well, the 2005 CCHS gathered information on the use of the telephone to consult with health service providers and found that Manitoba women were much more likely than men to use this service (12.0% versus 4.9%) [6].

Research comparing emergency health service usage by sex has produced conflicting results. For example, the 1996/1997 NPHS found higher emergency department usage by Canadian females than males (24% versus 19%) [7], whereas the 2003 CCHS found that men were more likely than women to have used ER services (14% versus 12%), and for Manitoba, no sex difference in rates of emergency department usage was found [8]. However, use of hospital emergency services is known to vary by both sex and age, reflecting differences in the lives of women and men, including involvement in sports, risk taking, gender-based violence, and alcohol and drug use. Under age 15, more males than females are admitted to emergency departments, from age 15 to the mid-40s women generally have more visits than men, after which men again outnumber women [9].

Accounting for Women’s Greater Use of Health Services

Research has consistently shown greater use of health services by women than men [10, 11, 12, 13, 14, 15]. Several explanations have been offered, though no single explanation adequately accounts for the sex differences. A model advanced by Anderson proposed that three types of factors affect an individual’s use of health care: first, the state of their health, whether perceived or diagnosed; secondly, their predisposition toward using services, which is influenced by such characteristics as age, gender, race or cultural identity; and thirdly, factors enabling them to access services, including education, income and access to service providers [11]. Consideration of all these variables has resulted in a complex literature and unclear evidence that health services are equitable and meeting women’s needs.

The Influence of Sex-specific Conditions and Chronic Disease on Women’s Service Use

Sex differences in health service use are, in part, attributed to women’s reproductive biology and sex-specific conditions, reflected in higher rates of service use for women within the reproductive age range. Pregnancy, childbirth, and uniquely female diseases and preventive and diagnostic needs are recognized as major factors behind women’s greater use of mainstream health services. Papanicolaou (Pap) test, mammogram, and birth control pill use have been identified as some of the most important factors in women’s greater use of services. Research has shown that, although being pregnant and giving birth does not affect the rate of consultation with general practitioners, the use of specialists and the odds of being hospitalized is influenced by women’s reproductive biology [13]. Certainly, the large degree to which women’s reproductive health has come under medical management—for reasons related to menstruation, childbirth, and menopause—has added another dimension to women’s greater use of physicians’ services.

Women’s high service needs have also been accounted for by their higher levels of morbidity, particularly their generally higher rates of care-intensive chronic diseases relative to men. Clinical and epidemiological evidence has shown women’s higher consultation rates for chronic disease to be due to more than simply sex differences in help-seeking [14]. Research has shown that women with similar chronic conditions as men are more likely to visit a physician, although they are also less likely than men to be hospitalized for





the same conditions [9]. A multivariate analysis of 1994/95 health survey data⁵ found that certain conditions, including asthma, stroke and high blood pressure, were highly associated with women's risk for hospital admission, independent of other contributing factors, whereas for men, heart disease and high blood pressure were most likely to result in a hospital admission [7].

Research has attempted to distinguish between the extent to which women's use of health services is a function of need, reflecting poorer health status, sex-specific needs, and other factors, including a gender-influenced predisposition to seek care or interest in health. One such study found that when differences in health status (chronic conditions, general health, pain and distress) were accounted for, the odds that women consulted a general practitioner or a specialist in the previous year, or were hospitalized, were still more than double the odds for men. However, when female-specific health needs (pregnancy/childbirth, mammograms, Pap smear tests and the use of birth control pills) were also taken into account, the odds of women aged 20 to 49 consulting a physician or being hospitalized were no greater than the odds for men in the same age range [13].

Another study based on an analysis of 2005 CCHS data also found that when the effect of chronic conditions and self-perceived health were controlled for, women aged 18 to 64 still reported greater service use (single and multiple GP consultation and a specialist consultation) than men of the same age. The odds were considerably reduced when women who were pregnant or had given birth within the past year were excluded from the analysis. In contrast, among seniors, when chronic conditions, self-perceived health and other factors were taken into account, senior women no longer had significantly higher rates of service use than senior men. In fact, the odds that elderly women had consulted a specialist in the previous year were significantly lower than for men. Furthermore, the results showed that physician consultations were independently associated with age, sex, household income, race, language, urban/rural residence and having a regular family doctor [11].

These findings are somewhat consistent with the results of the above data analysis, which demonstrated that sex differences in rates of hospital separation were eliminated when hospital use for reproductive issues were removed. However, the findings for physician visits by cause showed that only about half of the difference between males and females could be accounted for by sex-specific events (pregnancy, birth, genitourinary and breast disorders) [3]. Thus, although health status is certainly a major determining factor for health service use, other variables, which may relate to socialized behaviour and health system factors, are also likely to have distinct effects on service use.

Other Health Status Factors Influencing Women's Service Use

Other common health conditions have also been implicated in women's greater use of health services. For example, women have a greater susceptibility to colds and flus and are more likely than men to seek treatment by a physician (as well as to self-manage treatment) for these conditions [13]. Depression is the third leading reason for visits to a physician, after hypertension and diabetes and more women than men

⁵ 1994/95 National Population Health Survey data linked with Hospital Morbidity files for 1994/95 to 1997/98, prepared for seven provinces, which did not include Manitoba.





receive treatment for depression (see Chapter Five, Depression). In Manitoba, nearly one in four girls and women aged 10 and older had been treated for depression within the five year period ending 2001/02, which was approximately twice the treatment rate for males (12.6% males versus 23.6% of females). Moreover, among Canadians, females report higher consultation rates for mental health issues than males in every age category and at all household income levels [13]. Research has also shown that women with depression are more likely to be hospitalized than those without depression (age-adjusted 18.7% versus 11.5%, $p < 0.01$), but that the same relationship is not found for men [7].

Gender-based violence is another major contributor to women's health care usage. Approximately one in five women in Manitoba has been recently (past 5 years) victimized by a partner (see Chapter Two, Domestic and Sexual Violence). Abused women are more likely than other women to experience poor health, chronic pain problems, depression, suicide attempts, addiction, and pregnancy problems. Accordingly, they require and use a disproportionate amount of health care services including emergency rooms visits, primary care, and community mental health center visits [16].

The results of an analysis of 1998/1999 NPHS data revealed an important trend toward greater hospital use by women that could be tied to their smoking behaviours. Not surprisingly, current smokers are more likely to be hospitalized than former smokers or those who never smoked. Females have enjoyed smaller relative risks for hospitalization from causes linked to smoking than males, which has been attributed to their lower average exposure due to later age at smoking initiation and fewer packs smoked per day than for males. However, these findings showed that just as the sex differences in smoking behaviours have diminished over time, as women's smoking increased, the likelihood of hospitalization has become similar for female smokers and male smokers [7].

Gender Predisposition to Seeking Health Services

Women's rates of health service may also, in part, be explained by socialization and gender roles that encourage women to respond to symptoms and to be more active in seeking medical care, as well as alternative care. Women's greater use of a variety of health care services may reflect greater awareness, knowledge and concern about health matters, that enhance a more proactive and preventive approach to health by women [13]. This may help to explain why greater sex differences are generally seen in the use of physician services as compared to the use of hospital resources, more often used for treatment in advanced stages of disease. As well, women may be more likely to seek help for health concerns because social norms for communicating vulnerabilities and identifying illness are more permissive for females than for males. Gender differences in help-seeking manifest early in childhood and are reinforced over the life course [14].

Another argument has posed that female gender roles better accommodate women to seek care including, for example, greater flexibility to schedule doctor's appointments and less loss of income when time is taken to seek medical attention [14]. However, as increasing numbers of women participate in the paid work force, typically with less self-determination and flexibility in their work roles, while continuing to provide care within the community and family, often as single parents, the costs and role flexibility advantages for women are likely to diminish.





Interestingly, a recent analysis of CCHS data⁶ has shown gender diversity to be an important factor in health service utilization. The study confirmed that the use of health care services differs depending on self-identified sexual preference. Gay men were generally more likely to consult with a family doctor than heterosexual men, whereas lesbian women were less likely to see a doctor than were their heterosexual counterparts. Also, lesbian and bisexual women were less likely than heterosexual women to have a regular doctor. However, they were significantly more likely than heterosexual women to consult with professionals for treatment of mental health issues. Sexual orientation remained a significant, independent factor, even when differences in income, education, culture, diagnosed chronic disease, mood or anxiety disorder, self-rated health, and other factors that influence health care usage were controlled for. Other research has demonstrated similar differences, attributing them to such factors as some lesbians delaying or avoiding seeking care because of a fear of disclosing their sexual orientation to their doctor or past negative experiences with medical professionals. Lesbian and bisexual women's higher usage rates for psychological services may be due to more positive norms for using mental health services in these communities, as well as greater stress among women who belong to a stigmatized social category, which could trigger seeking care [17].

Gender Bias in Service Provision

Though there is little question that, overall, women's use of health services is high relative to men, the question of whether the level of service is adequate to women's needs is less clear. A lack of prospective studies that link health outcomes to service use limits insight into whether higher service use by women improves women's health. At the same time, evidence of gender inequities in service access has been put forward, particularly for some diagnostic and specialists' services, which raises additional questions of whether treatment biases exist and, if so, whether they have consequences for women's health. It is also important to recognize that if the goal is equality in health outcomes, identical treatments and service provision to women and men may be inappropriate [9].

Physician referral practice patterns may partially account for sex differences in the rates of specialty care and diagnostic testing. Research has found that men are referred to specialty care more often than women, and hospitalized men are more likely to be referred for invasive cardiac procedures than women [12]. Studies have found that women receive fewer kidney transplants and cardiac bypass surgeries than men, even when living with the same level of disease [9]. A review of literature found that the most common results indicating gender biases in health services demonstrated that men were more likely than women to receive treatment for cardiac arrhythmias and cerebrovascular disease, and to receive vascular surgery, heart transplants, kidney transplants, hip replacements, and antiretroviral (AZT) therapy for HIV/AIDS. In contrast, women appeared more likely to receive liver transplants and cataract surgery. However, the review authors cautioned that because the studies did not provide sufficient information on disease severity, prognosis, or patient preferences for treatment, the determination of bias could not be made [18].

⁶ The study was based on combined 2003 and 2005 data from the Canadian Community Health Survey for adults aged 18 to 59.





However, a study which employed an experimental design found evidence of gender bias in physicians' surgical recommendations, that saw fewer women than men recommended for knee replacement, despite identical clinical presentations of knee osteoarthritis and scripting of patients' treatment discussions [19] (see Chapter Five, Arthritis for details).

Other evidence of gender bias comes from studies of wait times for health services. An analysis of national health survey data⁷ found that Canadian women had significantly longer wait times for diagnostic services than men (53.1 days versus 31.4 days). In particular, women were much more likely than men to wait for magnetic resonance imaging (MRI) (70.3 days versus 29.1 days)⁸. As well, women had longer waits for certain specialists, such as specialists for asthma and other breathing conditions, for which women waited nearly eight times as many days, on average, as men (78.8 days versus 10.8 days). In contrast, women had significantly shorter wait times than men for the services of mental health specialists (20.9 days versus 55.4 days) [10].

The Unmet Needs of Women

Though it is difficult to determine what amount of health care is optimal for any group, measures of unmet health needs and satisfaction have provided data on the accessibility and quality of services, which are commonly based on self-reports and recall for the preceding 12 month period. Manitoba (2002 HSAS) survey respondents reported a relatively high rate (10.4%) of unmet needs, ranking third nationally after Newfoundland and Prince Edward Island [1]. Moreover, the percentage of Canadians who reported unmet health care needs has increased (4% in 1994/95 to 6% in 1998/99), and the perception of unmet need is higher among females than males (7% versus 5% in 1998/1999) [7]. As well, women in Manitoba are almost twice as likely as men to report use of some form of alternative health care (see next section of this chapter) which may also indicate that women's needs are not adequately met by services or care available to them.

The 2000/01 CCHS asked Canadians how satisfied they were with health care services (including hospital, physician and community-based services). The lowest levels of satisfaction in Canada were reported by residents of Nunavut, while among the provinces, Manitobans reported the lowest levels of satisfaction with health care services overall. Manitoba women were somewhat more likely than men (81.2% versus 79.2%) to rate the quality of services as excellent or very good (compared to Canadian women and men: 84.7% and 84.0% respectively). However, results of the Women's College Hospital Health Survey showed that 43% of Canadian women have changed doctors within the year because they were dissatisfied with the way they were being treated [1]. These results indicate both considerable dissatisfaction among women, and consequences for the continuity of care.

⁷ These included the 1998/99 National Population Health Survey, the 2000/01 Canadian Community Health Survey, and the 2001 Health Service Access Survey.

⁸ The MCHP *Sex Differences Report* reported sex-specific MRI scan rates, which did not differ for Manitoba males and females. However, the report did not address wait times for this service [3].





Women's Access to Health Services

Because women have higher rates of health care utilization, they are also disproportionately affected by difficulties accessing these services. Unfortunately, the 2002 Health Services Access Survey (HSAS) did not report on access indicators by sex, but found that the vast majority of Manitobans (84.8%) had a regular physician in 2001. More than 50% of those who did not, gave the reason as having not contacted a physician, that is, a lack of doctors was not apparently the primary cause of a lack of continuity in care [1]. Manitoba has among the highest number of health care providers per capita in Canada. However, a recent study also shows that the province ranks among the three provinces with the largest net losses of health care providers through interprovincial migration. Another concerning trend is that health care professionals are aging faster than the Canadian workforce overall and that more doctors move to urban than to rural communities [20]. Results of a Manitoba study indicate that the use and supply of family physicians' services has actually declined only slightly since the early 1990s, a period when a physician surplus was widely perceived. In explanation for current shortages of physicians, the study points to a major generational shift and an increase in workloads among family physicians in the province. Older physicians have heavier workloads than in the past, while more young doctors limit their workloads. Thus, difficulties in finding a physician may be due, not only to somewhat fewer physicians, but to greater competition for physicians' time and possibly to fewer physicians taking on new patients [21].

A number of other access issues were highlighted by the HSAS, which generally showed greater challenges for Manitobans than for other Canadians: 17.1% of Manitobans had difficulty accessing routine care (11.1% Canada), 19.4% had trouble getting health information or advice (13.1% Canada), and 26.2% had difficulty getting immediate care for a minor health problem (18.8% Canada). Problems of access to health services are particularly great in rural areas. The 2002 Romanow Commission acknowledged that rural challenges to access result from serious shortages in health care providers in rural areas. As well, rural residents face additional barriers to access, including the need to travel for care, added costs for travel, and separation from social support [1, 2].

Although comprehensive studies of sex differences and gender influences on health service access are lacking, a study which conducted a gender analysis of wait times for hip and knee replacement provides an interesting illustration of how gender issues may influence access. The study showed distinct access barriers for women that are commonly unaccounted for in studies of wait times for surgery. Women were seen to delay a decision to undergo surgery because of their unpaid care giving responsibilities or the lack of support for their own care during rehabilitation following surgery. Because such delays typically preceded their being placed on waiting lists, women's barriers to surgical services are often underestimated [22]. Although these access barriers resided in the daily life context of women, rather than in the health service *per se*, it signals a lack of relevance of services for women and of measures designed to monitor access.





Socioeconomic Status & Women's Health Service Usage and Access

Low income and education are known to have negative consequences for health and are associated with service use rates. Several Canadian studies have reported that low income is nearly as important a determinant of health service use as is illness [23]. National population health surveys and Manitoba health administration data have shown that women and men with low incomes are more likely than those with higher incomes to be heavy users of physician services, emergency departments, to be admitted to hospital, to take multiple medications, to require home care services, and to die sooner [7, 3]. Not only are the poorest Canadians affected, as the relationship between service use and income often follows a gradient. For example, Canadians in the lowest income group are more likely to be hospitalized than those in the middle and highest income groups (12%, 7%, 5%). As well, access to dental care is characterized by a steep income gradient, with the lowest rates of use found among those with the lowest incomes. This reflects the fact that dental care is considered a non-essential service and, therefore, is not covered by public health insurance and those living on low incomes are less likely to have private insurance or coverage through an employment benefits plan than those with mid to high range incomes. A similar relationship has been demonstrated for education levels and rates of hospitalization. Men and especially women with less than secondary education are more likely to be hospitalized than those with college or university education [7].

The MCHP data provided above showed that low income residents of Manitoba's urban communities made more frequent visits to general physicians yet, in both urban and rural areas, had fewer consultations with specialists than residents of high income neighbourhoods [3]. Particularly concerning for women is that residents of low income areas are less likely to use preventive screening services that protect women from serious life threatening conditions. In both urban and rural centres, women in the highest income neighbourhoods are most likely to use a Pap smear to screen for cervical cancer and a mammogram to screen for breast cancer. Furthermore, low screening rates among women with income challenges are consistent with research that has found higher risks of cervical cancer in this population (for more information, see Chapter Five, Cancer).

A review of literature on factors contributing to long hospital stays found considerable evidence that women were at increased risk for long stays in hospital. The authors attributed this to women's greater likelihood of suffering from adverse social circumstances, such as isolation, poverty, inadequate housing and poor access to transportation, as well as to women living longer than men [24]. These findings are somewhat consistent with the results of the data analysis presented above, which showed both a strong relationship between area-level income and length of hospital stays, and that females used more hospital days than males, though the difference achieved statistical significance only in Manitoba's rural south and north regions [3].

Gender inequalities may also limit Manitoba women's access to services, as is the case for many millions of women in other nations who continue to be deprived of basic health care as a result of poverty and discrimination [25]. To a large extent, Canada's universal medical care system has removed financial barriers to medical and hospital services. Though provincial systems vary somewhat in the extent of coverage, in Manitoba the Medicare system covers all residents for physician, midwifery, public health





and hospital services, as well as some chiropractic and home care services. Despite these benefits, indirect and incidental costs associated with service access still present barriers for individuals living on low-incomes. For example, women report that the expenses of travel and accommodation, lost income, and childcare influence their decision to seek health care. Women's lower levels of labour force participation and lower average earnings compared to men, as well as their limited access to other household income, or influence over how it is spent contribute to financial barriers women face in getting health services (see Chapter Two, Women, Income and Health).

Aboriginal Women and Accessible, Appropriate Care

Although sex-specific data for health services use by First Nations or Aboriginal⁹ people is unavailable, information for the total population (female and male) gives a broad indication of usage rates, which are enhanced by the results of qualitative studies with women. An analysis of provincial administrative data found large disparities in service use between First Nations and Manitobans overall. Hospitalization rates for Registered First Nations (RFN) people in Manitoba were double the rates for all Manitobans (348 versus 156 per thousand, per year). In most RHAs, RFN residents had the highest rates of both hospitalization and total days of care. RFN persons also average more frequent contact with physicians than do other Manitobans (5.8 versus 4.7 visits per year). However, the rate at which First Nations people were referred to specialists, taking into account the first consultation or referral visit only, was almost the same as for other Manitobans (0.29 versus 0.27 visits per person, per year), despite much poorer average health status of First Nations. It is interesting to note that the proximity to specialists did not influence rates of specialist consultations for RFN. For example, in Winnipeg and Brandon (where 90% of the specialists are located), RFN people had fewer contacts per person with specialists (first visit and follow-up treatment by a specialist) than did other residents (Winnipeg: 1.60 versus 1.71; Brandon: 0.82 versus 0.98), again, despite their overall poorer health [26]. Other research has shown that Aboriginal people in Canada, as well as visible minorities, have lower odds of reporting specialist consultations than Canadians with Caucasian ancestry [11].

Aboriginal women face formidable barriers in obtaining appropriate health services, including discrimination, distance and cultural barriers [12]. Research that explored Aboriginal women's experience with mainstream health care services in Winnipeg indicated a considerable level of unmet needs. Among the top four health needs reported by participants were the need for improved access to services (23% of 125 respondents) and the need for treatment and services for depression (22%), which followed reports of need for balance in their life (26%), and having their nutritional needs met (23%) [27]. In a study of older Métis women in Saskatchewan, Krieg and colleagues identified multiple, interconnected barriers to accessing health care in northern and Aboriginal communities, including service availability, transportation, financial needs, language and isolation. The authors noted that access barriers have led to increased dependence on informal care giving to fill the gaps of necessary services [28], responsibilities that primarily fall on women in the community. Aboriginal women are also vulnerable to other health

⁹First Nations Manitobans are those individuals who hold Treaty Indian status or are a Registered Indian as defined by the *Indian Act of Canada*, and/or who are members of an Indian Band or First Nation. Aboriginal people are those who self-identify as belonging to a culturally defined population.





system challenges commonly experienced by northern and rural residents, such as a lack of choice in health care providers and high turn over rates limiting the continuity of care, and which may reduce the quality of care [29].

Aboriginal women's dissatisfaction with health services also stems from the system's lack of appropriateness and sensitivity for the distinct value systems of Aboriginal peoples. Traditional Aboriginal cultures generally view health as a holistic state of being, with spiritual, emotional, physical and mental dimensions, and which involves the whole community [28]. Bartlett described concerns raised by Métis women with the lack of collective experience around diagnoses and treatment in mainstream health services. Women reported feelings of isolation in the individualized health system and society. Current services, based on westernized models, fail to account for the unique value systems of Métis women around collective identity and communal support [30].

Similarly, a study among women in a northern BC reserve community, which brought First Nations women's perspectives to bear on health care encounters, demonstrated the need for health service providers to account for the historical and social contexts of women's lives. Though both positive and negative aspects of women's encounters were examined, participants described more negative experiences, including having their health concerns and knowledge invalidated by service providers; racism and discrimination; apprehension of children brought for care; services being withheld from women who were homeless or who suffered from alcoholism; feelings of being an "intruder" or being excluded by the system; and punitive rules (e.g. fines for missed appointments) that failed to account for barriers inherent to their social circumstances (e.g. remote communities, lack of a phone, transportation, low income). As well, past experiences of the residential school system affected some women's encounters with the health care system, which was perceived as another colonial authority with the potential to re-victimize women. Harms suffered in the schools, including sexual abuse, shaming of the body and self, and the reinforcement of non-assertiveness and stoicism, heightened women's anxiety and delayed their seeking care. Women's health care encounters were recognized to greatly influence not only their own health, but that of their family members and communities, due to the culturally defined role of women [29].

Policy Implications

National and provincial health policy trends in recent decades have progressed in addressing issues that are consistent with women's health priorities, even though gender influences on health and health care have not always been recognized or acknowledged. For example, the 2002 report of the Romanow Commission made few mentions of women or gender, yet the report called for a reinforced commitment to a universally accessible, publically funded health care system and expanded support for home care, which showed progress toward addressing some of the key challenges for women, such as low income and barriers to health insurance, and high demands for care in the home and community [31].

As well, recent decades have seen provincial health departments move toward a population health approach and multisectoral initiatives that recognize the breadth of factors that influence health, many of which fall outside the health sector. This too has been appropriate to women's health and health service





priorities, as the broader social and economic arena is an important contributor to women's health risks through the effects of an unequal distribution of power and resources. Research has demonstrated that socio-economic status and other factors beyond individual control are more important to women's health status than are lifestyle factors. Thus, women's health promotion initiatives that focus only on lifestyle will have limited effect until more is done to address economic inequality and women's poverty [32].

There is increasing recognition that health policies that account for differences in women's and men's biological and social vulnerability to health risks, their health outcomes, and health service use patterns are more likely to be successful and cost-effective compared to those that are not concerned with such differences. Health Canada's adoption of a policy that commits to gender-based analysis throughout the department has provided an important example for this work at the federal level. Furthermore, the development of women's health strategies, both at national and provincial levels, help to raise the profile of gender sensitive and women-centred health care.

Considerable community and research capacity exists in Manitoba to support the advancement of gender-sensitive, women-centred care (see the Gender and Health Planning resources on Prairie Women's Health Centre of Excellence website www.pwhce.ca and the Women's Health Clinic's model for women-centred care www.womenshealthclinic.org).

Manitoba Women's Health Strategy Goals:

- To reduce the risk factors that contribute to the poor health of many women
- To support development of a health system that is sensitive and responsive to women's health
- To establish an effective mechanism for women to influence the health care system
- To promote a wellness model based on adequate public education and prevention of disease, in addition to the existing treatment model
- To ensure that the continuum of care for women spans all life stages
- To build broad understanding that women's health status includes their physical, emotional and mental health [33]

Some good practices for women's care include consideration of women's needs for respect, safety, involvement and participation, and empowerment in care environments. As well, models of women-centred care recognize the importance of accommodating women's service access barriers, which commonly include low income, transportation challenges, care giver burden, role conflicts associated with paid and unpaid work, and child care needs [34, 35, 36]. With regard to Aboriginal women, Browne and colleagues proposed that policies should recognize Aboriginal women's centrality as care givers in the family, safeguard against negative stereotyping of women, and support education for health providers, staff and administrators that includes an analysis of the socio-political and historical factors influencing health care encounters [29].

Health policy and program initiatives should be informed by the context of women's whole lives and social circumstances. In particular, there is a need for greater sensitivity for the influence of gender-based violence on women's physical and mental health, as well as for the health consequences of gendered power relations. For example, health promotion messages often target women in their role as care givers in the family, yet such initiatives too often overlook important power imbalances within the household





that may limit women's ability to make decisions about implementing health promotional measures [37], or ignore women's own wellbeing [25]. Finally, health service planning for women's needs also requires comprehensive information on important health issues for women, which include reproductive health issues, but also such concerns as women's greater burden of chronic disease and chronic pain conditions.

Because women hold strong values with respect to health, are major consumers of health services, and have an important role in the formal and informal provision of care, it is essential that they also have a major role in determining the future of health care. Furthermore, it is important that community consultation for health program planning and evaluation reflects the diversity of Manitoba's women and involves women with demonstrated health vulnerabilities and health service challenges, including women living on low income, women with disabilities, and women living in rural and remote communities, among others.

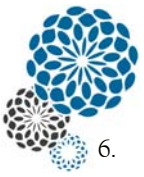
According to Women and Health Care Reform¹⁰, women will soon outnumber men among family physicians in Canada, and are affecting the nature of physician practice in beneficial ways. However, they are not the main decision-makers in primary health care, as greater authority rests in economic policy makers, managers and specialist physicians, most of whom are still men. Women have a large stake in the future of primary health care, yet their limited voice in reform processes can lead to policies that are not sensitive to women needs or, in fact, are detrimental to their health. For example, the transfer of services to the community level holds potential for improving the relevance and accessibility of services for women, yet too often this shift has also seen a transfer of responsibilities for care to under-resourced community level agencies and to care givers in the home, who are more often women [9]. Considering that care giving has not only positive, but also negative effects on the health of women (see Chapter Two, Unpaid Work and Consequences for Women's Health), the potential danger for the costs of reform to outweigh benefits becomes clear.

References

1. Colman R. July 2003. A Profile of Women's Health Indicators in Canada. Ottawa: Health Canada. 241 p.
2. Romanow RJ. November 2002. Building on Values: The Future of Health Care in Canada – Final Report of the Commission on the Future of Health Care in Canada. Ottawa: National Library of Canada. 356 p.
3. Fransoo R, Martens P, and The Need To Know Team. 2005. Sex Differences in Health Status, Health Care Use and Quality of Care: A Population Based Analysis for Manitoba's Regional Health Authorities. Winnipeg, Manitoba: Manitoba Centre for Health Policy. 437 p.
4. Martens PJ, Fransoo R, The Need to Know Team, Burland E, Jebamani L, Burchill C, Black C, Dik N, MacWilliam L, Derksen S, et al. 2003. The Manitoba RHA Indicators Atlas: Population-Based Comparison of Health and Health Care Use. Winnipeg, Manitoba: Manitoba Centre for Health Policy. 288 p.
5. CANSIM Table 105-05011 Canadian Community Health Survey (CCHS) indicator profile, by age group and sex, Canada, provinces, territories, health regions (2007 boundaries) and peer groups, annual. [Internet]. Ottawa, ON: Statistics Canada; c2007 [cited 2008 Aug 6]. Available from: http://cansim2.statcan.ca/cgi-win/CNSMCGI.EXE?Lang=E&ArrayId=01050501&ArrayPick=1&Detail=1&ResultTemplate=CII/CII_&RootDir=CII/&TblDetail=1&C2SUB=HEALTH

¹⁰ Formerly the National Coordinating Group on Health Care Reform and Women.





6. CANSIM Table 105-0259 Contact with telephone health line in the past 12 months. Canadian Community Health Survey (CCHS 2.1 and 3.1). [Internet] Available from: http://cansim2.statcan.ca/cgi-win/cnsmcgi.pgm?regtk=&C2Sub=&ARRAYID=1050259&C2DB=PRD&VEC=&LANG=E&SrchVer=2&ChunkSize=50&SDDSLOC=&ROOTDIR=CII/&RESULTTEMPLATE=CII/CII_PICK&ARRAY_PICK=1&SDDSID=&SDDSID=SC=
7. Johansen H, Millar W. 1999. Health Care Services - Recent Trends. Health Reports 11(3):91-109.
8. Carriere G. 2004. Use of Hospital Emergency Rooms. Health Reports 16(1):35-39.
9. National Coordinating Group on Health Care Reform and Women. 2005. Primary Health Care Reform and Women. Winnipeg, Manitoba: Canadian Women's Health Network. 23 p. <http://www.womenandhealthcarereform.ca/publications/primarycareen.pdf>
10. Kazanjian A, Morettin D, Cho R. 2004. Health Care Utilization by Canadian Women. In: Women's Health Surveillance Report - Supplementary Chapters. Ottawa: Canadian Institute for Health Information. p 5-6.
11. Nabalamba A, Millar WJ. 2007. Going to the Doctor. Health Reports 18(1): 23-35.
12. Bertakis KD, Azari R, Helms LJ, Callahan EJ, Robbins JA. 2000. Gender Differences in the Utilization of Health Care Services. J Fam Pract 49:147-152.
13. Author not stated. 2001. Health Care and Self Care. In: Catlin G, editor. How Healthy are Canadians? 2001 Annual Report. Health Reports 12(3): 33-40.
14. Cleary PD, Mechanic D, Greenley JR. 1982. Sex differences in medical care utilization: an empirical investigation. Journal of Health and Social Behavior 23(2): 106-19.
15. Millar WJ, Beudet MP. 1996. Health facts from the 1994 National Population Health Survey. Canadian Social Trends (Statistics Canada, Catalogue 11-008) Spring: 24-7.
16. Plinchta S. 1992. The effects of woman abuse on health care utilization and health status: a literature review. Womens Health Issues 2(3):154-63.
17. Tjepkema M. Health care use among gay, lesbian and bisexual Canadians. Health Reports [Internet]. 2008 March 19 [cited 2008 July 30]; 19(1):53-64. Available from <http://www.statcan.ca/english/freepub/82-003-XIE/2008001/article/10532-en.htm#4>
18. Raine R. 2000. Does gender bias exist in the use of specialist health care? J Health Serv Res Policy 5(4):237-49.
19. Borkhoff CM, Hawker GA, Kreder HJ, Glazier RH, Mohamed NN, Wright JG. 2008. The effect of patients' sex on physicians' recommendations for total knee arthroplasty. N Engl J Med 342:1016-22.
20. Canadian Institute for Health Information. 2007. Summary Report: Distribution and Internal Migration of Canada's Health Care Workforce. Ottawa, Ontario: CIHI. 34 p.
21. Watson D, Bogdanovic B, Heppner P, Katz A, Reid RJ, Roos NP. May 2003. Supply, Availability and Use of Family Physicians in Winnipeg. Winnipeg: Manitoba Centre for Health Policy 92 p.
22. Jackson BE, Pederson A, Boscoe M. 2006. Gender-based Analysis and Wait Times: New Questions, New Knowledge. In: Postl BD, editor. The Final Report of the Federal Advisor on Wait Times. Women and Health Care Reform Group. 17 p.
23. Wilkins K, Park E. 1998. Characteristics of Hospital Users. Health Reports 9(3):27-36.
24. De Coster C, Kozyrskyj A. Sept 2000. Long-Stay Patients in Winnipeg Acute Care Hospitals. Winnipeg, Manitoba: Manitoba Centre for Health Policy. 67 p.
25. Doyal L. November 2001. Sex, gender, and health: the need for a new approach. BMJ 323:1061-1063. <http://www.bmj.com/cgi/content/full/323/7320/1061?ck=nck>
26. Martens PJ, Bond R, Jebamani L, Burchill C, Roos NP, Derksen S, Beaulieu M, Steinbach C, MacWilliam L, Walld R, et al. March 2002. The Health and Health Care Use of Registered First Nations People Living in Manitoba: A Population-Based Study. Winnipeg, Manitoba: Manitoba Centre for Health Policy. 203 p.
27. Bent K. 2004. Anishinaabe Ik-We Mino-Aie-Win: Aboriginal Women's Health Issues: A Holistic Perspective on Wellness [master's thesis on the internet]. Athabasca, Alberta: University of Athabasca, supported by a grant from Prairie Women's Health Centre of Excellence; 2004 August [cited 2008 Aug 25]; [93 p.]. Available from: <http://www.pwhce.ca/pdf/abWoHealthBentFull.pdf>
28. Krieg B, Martz DJF, McCallum L. Revised August 2007. Access to Health Services for Elderly Métis Women in Buffalo Narrows, Saskatchewan. Winnipeg, Manitoba: Prairie Women's Health Centre of Excellence. 38 p.
29. Browne AJ, Fiske J, Thomas G. 2000. First Nations Women's Encounters with Mainstream Health Care Services and Systems. Vancouver, BC: British Columbia Centre of Excellence for Women's Health. 37 p.
30. Bartlett J. 2005. Health and well-being for Métis women in Manitoba. Canadian Journal of Public Health 96(1): 22-27.





31. Haworth-Brockman M. 2002. Romanow Report Addresses Some Key Issues. Press Release. Winnipeg, Manitoba: Prairie Women's Health Centre of Excellence. 28 November 2002 [cited 2008 Sept 10]. Available from: <http://dawn.thot.net/romanow.html#25>
32. Donner L. January 2002 (Revised) Women, Income and Health in Manitoba: An Overview and Ideas for Action [Internet]. Winnipeg, Manitoba: Women's Health Clinic. Available from: <http://www.womenshealthclinic.org/resources/wih/wih.html>
33. The Manitoba Women's Health Strategy. [Internet]. Winnipeg, Manitoba: Manitoba Health. [cited 2008 Jul 30]. Available from <http://www.gov.mb.ca/health/women/>
34. Vancouver/Richmond Health Board. June 2001. A framework for women centred health. Vancouver, BC: Vancouver/Richmond Health Board. 46 p.
35. Barnett R, White S, Horne T. 2002. Voices From The Front Lines: Models of Women-Centred Care in Manitoba and Saskatchewan. Winnipeg, Manitoba: Prairie Women's Health Centre of Excellence. 49 p.
36. Women's Health Clinic. Models of Women-Centred Care, Appendix 5, Women, Income and Health in Manitoba: An Overview and Ideas for Action. [Internet]. Winnipeg, Manitoba: Women's Health Clinic; updated Nov 20, 2006 [cited 2008 Sept 10]; [at about 8th screen]. Available from: <http://www.womenshealthclinic.org/resources/wih/wih.html>
37. Östlin P, Eckermann E, Shankar Mishra U, Nkowane M and Wallstam E. 2006. Gender and health promotion: A multisectoral policy approach. Health Promotion International 21(Supplement 1):25-35.





Women’s Use of Complementary and Alternative Health Care Services

Introduction

This section presents a review of women’s use of complementary and alternative health care services (CAHC). It does not discuss the evidence of either the safety or the efficacy of any of these treatment modalities. Also excluded from this chapter is a discussion of the use of natural health products (such as vitamins, herbs, homeopathic agents and nutritional supplements).

CAHC services range from specific interventions (such as reflexology and acupuncture) to complete systems of belief about the origins, prevention and treatment of disease (such as Aboriginal healing, traditional Chinese medicine and Ayurvedic medicine) [1]. We refer to these treatments collectively as “complementary and alternative health care” since they are most commonly used to supplement, rather than to replace, conventional medical care. One estimate found that only six percent of Canadians used CAHCs and natural health products without also using conventional medical care [2]. CAHC services encompass a wide range of practices, with varying levels of use, evidence and consumer confidence [3].

What is considered “alternative health care” rather than “conventional health care” is culturally dependent. That is, how a particular practice is viewed on the continuum from “conventional” or “mainstream” to “alternative” care varies from country to country, and within and across countries, from culture to culture. For example, traditional Chinese medicine is a dominant healing practice in China, as is Ayurvedic medicine on the Indian subcontinent. Homeopathy is more widely accepted by physicians in Britain than by those in Canada, and has a much higher profile there than it does in Canada. In Scandinavian countries, unlike Canada, reflexology is practised widely [1].

The definition of what is, and what is not, a CAHC has also changed over time. An excellent example of this is the practice of midwifery in Manitoba. Historically, in both European and Aboriginal cultures, midwives provided mainstream care for pregnant and birthing women. When maternity care became the sole prerogative of medical practitioners, the practice of midwifery was criminalized. With the growth of the women’s health movement, beginning in the 1970s, activists sought to reclaim the practice of midwifery as a legitimate form of maternity care, based in the belief that pregnancy and childbirth are normal life events for women, and not states of illness. During this time, some women did practise informally as midwives, gaining their training either in countries where midwifery was considered a form of conventional care, or informally in Canada, through apprenticeships with practising midwives, or through some combination of means. In 2000, midwifery became a regulated health profession in Manitoba. Midwives are now employed by Regional Health Authorities in the province, and may attend women giving birth in and out of hospital. We have therefore seen midwifery go from mainstream practice, to criminal activity, to alternative care, and now, to a regulated health profession, part of the continuum of conventional care in Manitoba. See Chapter Four for a more complete discussion of midwifery in Manitoba.





CAHC treatments, while diverse, have several important elements in common. While some of these are shared with mainstream medical practices, they are emphasized in CAHC. CAHC treatments are generally viewed by those who practice them, and by those who use them, as:

- working in conjunction with the body's own self-healing mechanisms;
- “holistic” treatments for the whole person (not just of separate systems of the body);
- actively involving the patient in the treatment process;
- focusing on disease prevention and well-being [1].

The reasons people give for using CAHC services range widely, from prevention, to health maintenance, to dealing with chronic diseases and conditions. American research found that about 60% of CAHC treatments were used for prevention or health maintenance, while about 40% were used to treat existing illness [2]. Other American research found that most of those who chose CAHC treatments did so less because of dissatisfaction with conventional medicine and more because CAHCs were congruent with their values, beliefs and philosophical orientation to health and life [4].

Canadians with chronic pain and chronic conditions such as fibromyalgia, back problems, multiple chemical sensitivities, bowel disorders, migraine, chronic fatigue syndrome, thyroid disorders, asthma, ulcers, or arthritis or rheumatism all report higher use of CAHC services [2, 5]. Reported CAHC use was highest among those with fibromyalgia (37%), back problems (36%) and multiple chemical sensitivities (33%) [5]. Many of these conditions are more common among women. For example, Manitoba women were more likely than men to have received treatment for arthritis and inflammatory bowel diseases [6]. Women are also more likely to have been diagnosed with fibromyalgia [7]. Those living with cancer and HIV/AIDS are also more likely to use CAHC services to cope with the long term effects of living with these diseases, to improve their quality of life, and to cope with the side effects of treatments [2, 8].

CAHC services are also important for women because they offer non-pharmaceutical treatments for symptoms associated with women's reproductive health, especially menstruation, pregnancy and menopause. This is consistent with the desire many women have to take greater control over their personal health and well-being, and to avoid the medicalization of normal physiological aspects of women's lives [2, 9].

The services included in this review of CAHC services are those generally considered as “alternative” in Canada at this time. They include massage therapy, homeopathy, acupuncture, Feldenkrais and Alexander techniques, relaxation therapy, biofeedback, Rolfing, herbal remedies, reflexology, spiritual and religious healing [10]. None of these treatments are insured through Manitoba's universal health care system (“medicare”), although they may be insured through private extended health benefit plans (usually employment-related). While some discussions of CAHC include chiropractic treatments, these have been excluded from the analyses presented here, as residents of Manitoba have coverage through the medicare system for some chiropractic treatments.





Manitoba Women and Complementary & Alternative Health Care

Manitobans are making significant use of services that, until recently, were considered outside the scope of “mainstream” health care [2]. The use of CAHC services has increased over time in Canada, and women consistently report higher use than men [2, 5, 9]. In 2003, 19% of Manitoba women and 11% of men consulted a CAHC practitioner¹¹ [11].

Figure 1 shows the percentage of Manitoba women and men using CAHC services in 2003. Women (19.1%) were significantly more likely than men (11.0%) to report that they had seen or talked to a CAHC provider during the previous year. Massage therapy was the most commonly used form of alternative care, with 14.7% of Manitoba women visiting a massage therapist in 2003 [10]. Thus, the reported use of alternative services is higher among women than among men. While research has not been done to definitively determine why this is the case, a number of contributing factors have been identified.

The treatments offered by conventional medicine for chronic diseases and chronic pain (both more common among women) may not be effective in relieving symptoms. As well, there are the long term physical and emotional consequences of domestic and sexual violence. CAHC practitioners are more likely than physicians to speak to women about “holistic health”, understanding the influences of the multiple stresses and experiences (both past and present) in women’s lives. This is especially important for women who have experienced sexual and physical violence, both as adults and as children [9]. Lesbian and bisexual women are also significantly more likely than heterosexual women to use CAHC services. In a study combining results from the 2003 and 2005 cycles of the Canadian Community Health Survey, Statistics Canada found that 33.1% of lesbian women consulted CAHC providers, compared with 27.1% of bisexual women

Measuring the Use of Complementary and Alternative Health Care Services

The data presented here are drawn from the Canadian Community Health Survey, Cycle 3.1, for the population aged 18 years and older. Respondents were asked whether, in the past 12 months, they had seen or talked to an alternative health care provider such as an acupuncturist, homeopath or massage therapist about their physical, emotional or mental health.

Those who responded in the affirmative to this question were then asked specifically about consultations with massage therapists, homeopaths, acupuncturists, Feldenkrais or Alexander teachers, relaxation therapists, Biofeedback teachers, Rolfers, herbalists, reflexologists, spiritual healers, religious healers, and others [10].

Chiropractic care has been excluded from the analyses presented here, as residents of Manitoba have coverage through the medicare system for a maximum of 12 chiropractic visits per calendar year.

¹¹ These analyses are based on Statistics Canada’s Canadian Community Health Survey Cycle 3.1, Public Use Microdata file, which contains anonymous data collected in the year 2003. All computations on these Microdata were prepared by Prairie Women’s Health Centre of Excellence and the responsibility for the use and interpretations of these data is entirely that of the authors. The CCHS does not include residents of Nunavut, Yukon, or Northwest Territories, First Nations Reserves, Crown lands, residents of institutions, full-time members of the Canadian Forces, and residents of some remote regions.

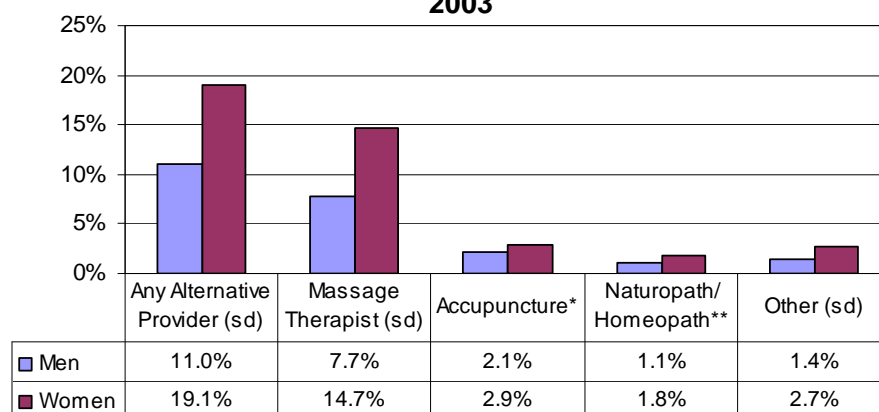




and 20.6% of heterosexual women [12]. Generally, CAHC practitioners spend more time with clients than physicians do with their patients. Many women appreciate these differences, and this may in part explain women's greater use of these treatments [9].

Manitoba women were also more likely than their Canadian counterparts to have used CAHC services [5]. This is consistent with other research that has found that the use of CAHC services is higher in Western Canada [2].

Figure 1
Use of Alternative Health Providers
Manitoba Men and Women
2003



Source: Statistics Canada, CCHS 3.1 [10]

Notes:

(SD) indicates that the difference between women and men is statistically significantly ($p < .05$).

* For men only, the data should be interpreted with caution as the coefficient of variation is between 16.6% and 33.3%.

** For both women and men, the data should be interpreted with caution as the coefficient of variation is between 16.6% and 33.3%.

The Costs of Alternative Care

As noted, alternative and complementary care are outside of the mainstream medical system and thus are not funded through Manitoba medicare. Manitobans pay for them either through extended health benefit plans, or personally, or some combination of both, with the individual and the plan each paying a portion of the costs. Women's lower average incomes than men place them at a disadvantage in purchasing CAHC services. Employed women are also less likely than their male counterparts to have employment-related extended health benefits (see Chapter Two). Across Canada, 54% of employed men and 45% of employed women had employment-related extended medical and/or dental and/or disability and/or life insurance [13]. Some women also can receive employment-related health benefits through their husbands' or partners' employment.

It is therefore not surprising that, despite the greater burden of illness that is found in lower income groups, the proportion of women using alternative health care services increases with income. This is in contrast to the patterns of use of conventional medical services, where women with the lowest incomes see physicians more frequently, and are more likely to be admitted to hospital, than are women with higher incomes [6] (see Physician and Hospital Service Use, this chapter).

There are several different ways of measuring income. In this discussion, we consider two of these – household income and personal income. The advantage of using household income in considering

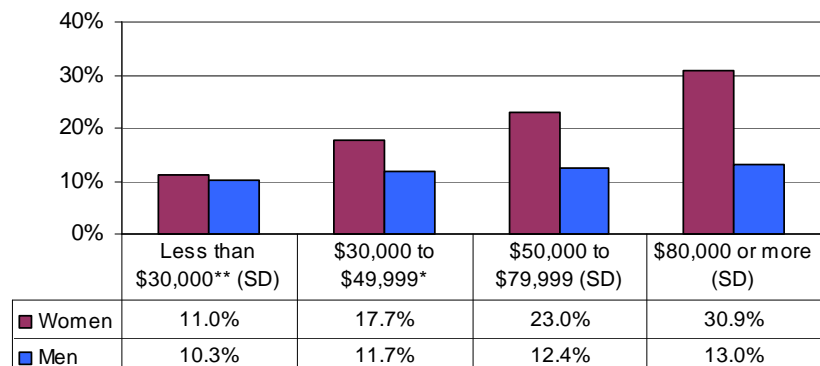




women’s income is that it gives a better picture of women’s potential access to resources than a measure of individual income. However, the disadvantage is that it assumes that women and men have equal access to household resources, regardless of their personal incomes. We have therefore examined use of CAHCs considering both household and individual incomes.

Figure 2 illustrates the use of CAHC services by women and men by *household* income in 2003. Household income was strongly related to women’s use of CAHC services, but not to men’s. Nearly three times more women reported using CAHC services in the highest household income quintile (31%) compared to women in the lowest household income quintile (11%). By contrast, the proportion of men who reported using CAHC services varied only slightly from the highest income quintile (13%) to the lowest (10.3%). There was almost no difference (<1%) in the CAHC use among women and men in the lowest income group, and the difference increased with household income to 18% between women and men in the highest income group. This suggests that women’s increased use of CAHCs, unlike that of men, is directly linked to household income [10].

Figure 2
CAHC Use by Household Income
Manitoba 2003



Source: Statistics Canada, CCHS 3.1 [10]

Notes:

(SD) indicates that the difference between women and men is statistically significantly ($p < .05$).

* For men only, the data should be interpreted with caution. The coefficient of variation is between 16.6% and 33.3%.

** For both women and men, the data should be interpreted with caution. The coefficient of variation is between 16.6% and 33.3%.

Among both women and men, increased *personal* income is more strongly linked to increased use of CAHC services than is household income (Figure 3). Use is highest among both women and men with 2003 personal incomes above \$50,000 [9]. Again, the relationship between increased income and use of CAHC services is stronger among women than among men.

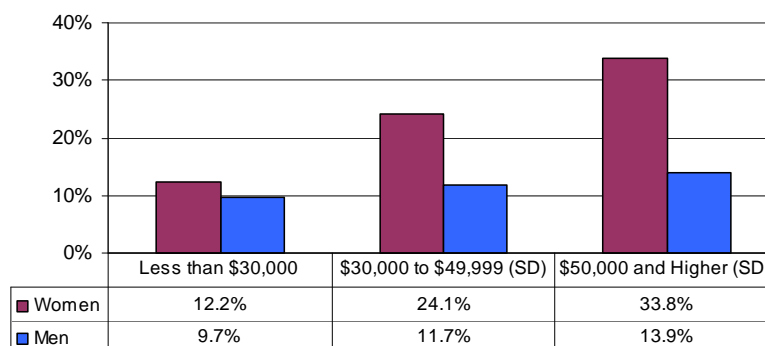
Whichever measure of income is used, women are more likely than men to use some of their additional income to purchase CAHC services.





When comparing these two means of measuring income, it is apparent that increased use of CAHC services is more strongly linked to women’s personal incomes rather than to their household incomes, suggesting that women’s willingness and/or ability to spend money on their own personal care is greater when they earn the money themselves. This is consistent with research done in Ottawa with 300 husband-wife families that found that the family should not be viewed as “a model of harmony and sharing in a world of discord.” Woolley found that access to, and control over, the family’s financial resources were shaped by each family member’s circumstances and that those with higher earnings had more control over money, placing women at a disadvantage. Her results challenge the notion that the family can be treated as one for purposes of economic theory or public policy [14]. CAHC use is perhaps one example of this phenomenon. Unfortunately, we have no survey data that address the extent to which women control their own incomes, and to what extent they have decision-making power over family income.

Figure 3
CAHC Use by Personal Income
Manitoba 2003



Source: Statistics Canada, CCHS 3.1 [10]

Notes:

(SD) indicates that the difference between men and men is statistically significantly ($p < .05$).

CAHC & Women with Chronic Conditions

Chronic health conditions, especially chronic pain, are also linked to use of CAHC services. Women with chronic conditions¹² are more likely to use CAHC services than are other women or men with chronic conditions (Figure 4). They were about 50% more likely to use CAHC services than either women without chronic conditions, or men with them. These data do not tell us why women with chronic diseases use CAHC services. However, other research suggests that women with chronic diseases are turning to CAHC providers to provide additional care for symptoms that are not well managed or controlled by conventional medical treatments, because CAHC approaches offer them the opportunity to be more actively involved in managing their conditions, because they prefer the additional time and

¹² Respondents to the CCHS 3.1 were asked if they had a condition that was expected to last, or had already lasted 6 months or more, and which had been diagnosed by a health professional. They were asked about each of the following: food allergies, other allergies, asthma, fibromyalgia, arthritis, rheumatism, back problems, high blood pressure, migraine headaches, chronic bronchitis, emphysema, chronic obstructive pulmonary disease, diabetes, epilepsy, heart disease, cancer, stomach or intestinal ulcers, the effects of a stroke, urinary incontinence, bowel disorders, Crohn’s Disease, or colitis, cataracts, glaucoma, thyroid conditions, chronic fatigue syndrome, multiple chemical sensitivities, mood disorders, anxiety disorders, learning disabilities, other long term physical or mental health conditions [10].



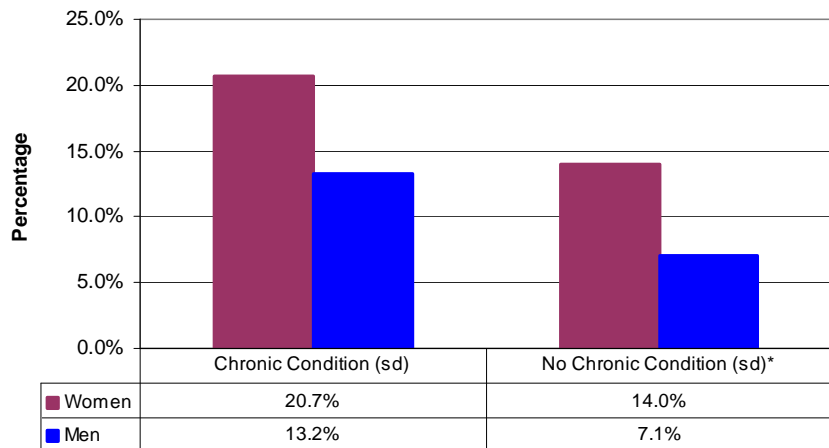


relationship-building generally offered by CAHC practitioners, and because they wish to reduce their dependence on prescription drugs [9].

Self-rated health (or self-perceived health) is how individuals describe their own health. In Canada, self-rated health is measured using the following five point scale: excellent, very good, good, fair and poor. Self-rated health can reflect aspects of health not captured in other measures, such as incipient disease, disease severity, aspects of positive health status, physiological and psychological reserves and social and mental function [15]. A substantial body of international research has found self-rated health to be significantly and independently associated with specific health problems, use of health services, changes in functional status, recovery from episodes of ill health and mortality [16]. (See Chapter Five for a more complete discussion of Self-rated Health.)

In 2003, 60% of Manitoba females (aged 12 years and older) reported themselves to be in “excellent” or “very good” health, while 11.4% reported that their health was only “fair” or “poor”. Considering CAHC use by Self-Rated Health status provides additional information about the users of these services in Manitoba (Figure 5).

Figure 4
CAHC Use by Chronic Condition Status
Males & Females Manitoba 2003



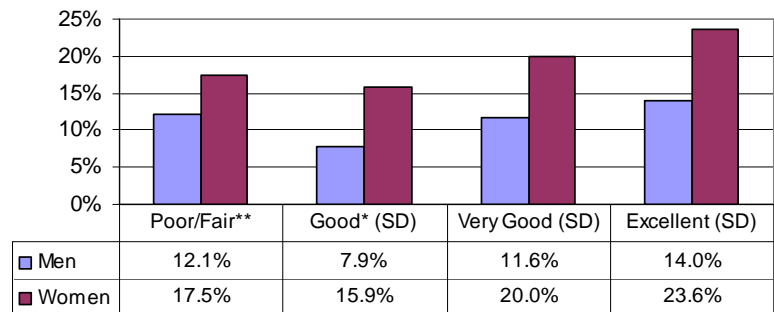
Source: Statistics Canada, CCHS 3.1 [10]

Notes:

(SD) indicates that the difference between women and men is statistically significantly (p<.05).

* For men only, the data should be interpreted with caution as the coefficient of variation is between 16.6% and 33.3%.

Figure 5
Use of Alternative Health Care Providers
Manitoba Men and Women by Self-Rated Health
2003



Source: Statistics Canada, CCHS 3.1 [10]

Notes: (SD) indicates that the difference between women and men is statistically significantly (p<.05).

* For men only, the data should be interpreted with caution. The coefficient of variation is between 16.6% and 33.3%.

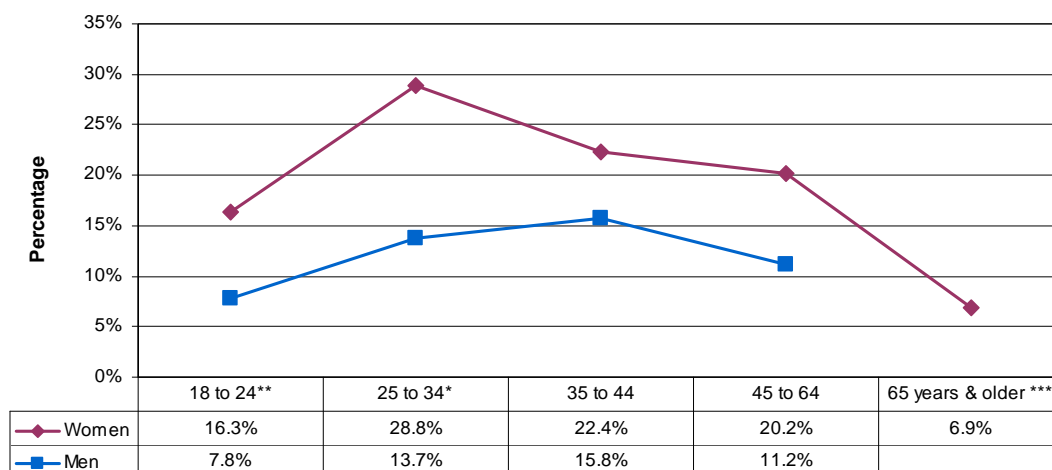
** For both women and men, the data should be interpreted with caution. The coefficient of variation is between 16.6% and 33.3%.





It is interesting that women who rated their own health as “good” were the least likely (15.9%), and women who rated their own health as “excellent” (23.6%) were the most likely, to have to have used CAHC services. This same pattern of use was also true for men [10]. However, it is important to interpret these results cautiously, since self-rated health is also related to income, with higher income women more likely to report very good or excellent self-rated health. Of course, these are also the women best able to afford, and most likely to purchase CAHC services. Note as well that women who rated their own health as “fair” or “poor” were more likely to use CAHC services than those with “good” self-rated health. This is consistent with the higher use of CAHC services by women with chronic conditions.

Figure 6
Use of Alternative Health Care Services By Age
Manitoba 2003



Source: Statistics Canada, CCHS 3.1 [10]

Notes:

** For both women and men, the data should be interpreted with caution. The coefficient of variation is between 16.6% and 33.3%.

*** The data for men aged 65 years and older have been suppressed due to high sampling variability.

The age of Canadians using CAHC services has changed over time. Earlier research found that CAHC use was a mid-life phenomenon, with use highest among those aged 25 to 44 years [4, 17]. However, it should be noted that these findings included use of chiropractic care, not included in our analyses here. In 2003, CAHC services were highest among young Manitoba women aged 25 to 34 years of age, perhaps reflecting a greater openness on their part to these therapies (Figure 6).

CAHC as Part of Women’s Health Care

In 2003, over 82,200 (or 19%) Manitoba women reported using CAHC services [10]. Other research has found that over 90% of CAHC users also use conventional health services [2]. In fact, CAHC users were found to be *more likely* than other Canadians to have a regular physician, to have seen a specialist in the last year, and to be high users of the health care system (reporting 10 or more physician visits per year). This is consistent with a population with a higher burden of chronic diseases. However, even after controlling for the presence of chronic diseases and pain, Canadian CAHC users were found to be more frequent users of conventional medical care than non-CAHC users with a similar profile [17].





Ontario research has found that the use of CAHC services has increased among women diagnosed with breast cancer. In 2005, 57.4% of respondents (compared with 39.4% in 1998) reported visiting a CAHC practitioner in the previous year. When CAHC practices are used by over half of women with breast cancer, their use can no longer be regarded as “alternative” [18].

The use of CAHC services among women to ameliorate the symptoms associated with menopause has also increased. The results of the Women’s Health Initiative study in the US demonstrated health risks associated with the use of estrogen-progestin hormone treatments to reduce menopausal symptoms [20]. As a result, more women are trying alternatives to relieve menopause-related symptoms [9, 21].

Women’s perceptions that the CAHC services that they use will not be accepted, either by their family physician or by specialists, also creates conflict and anxiety, contributing to their reluctance to discuss their use of CAHC with their physicians [19]. In a time when conventional medical practitioners are under increasing pressure to use evidence-based interventions, the relative lack of conventional evidence (such as clinical trials) in support of CAHC treatments may have increased their resistance and scepticism to these practices [19].

Women are more likely than men, however, to discuss CAHC use with their physicians. They are also more likely to discuss using conventional medicine with a CAHC provider than to discuss CAHC use with a physician [9]. Given the increased use of CAHC services, the ability and willingness of CAHC providers and of physicians to communicate clearly both with their patients and with each other is essential for women’s health [3]. Unfortunately, this is often not the case, creating both conflicts for women who use CAHC services, and potential risks to their health [1, 9, 17, 19]. The decision not to disclose CAHC use to physicians can itself be hazardous to women’s health [19]. Alberta research with women using CAHC services and natural health products (NHPs) for symptomatic relief of symptoms related to menopause, found that while family physicians were valued as a credible source of information for many women, others felt that their family physician would be unable or unwilling to provide them with unbiased information about CAHC treatments. This contributed to their unwillingness to discuss these issues with their family physicians [22]. Research in British Columbia has described how this environment creates conflicts and stress for women with breast cancer, trying to decide whether, and if so, which, CAHC treatments, and NHPs to use. The authors of the BC report challenge health professionals to address some of the underlying biases that may compromise open discussions with cancer patients about their choices of CAHC services and NHPs, and to promote informed decision-making that will support them to develop individual integrative care plans that safely incorporate complementary and alternative treatments along with conventional cancer treatments [19].

It is noteworthy that CancerCare Manitoba has recognized these issues, advising that the majority of cancer patients use complementary therapies, especially in the post-treatment phase. CancerCare’s approach is to invite cancer patients to share their decisions about, and experiences with, using CAHC services and NHPs, promising that their questions will be treated with respect and compassion. They stress the importance of letting CancerCare staff know if they are using a product or supplement because of potential interaction with cancer treatments. Cancer Care offers staff consultations upon request to





those with questions about these interactions. Informed decision-making about these issues is difficult because reliable information may be difficult to find, and because conventionally trained doctors often do not have expertise in this area [23].

Policy Implications

This review has illustrated the value of considering sex and gender in understanding women’s use of CAHC services. Outdated assumptions about women’s use of CAHC services, such as the belief held by some that women seek these treatments because of underlying mental health problems, manifested as psychosomatic conditions, in which they seek cures for imaginary diseases, are just that – outdated assumptions [9].

Trying to negotiate different systems of care, based on different philosophies and beliefs, can create stresses and conflicts for patients. There is, therefore, now some support in Canada for “integrative health care”, based on effective communication among all parties (CAHC providers, physicians and patients). Integrative care is more than using CAHC, natural health products and conventional care together. Its basis is the belief that consumers should have the ability to make informed choices about all their health care options. Integrative care removes the burden from patients of trying to bridge the divide between “alternative” and “conventional” forms of care [1]. Health Canada has funded some pilot projects in integrative health care, including work on the development of materials about CAHC treatments for undergraduate medical education [24].

There are also jurisdictional issues involved in the provision of CAHC services. Establishing standards for those providing CAHC treatments, and determining if and how these should be regulated, is a matter of provincial jurisdiction. For example, massage therapy in Manitoba is not a regulated profession, though massage therapists have a voluntary accreditation program through their professional association [25]. Similarly, those practising as naturopathic doctors are not regulated in Manitoba, although they are in other provinces, including Ontario [26]. On the other hand, the regulation of natural health products, such as herbal remedies, vitamins, and minerals, is a matter of federal jurisdiction [27].

As increasing numbers of women turn to CAHC services to complement the treatments provided by conventional medicine and allied health professions, issues related to their use become increasingly important. These include:

1. the dearth of research on the effectiveness of many CAHC treatments;
2. the lack of regulatory oversight of providers of CAHC services;
3. physicians’ lack of knowledge about CAHC treatments;
4. patients’ reluctance to disclose their use of CAHC services to their treating physicians.

Because of sex and gender differences in the use of, and the response to, CAHC treatments, it is imperative that sex and gender be included in addressing these issues.





References

1. Smith M, Simpson J. 2003. Alternative Practices and Products: A Survival Guide. Health Policy Research Bulletin (7) 3-5. Ottawa: Health Canada.
2. Simpson J. 2003. Utilization Patterns and Trends. Health Policy Research Bulletin (7) 9-13. Ottawa: Health Canada.
3. Hoe D. 2003. Finding the Balance: Safety, Effectiveness and Access. Health Policy Research Bulletin (7) 16-18. Ottawa: Health Canada.
4. Astin JA. 1998. Why Patients Use Alternative Medicine: Results of a National Study. JAMA, 279(19): 1548 – 1553.
5. Park J. 2005. Use of Alternative Health Care. Statistics Canada Health Reports 16(2) pp 39-42.
6. Fransoo R, Martens P, Burland E. 2005. Sex differences in health status, health care use, and quality of care: A population-based analysis for Manitoba's regional health authorities. Winnipeg, Manitoba: Centre for Health Policy. 435 p.
7. Yunus MB. 2002. Gender differences in fibromyalgia and other related syndromes. The Journal of Gender-specific Medicine 5(2):42-7.
8. Leis A, Millard J. 2007. Complementary and alternative medicine (CAM) and supportive care in cancer: a synopsis of research perspectives and contributions by an interdisciplinary team. Supportive Care in Cancer 15:909-912
9. Barnett R. 2004. A preliminary framework for understanding women's use of natural health products (NHPs) and complementary and alternative health care (CAHC). Ottawa, ON: Health Canada, Women's Health Bureau, Health Policy and Communications Branch and Natural Health Products Directorate, Health Products and Food Branch. 38 p
10. Statistics Canada. 2006. Canadian Community Health Survey Cycle 3.1: Data Dictionary Master File - 12-Month (Rounded). Ottawa: Statistics Canada. 919 p.
11. Statistics Canada. Canadian Community Health Survey Cycle 3.1. Public Use Microdata File.
12. Tjekpkema M. 2008. Health care use among gay, lesbian and bisexual Canadians. Statistics Canada Health Reports 19(1) pp 553-64.
13. Marshall K. 2003. Benefits of the Job. Perspectives on Labour and Income 4(5) pp 5-12. Ottawa: Statistics Canada.
14. Woolley F. 2000. Control Over Money in Marriage. Carleton Economic Papers (00-07):1-34.
15. Statistics Canada Health Indicators Definitions, Data Sources and Methods. [Internet]. Ottawa, ON: Statistics Canada.; c2007 [cited 2008 Mar 14]. Available from <http://www.statcan.ca/english/freepub/82-221-XIE/2007001/defin/defin1.htm#wb1srh>
16. Bowling, A. 2005. Just one question: If one question works, why ask several? Journal of Epidemiology and Community Health 59:342-5.
17. Millar WJ. 2001. Patterns of use - alternative health care practitioners. Health Reports 13(1):9-21.
18. Boon HS, Folashade O, Zick SM. 2007. Trends in complementary/alternative medicine use by breast cancer survivors: Comparing survey data from 1998 and 2005. BMC Women's Health. 7:4. Available at: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=17397542>
19. Balneaves LG, Truant TLO, Kelly M, Verhoet MJ, Davison, BJ. 2007. Bridging the gap: decision-making processes of women with breast cancer using complementary and alternative medicine (CAM). Supportive Care in Cancer 15:973-983.
20. Rossouw JE, Anderson GL, Prentice RL, LaCroix AZ. 2002. Risks and benefits of estrogen plus progestin in healthy postmenopausal women: Principle results from the Women's Health Initiative randomized controlled trial. Journal of the American Medical Association 288(3):321-33.
21. Daley A, MacArthur C, McManus R, Stokes-Lampard H. 2006. Factors associated with the use of complementary medicine and non-pharmacological interventions in symptomatic menopausal women. Climacteric 9(5):336-46.
22. Suter E, Verhoef M, Bockmuehl C, Forest N, Bobey M, Armitage GD. 2007. Inquiring Minds: Women's approaches to evaluating complementary and alternative therapies for menopausal symptoms. Canadian Family Physiician. 53:84-90.
23. Complementary & Alternative Therapies. [Internet]. Winnipeg: Cancer Care Manitoba .; c2008 [cited 2008 Mar 17]. Available from [http://www.cancercare.mb.ca/home/patients and family/patient and family support services/complementary and alternative therapies/](http://www.cancercare.mb.ca/home/patients%20and%20family/patient%20and%20family%20support%20services/complementary%20and%20alternative%20therapies/).





24. Caron I, Simpson J. 2003. Who's Doing What. Health Policy Research Bulletin (7) 28-29. Ottawa: Health Canada.
25. Massage Therapists (MTs). [Internet]. Winnipeg: Manitoba Labour and Immigration .; c2007 [cited 2008 Mar 24]. Available from http://www.gov.mb.ca/labour/immigrate/asset_library/en/work/qrprofessions/Massage_Ther.pdf
26. Naturopathic Practice in Canada. [Internet]. Toronto, ON: Canadian College of Naturopathic Medicine . [cited 2008 Mar 24]. Available from <http://www.ccnm.edu/program.html#canadapractice>.
27. About Natural Health Product Regulation in Canada. [Internet]. Ottawa, ON: Health Canada.; c2004 [cited 2008 Mar 24]. Available from http://www.hc-sc.gc.ca/dhp-mps/prodnatur/about-apos/index_e.html.





Women's Use of Home Care

Introduction

While there is no single, commonly accepted definition of home care, home care refers to services that allow individuals with mental or physical impairments to stay at home and in their communities. Home care support generally includes:

- services provided by health professionals such as nurses, physiotherapists, occupational therapists and speech therapists;
- personal care including assistance with the activities of daily living such as toileting, transferring and grooming; and
- household and home support services such as cleaning, laundry and meal preparation [1].

Home care programs in Canada began as replacements for hospital care. Despite this, home care is not currently considered a medically necessary service under the *Canada Health Act*. Provincial governments are not, therefore, required to provide home care services, and there are wide disparities in the both the provision of public home care services, and their costs, across Canada [1].

Home care services can prevent, delay, shorten or substitute for care provided in hospitals or personal care homes [2]. As hospital stays for many procedures have been shortened or eliminated, home care services are essential to support those discharged. Home care services are also important to promote the independence and autonomy of persons with disabilities, for many of whom home care is essential to community life. Without it, they would be forced to depend on family and friends, or live in institutions. More recently, home care services have been expanded to include palliative care, providing medical and nursing care, personal care and other important services to those who wish to remain at home in the final stages of a terminal illness.

Home care services are an important women's health issue for three main reasons. Firstly, women are more likely to need home care services than are men, both because they bear a greater burden of chronic diseases and because they have longer average life expectancies than do men. Secondly, women provide more informal, unpaid care to family members and friends than do men. Gaps in home care programs are, therefore, more problematic for women. Thirdly, the overwhelming majority of paid home care workers are women. Paid and unpaid caregiving can have positive and negative effects on women's health and well-being - economic, physical and emotional [2]. (For a discussion of unpaid work and its consequences for women's health see Chapter Two.)





The Manitoba Home Care Program

Manitoba's Home Care Program is the oldest comprehensive, universal home care program in Canada, established by the Provincial Government in 1974. It forms part of the Continuing Care Program, which operates as a single-entry point for home care services and long term care facilities. Home Care was delivered by Manitoba Health from 1974 until the establishment of Manitoba's Regional Health Authorities in 1997. Since that time, RHAs have been responsible for the assessment, coordination and delivery of home care services [1, 3, 4, 5]

The Program's mandate is: 1) to provide home care services to persons assessed as having inadequate informal resources to return home from hospital or to remain at home in the community; and 2) to assess and place individuals in long term care facilities if and when home care cannot provide them with the services they need, and to provide them with care until they are placed. These services are provided free of charge to those who meet the assessment criteria for admission to the Home Care Program [4]. There is no age requirement, and services are provided to children as well as to adults. In order to be eligible for services through the Program, an individual must:

- be a Manitoba resident, registered with Manitoba Health;
- require health services or assistance with activities of daily living;
- require service to be able to stay in their home for as long as possible; and
- require more assistance than that available from existing supports and community resources [4].

Though Manitoba has a well-established, comprehensive and well-respected Home Care program, it was not intended to replace the informal care provided by family members and friends.

Manitoba Home Care Program Services

Personal Care Assistance

Home care workers provide help with mobility and personal care. Services are provided in homes, in the workplaces and in post-secondary educational institutions. Services for children attending school are provided through their school divisions.

Home Support

Home care workers provide meal preparation, light housekeeping and laundry.

Health Care

Nurses, physiotherapists, occupational therapists and others provide health teaching, counseling and direct services.

Family Relief

Home care workers may provide short term periods of in-home relief for informal caregivers.

Supplies and Equipment

Some supplies and equipment needed for in-home care are available for loan.

Respite Care and Adult Day Programs

Adult day programs are available for a fee. Respite care in hospital is available at no cost. There is a charge for respite care provided in personal care homes [4].





Financing Home Care

Across Canada, approximately 77% of home care expenditures are for publicly funded services and 23% for private services. However, spending on private sector home care in Manitoba accounted for less than 8% of total home care expenditures in 2000-2001. This was the least among all of the provinces. This reflects the strength of the Home Care Program, and means that much more of the home care required was provided by the public system (and at no cost to the individuals) than is the case in other Provinces. This is clearly an advantage for Manitoba women. In 2003/04, the Home Care Program accounted for 5.8% of Provincial government health care spending, compared to the national average of 4.2% [6, 7].

The costs of the Home Care Program have also grown more quickly in Manitoba than in other provinces, reflecting the provincial government's commitment to the program. In 2003-04, Manitoba had the second highest home care expenditure per capita (\$140.15/person) after New Brunswick. The Canadian average was \$91.14. The federal government also provides some home care services in Manitoba, through Veterans Affairs Canada to eligible veterans, to First Nations people living on Reserves, and to RCMP personnel. In 2003/04, this totaled \$1,493,000 in Manitoba, while expenditures under the provincially funded Home Care Program totaled \$194,129,300. In addition, some home care services are provided through the Workers Compensation system to workers living with disabilities as a result of their compensable injury or illness. In Manitoba, this totaled \$1,320,000 in 2003/04 [7].

The need for action on home care has long been recognized by advocates and policy experts. More recently, the 2002 Romanow Commission on the Future of Health Care in Canada, the Health Council of Canada and the First Ministers have all called for the inclusion of some types of home care services under the *Canada Health Act* [1, 8, 9]. The Romanow Commission recommended the expansion of the *Act*, to include medically necessary home care services in just three areas:

- Home mental health case management and intervention
- Home care services for post-acute patients for a maximum of 14 days, and for a maximum of 28 days if rehabilitation is required
- Palliative home care services to support people in their last six months of life [1].

The narrow scope of the Romanow Commission recommendation has been criticized, both by the Health Council of Canada, which found the two week limitation to be insufficient [8] and by the National Coordinating Group on Health Care Reform and Women¹³, which noted that these recommendations would not relieve the disproportionate burden of providing long term informal care born by women [2]. Despite the commitment of the previous federal government to implementation of these recommendations, through the *First Ministers Accord on Health Care Renewal* [9], the funding for these improvements to home care services has not been received, leaving Manitoba and other provinces to fund home care services without ongoing federal support.

¹³ Now called Women and Health Care Reform www.womenandhealthcarereform.ca





In some provinces, private delivery of home care services is the norm and has been promoted as a way to deliver services more “efficiently”. Experience in Manitoba has shown that that is not the case. In 1996, the Province announced its intention to privatize some elements of the Home Care Program in Winnipeg. Unionized home care workers went on strike over this issue. The agreement that ended the strike provided that a maximum of 20% of jobs would be privatized, on an experimental basis, with an evaluation to take place within two years. Olsten Health Services, a subsidiary of the Olsten Corporation, the largest home care company in the US, and the only private bidder for this contract, eventually took on just 10% of home care cases in Winnipeg. The experiment was abandoned, when it became clear that despite promises of financial savings and increased efficiencies, private services could not be delivered at the same or lower cost than through the public system. This was the case even though workers employed by private home care companies usually earn less, have fewer benefits, less job security, and, as a result have greater job turnover than do those employed by the Manitoba Home Care Program [10, 11]. This resulted in less continuity of care, which is vital to home care recipients and their families [12].

During this time, it also became clear that Manitoba’s public Home Care Program, and those employed in it, enjoyed widespread public support. This was an issue of “core values” for many Manitobans, who expect the provincial government to provide quality community care to its vulnerable citizens [10].

Home Care Program Use in Manitoba

The number of Home Care clients has dramatically increased in Manitoba since the Program was first established. From 1990/1991 to 1998/1999, the number of Manitobans receiving home care services increased from 24,022 to 32,238, an increase of 34.2% [3]. The proportion of Manitobans receiving Home Care services increased from 2.3% of the population in 1995/96 to 2.7% in 1998/99 [5] to 3.0% in 2003/04 [12]. About 63% of all Home Care clients are female, and this percentage has not changed over time [5, 13].

Increased home care use is associated with age. In 1998/99, approximately 21% of Home Care users were under 65 years of age; 79% were 65 years and older and 60% were 75 years and older [5]. In 2003/04, 62% of all Home Care users, and 66% of all female users, were 75 years and older [13]. While this is related in part to Manitoba’s aging population, there are other health care system factors that contribute to increasing demand for home care services: earlier hospital discharges, greater use of day surgery, advances in technology and pharmacology that allow more care to be provided at home, reductions in the number of hospital beds and a reduced ratio of nursing home beds to the population aged 75 and older [5, 14]. Demographic changes have also contributed to increased demand for home care – informal caregivers (mostly women) have less time available for informal care than those in their mothers’ generation due to paid employment and responsibilities for their own children [5]. Personal preference is also a factor. Most Manitobans prefer to remain in their homes, rather than be admitted to long term care facilities.

In 1998/99, 25% of Home Care clients used the Program for up to 60 days, 39% used the Program from 61 to 364 days and 37% of clients used the Program for the full year. The majority of Home Care clients (71%) were single, widowed, or divorced, illustrating the importance of immediate family members in providing informal home care. During that year, 8% of all Home Care clients were admitted to a personal care home, and 9% died while in receipt of Home Care [15].





In urban areas of Manitoba (Winnipeg and Brandon), among seniors aged 65 years and older, lower neighbourhood income is associated with higher mortality rates, higher hospitalization rates, and higher rates of death. Home Care use by income is therefore an important measure of the system's responsiveness to those in need. In 1998/99, 21.2% of seniors in the lowest income quintile received Home Care services, as did 17.1% in the second lowest income quintile, 15.0% in the middle income quintile, 13.7% in the second highest income quintile and 12.8% of those in the highest income quintile [3]. While these data do not measure the adequacy of the services received, or the perceived unmet needs of care recipients, they do illustrate an important point. The services of the Manitoba Home Care Program are used more by those with lower incomes, and higher burdens of ill health, as was intended.

The analysis that follows is based on data that were provided by Manitoba Health for clients of Manitoba's Home Care Program. It includes information about clients who received at least one service from the Program, in the 2003/04 fiscal year. Those who were assessed, but did not receive any in-home services during that year were not included in the data [13]. We are not able to include analyses of the different types of home care services provided, their intensity or frequency of their use, as these are not currently available from Manitoba Health [5, 15].

In the 2003/04 fiscal year, the Manitoba Home Care Program had 21,815 female Home Care clients and 12,653 male clients. This represented 3.7% of all Manitoba females, and 29.2% of women 75 years and older, compared with 2.2% of all males and 22.4% of men 75 years and older [13].

While Figure 1 shows some regional variations in the male to female ratio of Home Care users, more noticeable are the variations among RHAs. Home Care use in females ranged from a low of 10/1,000 in Burntwood and Churchill to a high of 56/1,000 in Parkland. These differences are in part due to the differing age structures of the populations in those regions.

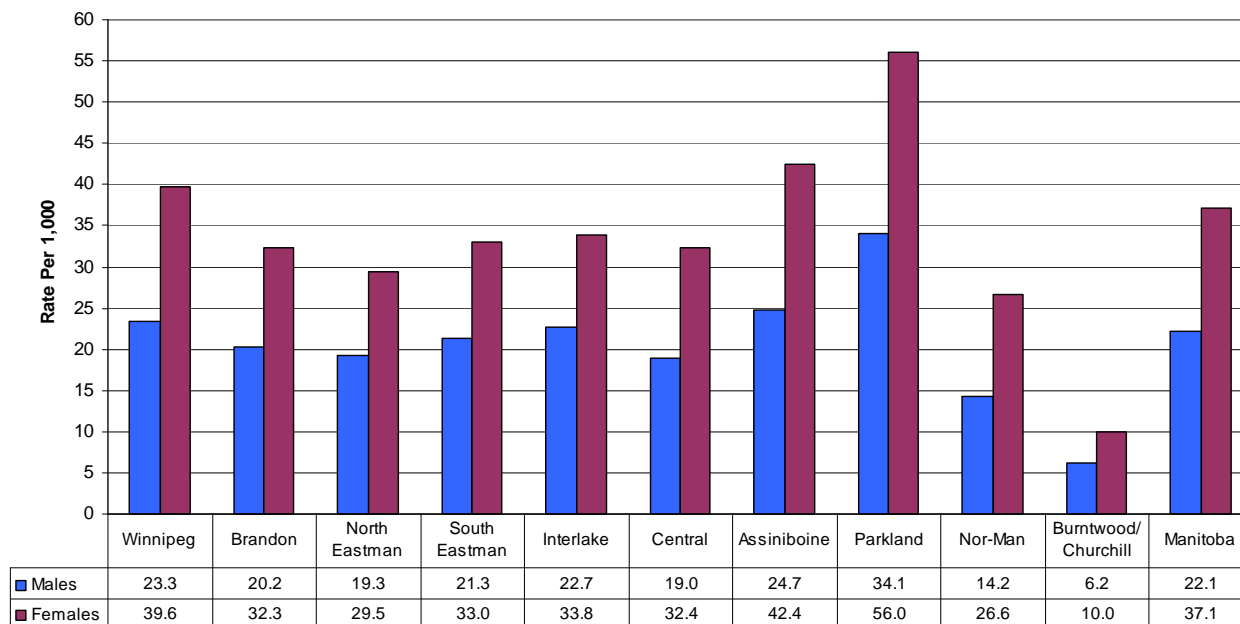
For example, the low usage in Burntwood/Churchill RHAs is in part due to the relative youth of their population when compared to Manitoba as a whole [14]. The Burntwood RHA is also home to a higher proportion of First Nations people living on Reserve, where the provision of home care services is a federal responsibility [15]. Services funded by the federal government have been criticized by the Assembly of First Nations as inadequate, insufficiently flexible, not grounded in a respect for culture and tradition, and not well-coordinated [16]. The dearth of appropriate home care services, particularly in remote communities, forces some Aboriginal Manitobans to move to larger centres such as Winnipeg. Jurisdictional disputes have also contributed to the lack of appropriate home care services for First Nations Manitobans on Reserves, forcing many, both children and adults, to leave their home communities [17, 18].

Regional differences in Home Care use in Manitoba have been examined using age- and sex- adjusted data for 1998/99 [15]. This method has the advantage of allowing inter-regional comparisons, adjusting for the differing age structure of the population across regions. However, it has the disadvantage of making sex differences invisible. Peterson, Shapiro and Roos examined all clients aged 65 years and older, and found that home care usage was significantly higher than the provincial average in the RHAs of Winnipeg,





Figure 1
Home Care Clients by Sex
Manitoba & RHAs
April 1, 2003 - March 31, 2004



Source: Manitoba Health [13]

Interlake, Parkland and Nor-man. They found usage was significantly lower than the provincial average in the Central, Brandon, South Westman and Marquette RHAs¹⁴. The authors concluded that, despite Regional administration and delivery of Home Care, rates of home care use were very similar across the province. They noted that this finding was different than that found in other jurisdictions, and suggested that this may result from factors including: Home Care’s inclusion as a core program by Manitoba Health; province-wide assessment and eligibility criteria; and the use of public employees as both case managers and direct care workers [15].

As noted above, the need for Home Care services increases with age. Figure 2 illustrates the patterns of home care use in Manitoba among women and men aged 75 years of age and older in 2003/04. In that year, 29.2% of women and 22.4% of men in that age group received Home Care services.

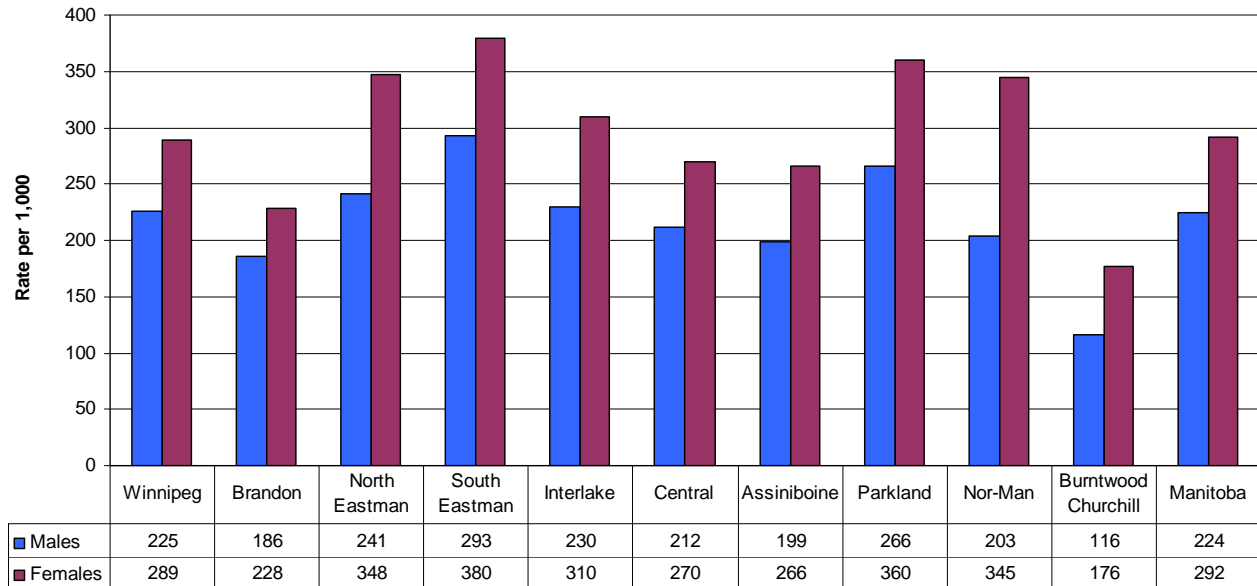
Given women’s longer average life expectancy, and increased likelihood of living with chronic diseases, it is not surprising that 68.2% of all home care clients 75 years of age and older were women, compared with 63% of all home care clients. Looking at it another way, in 2003/04, 21,815 Manitoba women and girls received Home Care services; 14,534 (66.6%) were 75 years of age and older [13]. In this same year, 6,768 men aged 75 years and older (53.5% of all male Home Care recipients) received services.

¹⁴ South Westman and Marquette RHAs have since been merged to form the Assiniboine RHA. This analysis excluded Burntwood and Churchill RHAs because of the jurisdictional issues described above.





Figure 2
Home Care Clients 75+ by Sex
Manitoba & RHAs 2003/04



Source: Manitoba Health [13]

Women aged 75 years and older, living in the RHAs of South Eastman, Parkland, North Eastman and Nor-Man and Interlake were more likely than their counterparts in the rest of Manitoba to have received Home Care services, while those living in the Brandon RHA were the least likely to have received them. The factors influencing Home Care utilization are complex, including issues of access, as well as expectations and cultural beliefs about the provision of care to elderly family and community members. Other research has found that residents of the Brandon RHA had lower rates of Home Care use and higher rates of hospital use before death, suggesting that some Brandon residents were hospitalized in situations where other Manitobans would have been cared for at home[15].

Use of Home Care by Manitoba Women with Disabilities

Data from Statistics Canada’s 2001 Participation and Active Living Survey show that about 14% of Manitobans reported living with some disability in 2001. Among adults 15 year of age and older 18.0% of females and 15.8% of males reported living with a disability¹⁵ [18, 23].

¹⁵ The Participation and Activity Limitation Survey uses the World Health Organization’s (WHO) framework of disability provided by the International Classification of Functioning (ICF). This framework defines disability as the relationship between body structures and functions, daily activities and social participation, while recognizing the role of environmental factors. For the purpose of PALS, persons with disabilities are those who reported difficulties with daily living activities, or who indicated that a physical, mental condition or health problem reduced the kind or amount of activities they could do.





Though the majority of Manitoba Home Care clients are elderly, the Home Care Program is vitally important for children and younger adults with disabilities. For those who require assistance with everyday activities, the Home Care Program is a key component of their independence. It is part of the larger portfolio of disability supports that includes such things as technical aids, transportation, support for independent living, job coaching, income assistance and housing. Without disability supports, including those provided by the Home Care Program, people with disabilities are prevented from fulfilling their social and economic potential [19, 20]. The Home Care Program provides care for adults with disabilities in their homes, in their workplaces and in educational settings. In Winnipeg, several nursing clinics for Home Care clients are available, enabling those who require nursing care to schedule these outside of their homes, for example, after work. For those who prefer, and are able, to directly manage their home care, the Self and Family Managed Care Program provides the same funding that would have been available for their care through the Home Care Program [21]. The majority of Self Managed Care program participants are women [20]. However, the tasks involved, including becoming the employer of those providing care, may be too daunting for many women with disabilities [20, 22]. Home care workers providing care in this way also lose the advantages of unionized, public sector employment, including pension contributions and other employment benefits.

Table 1 uses data from Statistics Canada’s Participation and Active Living Survey 2001 to highlight three key issues related to home care and people with disabilities – receiving help with everyday activities¹⁶, receiving help with the everyday activities from an organization or agency such as the Manitoba Home Care Program, and the extent to which people with disabilities report having unmet needs for help with everyday activities [18, 23].

| Table 1 | | | | |
|--|------------------------------------|-----------------|----------------------------------|-----------------|
| Persons Reporting Assistance/Need for Assistance with Activities of Daily Living 2001 | | | | |
| | Females 15 Yrs. & Older | | Males 15 Yrs. & Older | |
| | Canada | Manitoba | Canada | Manitoba |
| Persons with Disabilities | 15.7% | 18.0% | 13.4% | 15.8% |
| Persons with Disabilities Receiving Help with Activities of Daily Living | 74.6% | 72.0% | 55.3% | 48.9% |
| Persons Receiving Help Who Received Care from an Organization or Agency | 23.1% | 27.9% | 19.8% | 27.6% |
| Persons with Disabilities Reporting Unmet Needs for Help with Everyday Activities | 26.2% | 26.6% | 18.1% | 16.8% |

Data Sources: Statistics Canada, Participation and Active Living Survey 2001 [18, 23]

¹⁶ PALS defined everyday activities to include the following eight activities or tasks: (1) meal preparation; (2) everyday housework (e.g. dusting and tidying up); (3) heavy household chores (e.g. spring cleaning and yard work); (4) getting to appointments, running errands and grocery shopping; (5) looking after personal finances (e.g. making bank transactions or paying bills); (6) child care; (7) personal care (e.g. washing and dressing); (8) moving about inside the home/residence.





In both Canada and Manitoba, disabled women were much more likely than were their male counterparts to receive help with everyday activities – 72% of Manitoba women and 49% of Manitoba men. This may be due in part to women’s longer life expectancies, as the very elderly are more likely to require help with daily activities. Among people with disabilities who received help with everyday activities, Manitoba women and men were more likely than were their Canadian counterparts to have received this help from an organization or agency (including private companies, non-profit organizations and public home care programs). Interestingly, while across Canada men were much less likely to have received this care from an organization or agency, this difference was not present in Manitoba, where women and men were equally likely to have received formal home care. This suggests that one of the strengths of the Manitoba Home Care Program has been to create greater access for men in need of care, and to reduce their dependence on informal caregivers [18, 23].

However, Table 1 also points to the need for improvement in home care services for women. In both Canada and Manitoba, women were more likely than their male counterparts to report having unmet needs for help with everyday activities (27% of Manitoba women compared with 17% of men) [18, 23].

Gaps in Service & Areas for Improvement

Manitoba has an excellent Home Care Program, providing access to services at no cost to about 22,000 girls and women in the Province. There are still gaps in service, however. Home care recipients and their families may feel that the services provided by the Home Care Program are insufficient. Those who can afford to purchase extra services may choose to do so, but this expense can cause financial hardship. For example, 27% of Manitoba women with disabilities reported having unmet needs for help with activities of everyday living [18, 19].

Current Home Care services are focused on meeting the needs of those with long or short term physical health limitations, and of those with intellectual disabilities. It is not designed to support those living with mental illnesses. This gap was one of the priority issues identified by the Romanow Commission [1]. Despite commitments by the previous federal government to the First Ministers, funding to expand home care programs to provide enhanced services to people living with mental illnesses has not been forthcoming. The Canadian Mental Health Association has noted that “in a comprehensive continuum of care, home care must address the needs of people with mental illness as well as the mental health needs of all home care recipients” [24].

Much of the care that Home Care clients receive is provided outside of the Program, by informal caregivers, care disproportionately provided by women¹⁷. Many informal caregivers are loving and supportive. However, the underlying assumption of the Home Care Program, that families can and will provide care, and that this is both desired by, and in the best interests of, those receiving care is not always the case. Relying on informal care by family members can exacerbate intergenerational conflicts in families, as for example, with young adults with disabilities striving for independence, who must still rely

¹⁷ As noted before, see Chapter Two for a discussion of women’s unpaid work and caregiving.





on their parents for personal care. It can place a strain on marital relations, when one spouse becomes dependent for personal care on the other. It can also create conflicts between elderly parents and their children, when caregiving roles are reversed. Challenging these assumptions will both reduce the burden on informal caregivers and strengthen relationships between those receiving and those providing care.

As Evelyn Shapiro stated in her synthesis of findings from the 45 Home Care pilot projects funded through Health Canada's Primary Health Care Transition Fund (1997-2001):

It is time for both levels of government to implement a national home care program that treats all Canadians equally and equitably. The absence of a federal– provincial agreement on a national home care program means that where Canadians live, rather than what they need, determines access to services, residency requirements, the payment of user fees, and the continuity of service providers [25, p.ii].

The absence of such a national program means that Manitoba has funded its Home Care Program without federal support. A properly funded, national home care program would enable Manitoba to enhance its current Program to better meet the needs of those who need home care services, and the family members and friends who are their informal caregivers.

References

1. Romanow R. 2002. Building on Values: The Future of Health Care in Canada. Final Report of the Commission On The Future Of Health Care In Canada. Ottawa: Commission on the Future of Health Care in Canada. 356 p.
2. Armstrong P, Boscoe M, Clow B. 2003. Reading Romanow: The implications of the final report of the Commission on the Future of Health Care in Canada for Women. Toronto, ON: The National Coordinating Group on Health Care Reform and Women. 60 p.
3. Roos NP, Stranc L, Peterson S. 2001. A look at home care in Manitoba. Winnipeg, Manitoba: Manitoba Centre for Health Policy and Evaluation. 135 p.
4. Manitoba Home Care Program: Your Guide to the Manitoba Home Care Program. [Internet]. Winnipeg, MB: Manitoba Health. [cited 2008 Feb 29]. Available from <http://www.gov.mb.ca/health/homecare/guide.html>
5. Mitchell L, Roos NP, Shapiro E. 2005. Patterns in Home Care Use in Manitoba. Canadian Journal on Aging. 24(Suppl. 1):59-68
6. Le Goff P. 2002. Home Care in Manitoba, Saskatchewan, Alberta and British Columbia: Structure and Expenditures. Ottawa: Library of Parliament. Available from <http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/BP/prb0232-e.htm>
7. Canadian Institute for Health Information. 2007. Public-Sector Expenditures and Utilization of Home Care Services in Canada: Exploring the Data. Ottawa: Canadian Institute for Health Information. 36 p.
8. Health Council of Canada. 2008. Fixing the Foundation: An Update on Primary Health Care and Home Care Renewal in Canada. Ottawa: Health Council of Canada. 53p.
9. 2003 First Ministers' Accord on Health Care Renewal. [Internet]. Ottawa, ON: Health Canada.; c2006 [cited 2008 Feb 29]. Available from http://www.hc-sc.gc.ca/hcs-sss/delivery-prestation/fptcollab/2003accord/index_e.html
10. Shapiro E. 1997. The cost of privatization: A case study of home care in Manitoba. Winnipeg: Canadian Centre for Policy Alternatives Manitoba. 14 p.
11. Willson K, Howard J. 2000. Missing Links: The Effects of Privatization of Health Care on Women in Manitoba and Saskatchewan. Winnipeg: Prairie Women's Health Centre of Excellence. 71 p.
12. Fuller C. 2001. Home Care: What We Have, What We Need. Ottawa: Canadian Centre for Policy Alternatives. 59 p.
13. Manitoba Health. 2005. Custom Tabulation.
14. Martens P, Fransoo R, The Need to Know Team, et al. 2003. The Manitoba RHA Indicators Atlas: Population-based comparisons of health and health care use. Winnipeg, Manitoba: Manitoba Centre for Health Policy and Evaluation. 288 p.





15. Peterson S, Shapiro E, Roos NP. 2005. Regional Variation in Home Care Use in Manitoba. *Canadian Journal on Aging*, 24(Suppl. 1):69-80
16. First Nations Action Plan on Continuing Care. [Internet]. Ottawa: Assembly of First Nations.; c2005 [cited 2008 Mar 3]. Available from <http://www.afn.ca/cmslib/general/CCAP.pdf>
17. MacDonald N, Attaran A. 2007. Jordan's Principle, governments' paralysis. *Canadian Medical Association Journal* 177(4):321.
18. Statistics Canada. 2002. A Profile of Disability in Canada, 2001 – Tables. Catalogue No. 89-579-XIE. Ottawa: Statistics Canada. 24 p.
19. Province of Manitoba. 2001. Full Citizenship: A Manitoba Provincial Strategy on Disability. Winnipeg: Province of Manitoba 44 p.
20. Home Care and Women with Disabilities: An Interview with Paula Keirstead. [Internet]. : Thompson R; c1998 [cited 2008 Mar 04]. Canadian Women's Health Network. Network/le Réseau 1(3). Available from <http://www.cwhn.ca/network-reseau/1-3/interview.html>
21. Linda Dando. Home Care Program Director, Winnipeg Regional Health Authority, personal communication, March 4, 2008.
22. Self Managed Care Programs in Canada: A Report to Health Canada. [Internet]. : Spalding K, Watkins J, Williams, AP; c2006 [cited 2008 Mar 04]. Available from http://www.hc-sc.gc.ca/hcs-sss/alt_formats/hpb-dgps/pdf/pubs/2006-self-auto/2006-self-auto_e.pdf
23. Statistics Canada. Disability Supports in Canada, 2001 – Tables. Catalogue No. 89-577-XIE. Ottawa: Statistics Canada. 155 p.
24. Home Care and Mental Health: From Policy to Action Policy Forum January 29-31, 2006 Toronto, Ontario, Canada. [Internet]. Washington, DC: Canadian Mental Health Association .; c2006 [cited 2008 Mar 04]. Available from http://www.cmha.ca/data/1/rec_docs/628_From%20Policy%20to%20Action,%20March%202006%20English.pdf
25. Shapiro E. 2002. Sharing the Learning: Health Transition Fund Synthesis Series – Home Care. Ottawa, ON: Health Canada. 34 p.





Women's Use of Prescription Drugs

Introduction

Pharmaceuticals represent the third largest health care expenditure in Manitoba, after hospital and physician services. Growing costs reflect increases in drug usage more so than increases in price of drugs [1]. In the context of increasing costs and the demographic reality of an aging population, sex-specific and gender-based analyses of drug prescription use may improve the efficiency of medical responses, helping to highlight areas of risk or unwarranted prescription of drugs that are less effective for women, or for men.

An analysis of women's prescription drug use is especially important in light of women's greater use of pharmaceuticals, women's longer life spans, which increase their exposure to drug treatments, and the greater degrees to which women's lives have come under medical management (e.g. pregnancy, fertility, and menopause). As well, women generally hold considerable interest in the safety and effectiveness of prescription medications in connection with their child-bearing role and as the major providers of care giving within the home and community. Canadian women's collective memory of the thalidomide tragedy, and more recent experiences with Hormone Replacement Therapy, underscore the importance of continued vigilance in identifying sex and gender-distinct effects and harms of drug use. Thus, a gender-based analysis of pharmaceutical use can also help to inform and involve women in the development of therapeutic approaches that are more appropriate to their health needs, risks and priorities.

Manitoba Women's Prescription Drug Use^{18,19}

Manitoba females are more likely to be prescribed medication than are males. Based upon data for 2003/04, the Manitoba Centre for Health Policy (MCHP) found a significantly higher prevalence of prescription drug use by females than males. Among females, 69.8% received at least one prescription compared to 61.1% of males (see Figure 1). This is consistent with findings from previous analyses of Manitoba data and from other Canadian studies [3, 4, 5].

Pharmaceutical use refers to the use of prescription drugs dispensed from community pharmacies. It excludes drugs provided to hospital patients.

Prevalence of drug use:

The percentage of Manitoba residents (all ages) who had at least one prescription dispensed in the 2003/04 fiscal year. As this includes any prescription medication, contraceptives are a common contributor to female but not to male rates. Values are age-adjusted to reflect the total population of Manitoba (males and females combined).

Number of different drugs used:

The average number of different drugs dispensed in 2003/04 to each resident who had at least one prescription dispensed in the year. 'Different' drugs means agents in different classes of the Anatomic, Therapeutic, Chemical (ATC) classification system. Thus, getting prescriptions for two types of antidepressants, for example, would not count as two different drugs [Fransoo et al. 2005].

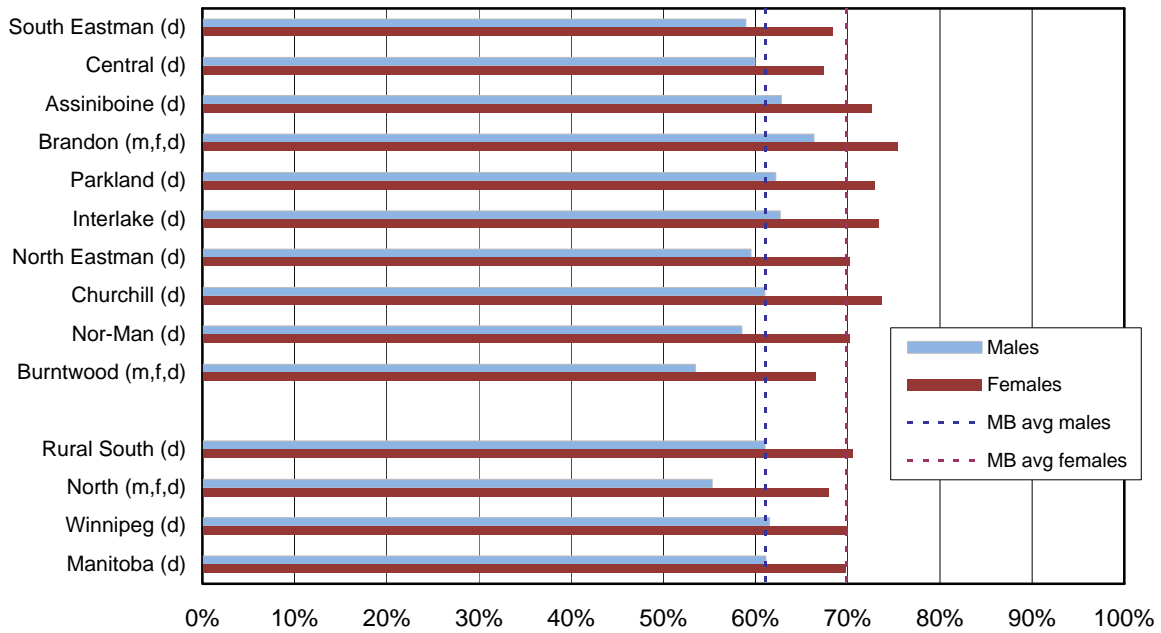
¹⁸ Unless otherwise noted, data presented in this section were derived from Fransoo et al., Manitoba Centre for Health Policy, *Sex Differences in Health Status, Health Care Use, and Quality of Care*, 2005.

¹⁹ The MCHP data are derived from the Drug Programs Information Network database (DPIN). Prescriptions dispensed from hospital pharmacies to patients are excluded [Fransoo et al, 2005].





Figure 1: Pharmaceutical Use, by RHA, 2003/04
Age-adjusted percent of residents with at least one prescription for any drug



'm' indicates area's rate for males was statistically different from Manitoba average for males
 'f' indicates area's rate for females was statistically different from Manitoba average for females
 'd' indicates difference between male and female rates was statistically significant for that area.
 Source: Fransoo et al. , Manitoba Centre for Health Policy, 2005

Further comparisons of prescription drug use in Manitoba by sex and age (see Figure 2) showed that usage generally increased with age for both females and males. However, for females, usage escalated sharply in adolescence and young adulthood. By age 10, approximately 45% of girls and boys in Manitoba had received at least one prescription. For males, these rates changed very little until after age 25, whereas for females, by age 20, 75% of young women used one or more prescription drug. The large sex difference among young adults in part reflects contraception use by young women. However, higher drug use by women continued well beyond reproductive years. At ages 50 and 60, when 79% and 85% of women took some prescription medication, women's rates still exceeded men's by nearly 13% and over 7%, respectively. By age 80, women and men had similar rates of prescription drug use.

The number of medications prescribed per individual also increased with advancing age. Beginning at age 15, women of all ages were prescribed a greater number of drugs than men, though sex difference diminished somewhat after age 60. By age 80, nearly all women and men use pharmaceuticals, and the elderly were prescribed an average of seven or more drugs within the year.

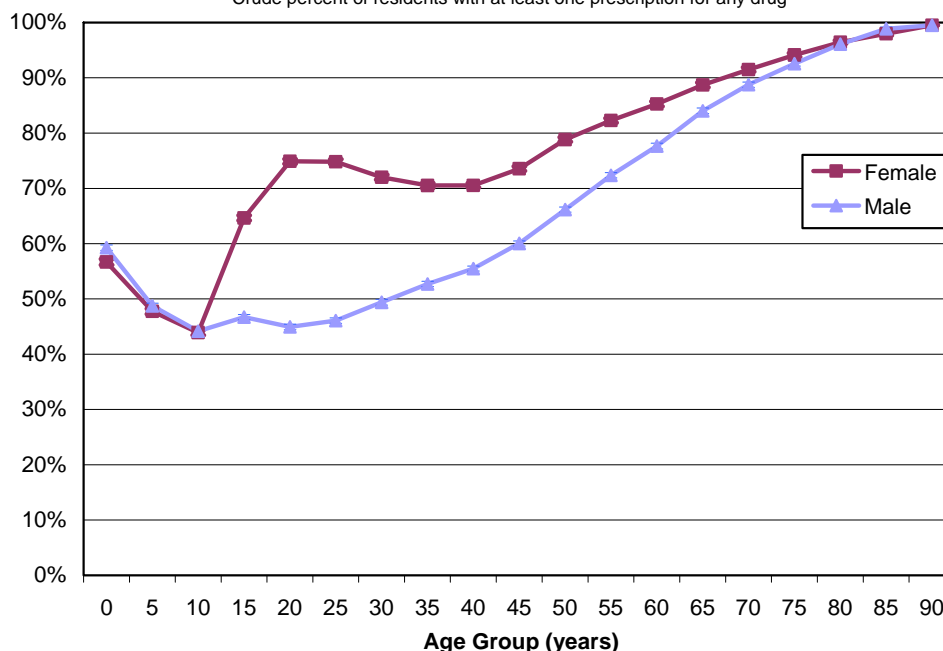
Regional comparisons showed quite a consistent pattern (see Figure 1). For all regions, females had a significantly higher rate of prescription use than males. Among females (and among males), those residing in the North, specifically within the Burntwood RHA, showed significantly lower rates of prescription drug use compared to the provincial female population, which is likely to reflect underreporting in the





**Figure 2: Pharmaceutical Use
by Age and Sex, 2003/04**

Crude percent of residents with at least one prescription for any drug



Source: Fransoo et al. , Manitoba Centre for Health Policy, 2005

region²⁰. As well, females (and males) in the Brandon region had higher than average rates of prescription drug use. Interestingly, Metge and colleagues found no significant difference in prescription drug use by urban-rural residence, despite lesser availability of health services in rural areas [3].

The MCHP analysis also demonstrated weak but significant differences in pharmaceutical use by income (area-level income). Higher rates of illness are found in low income areas, yet a lower proportion of residents of low income areas received one or more prescription, despite the Pharmacare program reducing financial barriers for those with low income.

The Manitoba data also show that a greater number of different prescription drugs²¹ are prescribed to females than males (see Figure 3). On average, females were prescribed 4.0 different classes of medication, whereas males were prescribed 3.6 drugs, which represented a statistically significant difference. Compared to an earlier study [6] the number of drugs prescribed per user appears to have increased slightly between 1999/2000 and 2003/04.

²⁰ Prescription drug use in remote communities is subject to underreporting, as nursing stations dispense some medications without individual prescriptions being entered into the system. Approximately 20% of prescription drugs used by northern residents are not entered into the DPIN database [Fransoo et al, 2005].

²¹ The average number of prescription medications is age-adjusted to allow a fair comparison between females and males and across regional populations, which may differ in age structure.

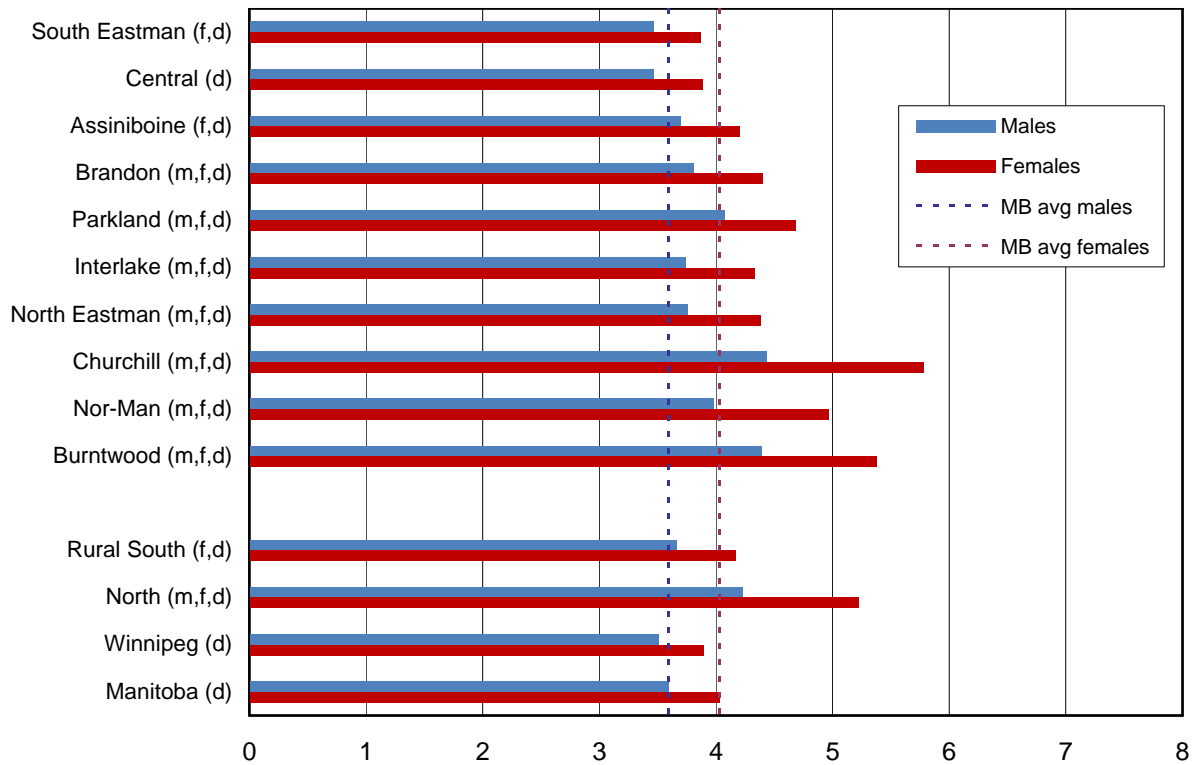




Women and men living in northern regions (Churchill, Burntwood and Nor-Man RHAs) were more likely to receive multiple prescriptions than were residents of other regions, despite underreporting of prescriptions in these regions. Women in the North received, on average, more than five prescriptions within the year compared to the provincial average for women of four prescriptions. A small, but significant difference was also found in the number of medications dispensed to women in the Rural South.

Figure 3: Number of Different Drugs Per User, by RHA, 2003/04

Age-adjusted average number of different drugs used per resident, with one or more prescriptions



'm' indicates area's rate for males was statistically different from Manitoba average for males
 'f' indicates area's rate for females was statistically different from Manitoba average for females
 'd' indicates difference between male and female rates was statistically significant for that area
 Source: Fransoo R, Manitoba Centre for Health Policy, 2005.

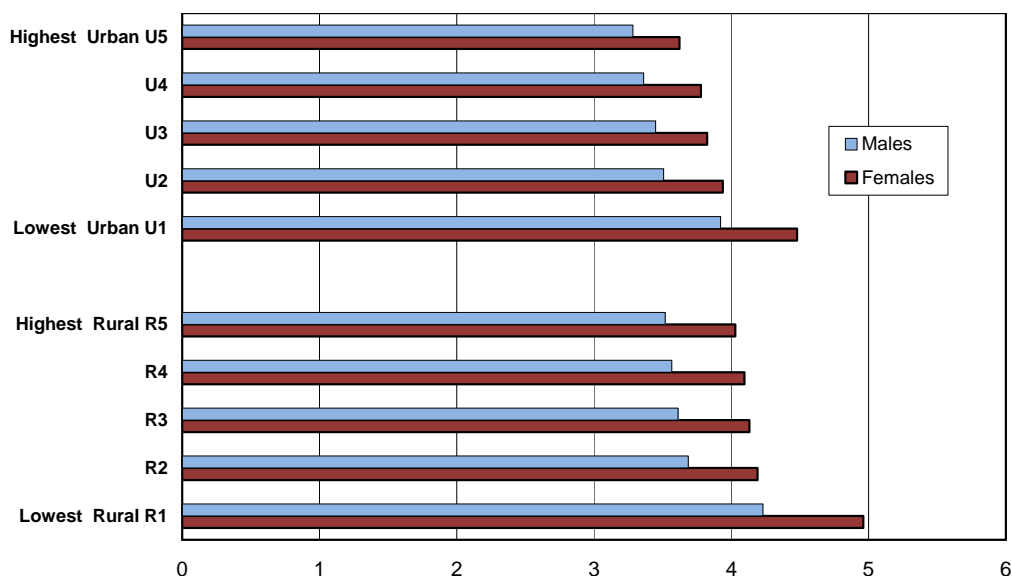
Although residents of low income areas were less likely than those in higher income areas to have been dispensed any medication, low income Manitobans who used any medications tended to take a greater number of prescription medications than residents of higher income areas (see Figure 4). Women living in rural, low income areas used nearly five drugs within a year, on average, which far exceeded the number of prescription drugs taken by rural women in the highest income group, as well as low income women in urban areas.





Figure 4: Number of Different Drugs Per User, by Income Quintile, 2003/04

Age-adjusted average number of different drugs used per resident, with one or more prescriptions



Linear Trend Test Results

Female: Urban: Significant ($p < .001$) Rural: Significant ($p < .001$)

Male: Urban: Significant ($p < .001$) Rural: Significant ($p < .001$)

Source: Fransoo R, Manitoba Centre for Health Policy, 2005.

Another common measure of prescription drug usage is the defined daily dosage (DDD) rate of drug use in a population, though this measure was not employed by the MCHP. The measure goes beyond a count of prescriptions and estimates the number of days of drug treatment an individual in the population would receive in a year. By this measure, Metge and colleagues showed that Manitoba women consume, on average, about one-third more doses of medication daily than men (175 versus 129 DDD in 1999/2000) [1].

Women and Selected Prescription Drugs

Women and men differ in their use of some of the most commonly prescribed medications. The higher rate of prescription of psychotherapeutic drugs to women has long been a concern, and clearly affects women in Manitoba. For the 2003/04 fiscal year, females in the province were twice as likely as males to have two or more prescriptions for antidepressants²² (8.6% versus 4.5%) and the two-fold difference was found in all RHAs and districts [2]. The sex difference in prescription of antidepressants may stand to reason, as Manitoba women also have twice the rate of treatment for depression as men (23.6% versus 12.6% for population aged 10 and older, 1997/98-2001/02) [7]; (also see Chapter Five, Depression). More concerning, perhaps, is that rates of prescription for antidepressants have also been steadily increasing. In

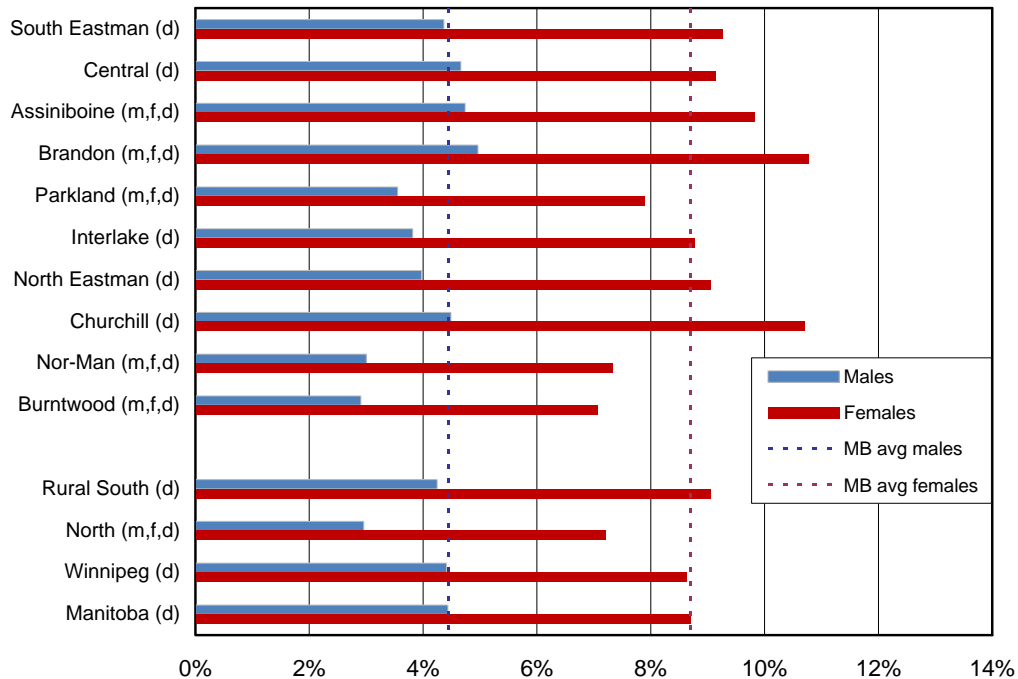
²² Selective serotonin reuptake inhibitors (SSRIs) like paroxetine (Paxil) and fluoxetine (Prozac) are most frequently prescribed for depression [Martens 2004]. [7]





Manitoba, for the female and male population combined, age-adjusted rates have increased from 4.3% in 1996/97-1997/98, to 5.5% in 1999/2000-2000/01, to about 6.5% in 2003/04 [6, 2]. As well, depending on the type of antidepressant prescribed (to be discussed later in the chapter), it may be concerning that 3.6% of 15 year old girls and 1% of 10 year old girls in Manitoba are prescribed antidepressants.

Figure 5: Antidepressant Use by RHA, 2003/04
Age-adjusted percent of residents with two or more prescriptions for antidepressants



'm' indicates area's rate for males was statistically different from Manitoba average for males
 'f' indicates area's rate for females was statistically different from Manitoba average for females
 'd' indicates difference between male and female rates was statistically significant for that area
 Source: Fransoo R, Manitoba Centre for Health Policy, 2005.

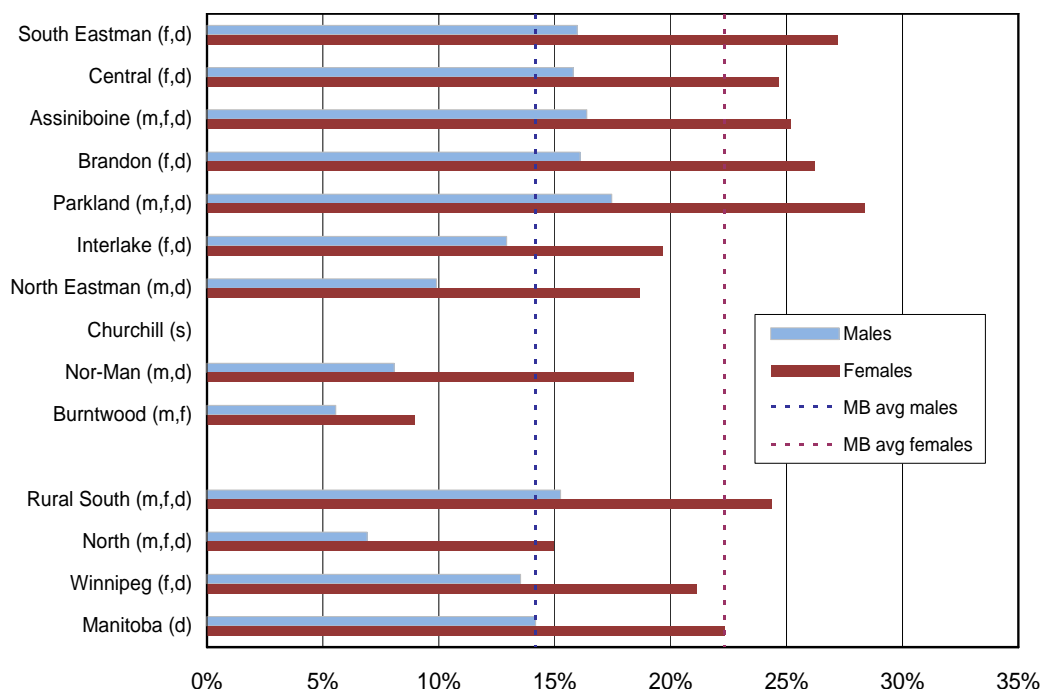
Benzodiazepines are a class of drugs that have a hypnotic and sedative action, used mainly as tranquilizers to control symptoms of anxiety. They are not recommended for use by older adults, as they have been associated with several adverse effects in this population (discussed later in the chapter). Still, many senior women continue to be prescribed benzodiazepines. According to the MCHP, more than one-in-five (22.3%) Manitoba women age 75 or older, who were not living in personal care homes, were given at least two prescriptions or more than a 30 day supply of benzodiazepines in 2003/04. This far exceeded the rate of prescription for men of the same age (14.2%). Regional comparisons showed the highest rate of benzodiazepine prescription among elderly women occurred among residents of the Rural South (24.36%) [2]. These findings are generally consistent with the results of other Canadian and international studies that have found that 20-50% of women over age 60 may be prescribed benzodiazepines, and that long-term use increases with age [8].





Figure 6: Community-Dwelling Seniors with Benzodiazepine Prescriptions by RHA, 2003/04

Crude percent of non-PCH seniors with 2+ prescriptions or greater than a 30 day supply, age 75+



'm' indicates area's rate for males was statistically different from Manitoba average for males
 'f' indicates area's rate for females was statistically different from Manitoba average for females
 'd' indicates difference between male and female rates was statistically significant for that area
 Source: Fransoo R, Manitoba Centre for Health Policy, 2005.

Manitoba men are more likely to receive a prescription for an **Angiotensin Converting Enzyme (ACE) Inhibitor** than women. ACE inhibitors are primarily prescribed to treat high blood pressure, though they are also prescribed to patients with congestive heart failure, those experiencing a heart attack, and for diabetes. Rates of ACE inhibitor use²³ were 10.0% for men and 8.7% for women, a seemingly small difference but significantly higher rate for men than women. However, usage was much higher among residents of the rural North, particularly for women, among whom a 20% rate of ACE inhibitor use was nearly twice that for Manitoba women overall, and significantly higher than rates for men in the same region (17%). In the Burntwood region, rates of ACE inhibitor use were consistently higher for females than males and exceedingly high among women in some districts within the region (e.g. 45% of females in Island Lake)²⁴. The result is generally consistent with high rates of diabetes and hypertension reported for First Nations people, who make up a large proportion of the population in many northern districts, and particularly for First Nations women. ACE Inhibitor use is strongly associated with income for women and men in both urban and rural areas [2], and this association appears stronger for women than for men (see also Chapter Five, Diabetes and Cardiovascular Disease).

²³ Rates of ACE inhibitor use for women and men are age-adjusted and calculated for residents aged 20 and older, based on at least one prescription within the 2003/04 fiscal year.

²⁴ Rates represent small numbers in these populations, which may fluctuate considerably from year to year.





Statins, which are used to lower blood cholesterol, are more often prescribed to Manitoba men than to women²⁵ (10% and 7%, respectively). Men's higher rates appear consistent with their greater risks for high cholesterol and cardiovascular disease. As well, in light of research that has shown less clear benefits for women, and some indications of adverse effects [9], lower statins prescription rates for women would seem appropriate. However, in Manitoba's northern regions, there is no significant difference in the rate of prescription for statins to men and women (12.7% versus 12.8%). Interestingly, the relationship between income and statin use is the reverse in women compared to men. Among women, in both urban and rural areas, there is a strong relationship between income and statin use, women in low income areas having the highest rates of use. The opposite is seen among urban men, among whom residents of high income areas have the highest rates of use, while no relationship was found among rural men. This pattern seems consistent with results for body weight (overweight being a risk factor for hypertension), where men in high income groups were more likely to be overweight than men in lower-middle income groups, whereas the opposite was found for women (see Chapter Three, Healthy Body Weight).

Among Manitoba women aged 40 and older, both the prevalence and the incidence of **hormone replacement therapy** have declined in recent years. That is, there are both fewer current users and fewer new users in 2002/03 than in 1997/98. The proportion of Manitoba women receiving HRT fell from 13% to 10.8% over the period, a significant decline. The rate of first time use decreased dramatically over the period, with the rate decreasing by more than half from 3.4% in 1997/98 to 1.5% in 2002/03. Notably, the decline in new HRT use was more pronounced among younger than older women (i.e. the largest declines were seen for women aged 50) [2]. These trends in HRT use are understood to have occurred in response to the findings of the 2002 Women's Health Initiative study, which found that the potential harms associated with HRT outweighed their benefits. For many years, hormone therapy had been prescribed to post-menopausal women in the belief that it would prevent heart disease and cancer of the uterus, slow the progression of osteoporosis, and alleviate symptoms of menopause. The WHI study found that, on the contrary, women who took combination HRT (estrogen and progestin) therapy had an elevated risk of stroke and breast cancer [10]. The findings of the MCHP analysis are consistent with results of a report from the Canadian Institute for Health Research, which found that HRT use among senior women in five Prairie and Atlantic provinces²⁶ declined by 17% per year between 2001/02 and 2006/07, and by 30% per year in the two-year period following publication of the WHI 2002 study [11]. (See "Menopause" in Chapter Four.)

Accounting for Women's Use of Prescription Drugs

Explanations have been sought for women's overall greater use of prescription drugs compared to men, some addressing women's high rate of prescription for psychotropic drugs in particular. As observed by Payne and colleagues, most explanations fall into a few types of hypotheses [4]. Firstly, women may be prescribed more medications as a general consequence of their more frequent visits to physicians and their

²⁵ Rates of statin use for women and men were age-adjusted and calculated for residents aged 20 and older, based on at least one prescription for statins within the 2003/04 fiscal year.

²⁶ Included Manitoba, Saskatchewan, Alberta, New Brunswick and Nova Scotia.





greater likelihood of having a regular physician, which may increase their access to prescription drugs [4]. Currie has argued that, compared to men, women have more distinct physiological events that bring them to doctor (menstruation, pregnancy, menopause, lactation). Moreover, the pharmaceutical industry has medicalized women's life events by redefining them as conditions requiring the care of physicians and drug therapy (for instance, defining menopause as a chemical "deficiency state" in women) [12].

A study by Payne et al. found that, for both women and men, medication use increased with the number of visits to physicians. Interestingly, the ratio of female to male prescription use was highest when the least medication use might be expected, that is, when few visits had occurred (F:M ratio = 1.89 for 0-1 visit; 1.01 for 5 more visits) [4]. Thus, it appears that factors other than contact with the health system account for higher medication usage by women.

Secondly, women's higher rate of illness, chronic disease, and particularly pain and musculoskeletal conditions, than men is offered in explanation for sex differences in prescription rates [4]. An analysis of health survey data for 1998/1999 found that among the seven most common types of medications²⁷ taken by males and females (age 12 and older) in the previous month, a larger percentage of females reported the use of each, and the greatest difference was found for the use of pain relievers (71% females versus 58% of males). The sex difference was attributed to the greater prevalence of painful conditions such as arthritis and migraine among females, as well as social norms that encourage males to not acknowledge pain [5].

According to Metge and colleagues, the sex difference in prescription usage is largely accounted for by women's increased use of: diuretics (for high blood pressure), estrogens (oral contraceptives and hormone replacement therapy), thyroid replacement, anti-infectives²⁸, nonsteroidal anti-inflammatory drugs (NSAIDs - for inflammation, pain and fever), opioids, such as morphine (for pain), anxiolytics (for anxiety), hypnotic/sedatives (for anxiety and as a sleep aid) and antidepressants (for depression and as a sleep aid) by females. Specifically, females are prescribed anti-infectives 1.5 times and anxiolytics and antidepressants twice as often as males from the mid-teenage years to 65 years of age [3]. Presumably, women's greater vulnerability (whether biological or gender-based) to some conditions for which these drugs are prescribed (e.g. higher rates of arthritis, thyroid disease, sexually transmitted infections, depression and anxiety) influences their higher rates of usage, though other factors, such as prescribing behaviour or patient preference may also play a part.

Women's socialized roles, social status, and life and work circumstances are also important contributing factors in their levels of prescription drug use, particularly relating to their mental health and higher rates of psychotropic drug use relative to men. Research has long explored the influence of women's social conditions on their greater use of psychotropic drugs. In the mid-1970s, a study conducted in Winnipeg, which surveyed women and reviewed prescription data, found a relationship between the stressful work and home life of women and their two-fold greater rate of prescription drug use. Other research followed up in this area and found that the disproportionately high rates of prescription for mood modifying drugs

²⁷ Includes pain relievers, cough/cold remedies, stomach remedies, blood pressure medications, allergy medications, antibiotics, and asthma medications.

²⁸ Anti-infective is a general term that encompasses antibacterials, antibiotics, antifungals, antiprotozoans and antivirals.





to women, particularly older women, could be attributed to social isolation, poverty, a lack of alternatives, and family crises, conditions which are more likely to affect women [13].

Women's social status is acknowledged as an important factor in women's mental health and service needs worldwide. The World Health Organization recognizes that mental disorders affect women disproportionately, often triggered by risk factors such as gender-based violence, socioeconomic disadvantage, low income and inequality of income, and primary responsibility for caring for others [14]. Canadian women commonly experience high levels of stress stemming from the 'double workday' of paid labour and domestic work carried out by many women, a lack of time for rest or play, single parenthood, and a lack of control in the workplace [8, 12]. Poverty disproportionately affects women, and factors large in the mental health of women. Conditions of poverty increase women's vulnerability to anxiety, depression and sleep problems for which they may be prescribed benzodiazepines (tranquilizers) or sleeping pills [8]. A study of social factors contributing to the use of medications identified several key factors that were predictive of depression among women, including: previous depressive episodes, feelings of being out of control or overwhelmed, chronic health problems, traumatic events in childhood or young adulthood, lack of emotional support and a low sense of mastery [4].

Research has shown that women's greater contact with the health service system and higher rates of mental health disorders do not fully account for their greater use of prescription drugs. A US study²⁹ conducted in 1975 found that physicians were more likely to prescribe medications to women than to men, despite male and female patients presenting with the same complaint or diagnosis. The study concluded that differences in prescribing behaviour could not be accounted for by differences in the health conditions of women and men. The remaining sex difference may be accounted for by gender bias in physician prescribing behaviour, as well as by patient expectations and requests for prescriptions [4]. In 1998, another study found that women's visits to a physician were 55% more likely to result in a prescription for a psychotropic drug than were men's interactions with physicians, a significant difference which was not accounted for by other predictive factors, including diagnosis and physician specialty [15]. Payne and colleagues also demonstrated a gender influence on medication use that was distinct from and contrary to the influence of health status. The authors found that the highest female to male sex ratios occurred when the likelihood of medication use was the lowest. When chronic disease and pain were absent or self-rated health was perceived as excellent, women had higher rates of medication use relative to men than when men and women in poor health were compared.

Presumably, patient gender affects both patient and physician behavior, and carries influence throughout a range of individual service seeking behaviors and health care interactions which lead to prescription drug use. For example, we know that compared to men, women are more likely to visit a doctor. However, they also are more likely to bring psychological concerns to the doctor and to describe their problems in psychological or social terms. Conversely, men tend to handle stress more often outside of the medical system, for example with the consumption of alcohol. Furthermore, when women visit a doctor, they are

²⁹ Update to McKinley





more likely than men to be diagnosed with a mental health conditions, such as psychoneurosis or anxiety and to be prescribed medications [12]. Physicians are known to prescribe benzodiazepines and sleeping pills to help women cope with work or family stress, pre-menstrual syndrome, grief, and adjustment to life events such as childbirth and menopause, as well as for chronic illness and pain [8].

Questioning Levels of Prescription for Psychotropic Drugs to Women

For many women affected by serious mental health disorders, psychotropic drugs, including antidepressants and anxiety medications, bring much needed relief, restore the quality of life and help to prevent suicide and self-harm. Yet, the evidence from population health research and community-based knowledge has raised concerns about whether the level of prescription to women is appropriate and warranted.

Community health and women's health advocates have been critical of physicians' over-prescription of drugs, especially for natural life processes and depression. Harding hypothesizes that prescription represents a method of social control. That is, prescribing psychotropic drugs has the function, if not the intent, of managing social and economic stresses between generations, sexes and economic classes in society [13]. In this sense, symptoms of mental health conditions are a product of the stress inherent in power imbalances and social change, the solution for which is controlled by those who hold authority in society. The influence of a profit-motivated industry on prescribing and consumer behaviour is often the unacknowledged factor in women's rates of prescription drug use. Psychotherapeutic drugs (primarily anti-depressants, benzodiazepines and antipsychotics) are among the most profitable for pharmaceutical companies, and women are a heavily targeted "market" for these drugs. US research has found that direct-to-consumer advertising targets women more than twice as often as men and results in increased prescription drug use by women, as well as large market gains for the products [8].

Currie contends that the influence of the pharmaceutical industry extends to how we decide what constitutes disease and its appropriate treatment. Although depression was once considered to be largely a self-limiting condition, in that only a small proportion of cases were considered to require treatment, through the influence of the pharmaceutical industry, the condition has been redefined to include milder forms of depression and moods that are now recommended for treatment. Furthermore, the pharmaceutical industry has long promoted the idea that women's emotional distress is rooted in a biological disorder and, more recently, has promoted the theory that depression is caused by a lack of serotonin, which can be corrected with drug therapy, despite scientific evidence that refutes this as the cause. Thus, the ideology that guides theory and practice with regard to depression has seen a dramatic shift over the past 50 years, from a psychotherapeutic approach to the pharmacological approach of biological psychiatry [12].

While there has been a diversification in central nervous system drugs and shifts from prescribing older to newer varieties of these drugs (e.g. from tranquilizers to sleeping pills, to serotonin uptake inhibitors [SSRIs]), there has been no fundamental change in how emotional and social health problems are addressed [13]. Lippman has raised a largely unaddressed question; that is, whether women may benefit more from non-drug or holistic therapies than from pharmacological therapies [16]. Canadian culture has





largely accepted drug therapies as efficacious treatments and appropriate priorities for funding. Individuals are perceived as having responsibility to manage disease and risk of disease through medication, though this has deflected attention from upstream causes of illness. Cheaper and safer prevention methods are available but receive little support, and the role of structural determinants of health (poverty, social exclusion, stress from multiple roles) is often not assessed [16]. As one example, antidepressants (e.g. the SSRIs) are the most common therapy recommended by physicians for depression (81% of physician visits for depression), and are also prescribed for anxiety, panic attacks, obsessive compulsive disorder, “pre-menstrual dysphoria” and “social anxiety disorder”. Although the cost of antidepressants has escalated (e.g. in Ontario, a 347% increase in cost from 1993 to 2000), in large part due to the increased cost of SSRIs, other interventions with proven success in reducing depression, such as regular exercise, group or peer support, cognitive therapy, and nutritional improvements, are not adequately supported and funded by government [12].

Women and Prescription Drug Related Harms

Adverse reactions to prescription drugs increase the risk of morbidity and mortality, and are associated with added costs through additional drug use, hospitalization and physician visits. Sex is a significant risk factor for adverse drug reactions, which occur in women at a higher rate in both hospital and community settings. Clinical research has shown a 1.5- to 1.7-fold greater risk of adverse reaction to drugs among female patients as compared with male patients. These differences appear to be only partly due to women’s more frequent use of prescription drugs. As one illustration, in the U.S., eight of 10 prescription drugs withdrawn from the market in the 1997 to 2001 period had greater health risks for women than for men. For four of these drugs, the risks could not be attributed to greater use by women. While these results led to conclusions that greater health risks for women may be due to a degree of physiological susceptibility among women [17], biological factors do not operate in isolation—social factors and medical practice also influence women’s risks.

Simply by virtue of women’s greater exposure to multiple prescriptions, women have a greater risk for harms resulting from drug interactions. As well, women consume, on average, about a third more doses of medication daily than men [1] and, due to a longer life span associated with more chronic disease, may be exposed to a longer duration of drug therapy than men. Such exposures contribute to risk, as most drug therapies are associated with adverse effects as well as benefits.

As women predominate in older age groups in the population, and older individuals are also vulnerable to adverse drug effects, women make up a disproportionate number of those in the population who experience harmful effects of pharmaceutical use. Research has demonstrated that elderly women generally have the greatest risk of adverse drug reactions. A study conducted in 2002 found that 28% of visits to hospital emergency departments were drug related, 70% of which were preventable, and that women and elderly individuals were at greatest risk [18]. In part, older women’s greater risks are due to sex differences compounded by age-related changes in the way drugs are processed by the body. For example, older persons are more sensitive to drugs that affect the central nervous system [19, 20]. Research has demonstrated that elderly women are at the greatest risk from drug interaction and accumulation problems involving mood-modifying and other CNS prescriptions [13].





Older adults are at risk for adverse drug effects also due to the more complex drug therapies they receive. Based on the MCHP data reviewed above, we can expect Manitoba women aged 75 and older to be taking six different prescription drugs within a one year time frame. One in four women of this age takes statins or ACE inhibitors, and one in six takes anti-depressants [2]. The data speak plainly of the degree of pharmaceutical interventions that women of this age experience—certainly indicative of good access to drug therapies, though they also suggest a greater potential for the health ‘costs’ or harms associated with these benefits.

Inappropriate prescription practices play a role in the risks to seniors and senior women. A study of drug claims made by seniors (age 65 and older) in Manitoba, Alberta, Saskatchewan, and New Brunswick from 2000 to 2006 focused on several drugs identified by Dr. Mark H. Beers as commonly, but potentially inappropriately prescribed to seniors due to an elevated risk of adverse effects—drugs on the so called “Beers list”. In Manitoba, the age-sex standardized rate of Beers list drug use among seniors was 25.2% and 20.7% of seniors were prescribed the most high-risk Beers drugs³⁰. In all four provinces, chronic use³¹ of Beers drugs was higher for females than males (e.g. in Manitoba 14% females and 12% males). Even when drug claims for estrogen, only prescribed to females, were eliminated from the analysis, senior women were still more likely than their male counterparts to make repeated claims for drugs on the Beers list [18]. However, research indicates that older women’s usage of potentially harmful drugs may respond well to improved health education. In the 2003 WOW (What Older Women Want) Survey, which gathered the views of older (age 55-95) women living in 10 Canadian provinces, most survey participants (88%; n=2600) identified the need for better information about their prescription drugs as their top priority for the improvement of health care delivery to older women [21].

Somewhat higher rates of prescription for Beers list drugs (28%) have been recorded for seniors living in nursing homes [22]. Other studies have found prescribing practice in nursing homes and hospitals to conflict with known risks to seniors. One study observed that within one year of admission to nursing homes, nearly one-quarter of residents with dementia were prescribed an antipsychotic to control behaviour, despite limited evidence of benefit and an increased risk of death (up to 60%) associated with their use. As well, nearly half of elderly patients prescribed benzodiazepines to help them sleep after discharge from hospital are still taking the drugs six months later, despite the known risks for mental confusion and injuries from falls and motor vehicle accidents [22], as well as a risk of dependency within as little as one or two months of use [8]. Research on the hospital safety and harms has found a higher incidence of in-hospital hip fractures among the “oldest of the old”, women, stroke patients, and those taking certain medications which may lead to dizziness [19]

³⁰ These include conjugated estrogens, amitriptyline, oxybutynin, temazepam, and digoxin.

³¹“Chronic users” are defined as those seniors who made claims for a drug from the Beers list on a regular basis. For those making claims in Alberta, New Brunswick and Manitoba, chronic users claimed for a minimum of three prescriptions and a minimum of 100 solid dosage units in a given year, for any Beers drug. For those who made claims in Saskatchewan, two prescriptions was the minimum requirement.





For over 40 years it has been well known that benzodiazepines are highly addictive and have profound effects on the brain and body at therapeutic doses, particularly if they are prescribed for more than several weeks. It is estimated that 3 to 15% of any adult population is using and may be addicted to this class of drugs, and among this group, 60 to 65% are women. Recent data suggest that not only are women more likely to be prescribed benzodiazepines compared to men, but they are also more likely to be prescribed these drugs for longer periods of time [8]. Despite the documented harmful effects of benzodiazepines, they are still prescribed to Canadian women. Benzodiazepine dependence has been recognized as a serious problem among elderly women. In the elderly, benzodiazepine use causes confusion, cognitive decline and dementia. Long term use is linked to falls and fractures. Canadian and international studies indicate that 20 to 50% of all women over the age of 60 may be prescribed benzodiazepines or sleeping pills and that long-term use increases with age. A BC study showed strong association between falls in elderly women and prescriptions for anxiety medications, sedatives and hypnotics, of which 90% are benzodiazepines [8]. In 2000, one in three First Nations³² women over 40 in western Canada was prescribed benzodiazepines.

In response to information on the harms of benzodiazepines, rates of prescription for SSRIs have grown dramatically. However, current literature also indicates that adverse reactions to SSRIs are common, and some may be serious. Spigset found the most common problems arising from SSRI use were neurological (22%), psychiatric (19.5%), gastrointestinal (18%) and dermatological (11.4%). Furthermore, women experienced a higher rate of the most harmful effects from SSRIs than men. Among the most serious harms recorded were the elevated risks for suicide (more than double of the relative risk) and suicide attempts for those on SSRIs when compared to those prescribed older antidepressants or not receiving treatment. Problems of withdrawal, worsening depression, appetite changes, insomnia and electric shock sensations have also been reported by patients using SSRIs. They can also be harmful to pregnant women or their babies and contribute to falls and fractures for the elderly [8]. The risks to children and youth are particularly great. In 2004, based on the results of clinical trials, Health Canada issued a warning that many SSRIs³³ posed a risk to patients under the age of 18 being treated for depression, due to elevated risks for suicidal behaviour. At that time, approximately 3 million Canadian children were taking antidepressants. In Manitoba, for the five year period ending 2001/02, 1,075 females and 502 males (1.7% and 0.76% of their respective populations) aged 12 through 19 were given at least one prescription for a SSRI, and approximately 83% of prescriptions were ascribed to SSRIs known to increase suicide risks [7]. According to the MCHP data presented above, approximately 1-4% of females under the age of 18 were prescribed antidepressants in 2003/04 [2], though the proportion receiving high risk SSRIs was not reported.

Pharmaceutical use poses hazards to women in pregnancy, to their fetus or breast-feeding child, as well as having long-term health impacts on their offspring. The disastrous effects for Canadian women of such

³² Refers to those individuals who hold Treaty Indian status or are a Registered Indian as defined by the Indian Act of Canada, and/or who are members of an Indian Band or First Nation.

³³ This did not include fluoxetine, i.e. Prozac.





drugs as thalidomide and the DES (diethylstilbestrol) hormone in the 1960s, which resulted in birth defects and serious adverse effects on women's reproductive health, have been well documented [17], and through the support of women's and community health movements, have raised public consciousness about potential risks of pharmaceuticals. Despite the decreasing prevalence of smoking and alcohol consumption during pregnancy over the last decade, there is some indication that pregnant women are increasingly being exposed to medications, following a societal trend of increasing pharmaceutical use in Canada. An analysis of survey data³⁴ found that Canadian women of reproductive age and pregnant women are consuming increasing amounts of medications, though the increase is largely due to the consumption of non-prescription, over-the-counter medications. In Manitoba, 31% of pregnant women had used a prescription medication and 38% had used a non-prescription medication within the previous month (not significantly different than Canadian rates of 27% and 33%). Women with a chronic condition were significantly more likely to take prescription and non-prescription drugs during pregnancy. The study's results suggested that trends in chronic disease and increasing average age of women at the birth of a child may be key factors that interact to contribute to the increasing use of medication by pregnant women [23].

The use of oral contraceptives (OC) is so common among Canadian women that, in common language, they are referred to as 'the pill'. Their widespread use and past harms associated with earlier contraceptive products have raised concerns about their safety. Many epidemiological studies have been undertaken, most focusing on an association between oral contraceptives and cardiovascular disorders and an increased risk of death. Decreases in the dosage of estrogen in oral contraceptives appears to have improved their safety, though some research still indicates a small increased risk of heart attack and stroke for users [24]. There is also evidence that oral contraceptives may be inappropriately prescribed to Canadian women with other risk factors for cardiovascular disease, for whom the risks of OC are compounded. For example, there is substantial evidence that smoking combined with oral contraceptive use sharply increases the risk of cardiovascular and cerebrovascular mortality, yet Canadian survey research shows that 34% of oral contraceptive users³⁵ smoke, a significantly higher proportion than non-users (30%). Other studies from Switzerland, Italy and the United States have also found smoking to be more common among users of oral contraceptives than non-users. The Canadian research also found that, although women aged 35 to 49 were less likely to smoke and use oral contraceptives (17% versus 30% for non-users), OC users in this age group were more likely to smoke heavily (at least 15 cigarettes per day). According to at least one medical opinion provided to the authors, "the combination of oral contraceptive use with smoking, despite clear evidence of the risks involved, signals an important shortcoming of medical care" [24]. It may also call into question the effectiveness of public health efforts to inform women of these risks.

³⁴ Analyses were performed on 1996/1997 National Population Health Survey (NPHS) data and 2003 Canadian Community Health Survey (CCHS) data. The surveys covered the household population of the ten provinces, but excluded the territories. Both surveys asked women whether they were pregnant at the time of the interview and about their use of medication in the previous month. Information on the specific medication used were not collected. As the data are based on self-reports, the results may be subject to recall error.

³⁵ The source of the data is the 1996/1997 National Population Health Survey. Women aged 15 to 49, from 10 Canadian provinces, were asked whether they'd used oral contraceptives in the month preceding the survey.





Prescription Drugs in the Environment

Women's vulnerability to adverse drug effects extends to environmental risks as well. Trace amounts of pharmaceuticals, including antibiotics, painkillers, anti-inflammatories, hormones, and chemotherapy drugs, to name a few, have been detected in Canadian waterways and tap water in some communities. While concentrations are low, chronic exposure and their concentration in the food chain may pose risks, which may include resistance to antibiotics and the disruption of endocrine systems. Women's greater biological vulnerability to chemicals may result in harms even at low levels. Compared to men, women's bodies are, on average, made up of a larger proportion of fatty tissue, which stores more chemical endocrine disruptors in their bodies. Minute quantities of a drug may also pose serious hazards to a pregnant woman's fetus at particular stages of development, which can cause deformities, cancer and subtle cognitive effects. Despite the evidence that chemicals cause greater harms for women and their offspring, safety standards have generally been based on healthy white adult males and have not considered the environmental consequences of human use of these drugs [25].

Clinical Trials and Drug Surveillance

Women in general and women of childbearing age in particular have been underrepresented in or excluded from clinical trials, as are children and the elderly. Thus, despite their receiving official approval, drugs that come into use within the general population may not have been proven to be effective or safe for those to whom it is prescribed. As well, drugs are prescribed in different doses and for a longer duration of use than they were tested for, which may also affect the type and rate of adverse effects. Many drugs have been found to cause more harm than benefit or even death, after they have been approved for use. For example, Vioxx®, an anti-inflammatory painkiller and arthritis medication was withdrawn when the manufacturer acknowledged evidence that it increased risk of CVD in users [26].

Canada developed guidelines for inclusion of women in clinical trials in 1997, yet as of March 2006, there was no systematic process for monitoring conformity. Moreover, the guidelines did not make inclusion mandatory, but merely stated that women should not be excluded on basis of sex and reproductive status. Women continue to be underrepresented in clinical trials, particularly women belonging to ethnic minorities. As well, the high costs of clinical trials encourage trials of small size and limited generalizeability, which are unlikely to detect uncommon adverse effects. Elderly women, a large and growing consumer base for many pharmaceuticals, are also inadequately protected by trial evidence. Clinical trials commonly set an arbitrary cut-off age (e.g. 75), which may lead to drugs prescribed for an ever-growing population of women for whom the safety and effectiveness of those drugs is unknown. An important example is statins, which are being prescribed for women, even though women have not been included in sufficient numbers in clinical trials to determine the safety or effectiveness of these medications for primary or secondary prevention [16].

The adverse drug reactions suffered by women have been seen as a consequence of inadequacies in Canada's Health Protection program, including the regulation of clinical trials and the post-market surveillance system. Fuller has identified several weaknesses in the system, including an underfunded post-market surveillance system; the reliance on voluntary reporting of adverse drug effects by physicians and pharmacists, which has seen reporting rates as low as 1-5%; a lack of systematic data collection on





adverse effects, including the sex of the individual who suffers the effect; a lack of guidelines to evaluate gender-related differences in adverse reactions to prescription drugs; and a lack of integration of Health Protection policies with gender initiatives adopted by Health Canada [17].

Prescription Costs

Financial harms may also be associated with prescription drug use for some women, though Manitoba's Pharmacare program provides support to those whose income is seriously affected by high prescription drug costs. Compared to men, women's lower earnings, lower labour force participation rates, and more limited access to private insurance or coverage through employment insurance plans, increases their financial vulnerability to high and increasing pharmaceutical costs (see Chapter Two, Women, Income and Health). Financial effects may be the most concerning for older women. In Manitoba, the number of prescriptions per person increased for all seniors between 1995 and 1999, but especially for older seniors—by a surprising 80%. Yet increases in the amount older seniors spent on prescriptions over the same time period were even more alarming—more than double over five years [27].

The deregulation of prescription drugs, to allow for their sale over-the-counter, is a growing concern, which may result in a considerable financial burden on women, as the larger consumer of pharmaceuticals. In the UK, there is heavy pressure for increased deregulation of prescription medications, several of which are used in the treatment of chronic disease (e.g. statins and diuretics). Analysts believe that a similar trend in Canada is unavoidable. While deregulation may serve the interests of pharmaceutical companies, who stand to gain substantial profits from the increased sales of their products in an expanded market, as well as governments and private insurers looking to contain costs of coverage for prescription drugs, the benefits to consumers are less clear. The result of a change in the status of a substantial number of prescription drugs to over-the-counter medications could mean that a considerable portion of drug costs would be passed on to consumers, which is likely to result in more patients choosing not to treat their condition, perhaps conditions as serious as hypertension. Furthermore, increasing patient responsibility in the decision to initiate or continue treatment may increase the influence of a patient's socioeconomic class, education level and other non-medical factors, which could result in further social inequities in health outcomes [28].

Women's Prescription Drug Misuse & Abuse

The extent of prescription drug misuse among Canadian women (and men) is largely unknown, due to a lack of data. Indirect evidence comes from examining annual trends in the distribution and sales of medications, though this may be confused with legitimate treatment. Such data raise a cautionary flag that, by international standards, Canadians are heavy users of psychotropic prescription drugs. In 2002, Canada had the fourth highest per-capita use of prescription narcotics and the second highest use of sedative-hypnotics (including benzodiazepines). Coroners' reports on overdoses and admissions data from detoxification programs and hospitals also show cause for concern over the abuse of prescription drugs among Canadians. A study by the Centre for Addiction and Mental Health found that 11% of admissions to substance abuse treatment programs in Ontario in 1999–2000 were for abuse of prescription drugs. In the U.S., the 2004 National Survey on Drug Use and Health, which directly examined prescription drug misuse, found that 24.3% of young adults (aged 18-25) used prescription





drugs for non-medical purposes during their lifetime, and a growing prevalence of misuse was demonstrated. Although a broad range of individuals abuse prescription drugs, the available evidence suggests that, in general, adolescents, older adults, women, and Aboriginal people are at elevated risk for prescription drug abuse [29].

Women are recognized as having greater risks for misuse of prescription drugs as a consequence of their greater likelihood of receiving a prescription for a psychotropic drug, as well as multiple prescriptions. In 2003, the Drug Abuse Warning Network (DAWN) reported that the majority of U.S. emergency room visits involving the misuse of prescription drugs included antidepressants, benzodiazepines, and opioid pain relief medications, and patients who misused medications were more likely to be female. In about 50% of cases, patients had taken more than one drug [29]. Studies of prescription opioid misuse among adolescents (12-17) have also identified greater risk of misuse for females, as well as adolescents with lower socioeconomic status, “detached” parents, and attitudes favourable to illicit drug use [29]. A recent Canadian study found that prescription opioids are gaining popularity in cities across Canada, replacing illicit drugs like heroin and cocaine as drugs of choice [30]. In the United States, the abuse of painkillers, stimulants, tranquilizers and other prescription medications has exceeded practically all illicit drugs, with the exception of cannabis, and according to the International Narcotics Control Board, a similar trend is seen in Europe, Africa and South Asia [31]. These trends indicate the need for increased attention to prescription drug misuse, particularly by young women.

Prescription drug misuse has been recognized as an important indicator of social distress in First Nations communities where it is associated with elevated rates of addiction and suicide. Although national and sex-specific data on First Nations prescription use and misuse are lacking, some research has demonstrated cause for concern. A survey of a high-risk group of Aboriginal³⁶ people entering addiction

³⁶ Refers to those clients of treatment programs who have voluntarily self-identified as belonging to the culturally defined Aboriginal population.

Commonly Abused Prescription Drugs

Although any prescription drug can be consumed for reasons other than its intended medical purpose, drugs with psychotropic (drugs that affect the brain) properties are most often abused. Some of the most commonly abused prescription drugs include opiate-based drugs, tranquilizers, sedatives, barbiturates, stimulants and amphetamines. Opioids, sometimes referred to as narcotics, are commonly prescribed to ease pain. Their active ingredients may be morphine, codeine or oxycodone (e.g. brand names: OxyContin®, Dilaudid® and Demerol®). Central nervous system depressants include benzodiazepines, such as diazepam (Valium®), chlordiazepoxide HCl (Librium®) and alprazolam (Xanax®), which are often prescribed to reduce stress and panic attacks. They also include the barbiturates, used to treat anxiety, sleep disorders and seizures such as pentobarbital sodium (Nembutal®) and mephobarbital (Mebaral®).

Stimulants may be prescribed to treat narcolepsy and attention deficit disorder, and include dextroamphetamine (Adderall®) as well as methylphenidate (Ritalin®) and amphetamines [29, 32].





treatment in Calgary found that approximately half (48%) of respondents reported misuse of prescription drugs [8]. Among Aboriginal³⁷ youth, rates of suicide have been reported that are seven times higher than among non-Aboriginal youth, and the predominant method for female suicide is drug overdose [33]. The low cost of pharmaceuticals, relative to illicit drugs, and high rates of prescription in First Nations communities may contribute to their use in suicides, and other abuses. In Alberta, central nervous system agents are the most commonly prescribed class of drugs to First Nations clients, and codeine containing analgesics (e.g. Tylenol 3) and benzodiazepines account for the majority of these prescriptions. Further, a six-fold greater dosage level (defined daily dose) of benzodiazepines were prescribed to Albertan registered First Nations people compared to Canadians overall (297 DDD versus 48 DDD per 1000 adults per day) [33]. Tylenol 3 is one of many drugs commonly used in suicides, is used recreationally, and is easily obtained on the street or through prescription. Benzodiazepines have been associated with dependency, depressive symptoms, and increased suicidal tendencies. Thus, pharmaceutical abuse among First Nations and Aboriginal people has been attributed to several factors, including a context of social and economic inequity, the impact of cycles of loss and abuse, inappropriate and unethical prescription practices, a lack of alternative therapies for pain and situational crises, and inappropriate demands for pharmaceuticals by clients influenced by a dominant culture that favours pharmacological solutions to physical and emotional illness [33].

Older women are particularly at risk for misuse of pharmaceuticals and associated harms, whether this results from intentional or unintentional misuse. Research has found that 20% of Canadians over the age of 60 have a long term prescription for pain medication, and that multiple prescriptions are common in this population. These factors alone contribute to the risk for misuse and problematic use, including dependence [29]. Seniors also more likely to misuse medication, for example by skipping or splitting pills, and difficulties with memory may affect their ability to comply with drug regimens. Older women are more likely than men to live in low income circumstances and to live alone, as they more often outlive a male partner, which may diminish their resources and access to support for compliance with medical prescriptions.

Policy Implications

Although prescription medications bring great benefits to women, their use by women must be considered in the full context of women's lives and interactions with the health care system, as well as in balance with other more safe and sustainable options for treatment and disease prevention. Policy relating to prescription drug use may be enhanced by sex-disaggregated analysis of data and a gender-sensitive approach to safety, appropriate use, and access, among other topics. Key initiatives in these areas have typically not considered gender distinct needs, priorities and experiences. For example, as part of the development of a Canadian Pharmaceutical Strategy aimed at addressing access and quality issues, the national policy symposium, *Optimizing Prescribing Behaviors*, made no mention of sex or gender in its final summary report, though age was considered [22].

³⁷ 'Aboriginal' has not been defined by the author, although she generally refers to the health status of residents of reserve communities, who may include First Nations individuals with Treaty Indian status or Registered as Indians under the Indian Act, as well as residents who do not hold Treaty status..





At the provincial level, Manitoba's Pharmacare program has been important in mitigating the effect of prescription drug costs on women living on low income. Pharmacare covers prescription drug costs (for approximately 2,000 approved medications) beyond an income-based deductible for individuals of all age groups, regardless of health condition. This makes Manitoba Pharmacare unique in that it is inherently designed to reduce health inequities. Manitoba also has one of the most advanced systems in Canada for tracking prescription-related information to monitor the use of medications deemed at high risk for abuse and to prevent prescription duplication.

This analysis has highlighted several issues which indicate opportunities to improve the gender-relevance of policy, at both federal and provincial levels. Some key areas for focus would include:

- Ensuring that biologically-based differences between women's and men's sensitivity to pharmaceuticals are considered by initiatives on drug safety and effective prescribing practices.
- Monitoring conformity to Canada's guidelines for inclusion of women in clinical trials and supporting greater post-market evaluation of drug safety and effectiveness, including sex-specific data analysis and reporting.
- Requiring physicians and pharmacists to report adverse drug reactions (ADRs), and to report this information by sex. Ensuring that women's and consumer groups have an active role in pooling information about harms caused by drugs, informing government, and educating consumers [26].
- Safeguarding against over-use, inappropriate use, and the medicalization of healthy women's lives and enhancing support for holistic and alternative therapies with long-term benefits for women's mental and physical health.
- Addressing the breadth of social factors that contribute to women's emotional distress, including poverty, violence, poor housing, past trauma, job stress, time stress, unpaid care giving and lack of community support, through cross-sectoral and collaborative public policy [12].
- Developing and implementing guidelines for the prescription of benzodiazepines and sleeping pills to women to help ensure that women are prescribed these drugs for appropriate reasons and periods of time [8].
- Developing gender-sensitive approaches to the abuse of pharmaceuticals.
- Providing women with full and objective information about drugs, including their approved uses and risks involved in taking them, so that they may make informed choices.
- Addressing pharmaceuticals as part of environmental health risks to women (e.g. pharmaceutical products in drinking water) with recognition for the central role women play in purchasing, using and disposing of pharmaceuticals [25].

References:

1. Metge Colleen, Kozyrskyj Anita, Dahl Matt, Yogendran Marina, and Roos Noralou. June 2003. Pharmaceuticals: Focussing on Appropriate Utilization. Winnipeg: Manitoba Centre for Health Policy.
2. Fransoo R, Martens P, and The Need To Know Team. 2005. Sex Differences in Health Status, Health Care Use and Quality of Care: A Population Based Analysis for Manitoba's Regional Health Authorities. Winnipeg, Manitoba: Manitoba Centre for Health Policy. 437 p.





3. Metge C, Black C, Peterson S, Kozyrskyj A, Roos NP, Bogdanovic B. 1999. Analysis of Patterns of Pharmaceutical Use in Manitoba, 1996: Key Findings - A POPULIS Project. Winnipeg, Manitoba: Manitoba Centre for Health Policy. 94 p.
4. Payne J, Neutel I, Cho R, and Desmeules M (Centre for Chronic Disease Prevention and Control, Health Canada). 2003. Factors Associated with Women's Medication Use. In: The Women's Health Surveillance Report: A Multidimensional Look at the Health of Canadian Women. Ottawa, ON: CPHI; Health Canada. p 1-16.
5. Author not stated. 2001. Health Care and Self Care. In: Catlin G, editor. How Healthy are Canadians? 2001 Annual Report. Health Reports 12(3): 33-40.
6. Martens PJ, Fransoo R, The Need to Know Team, Burland E, Jebamani L, Burchill C, Black C, Dik N, MacWilliam L, Derksen S, Walld R, Steinbach C, Dahl M. 2003. The Manitoba RHA Indicators Atlas: Population-Based Comparison of Health and Health Care Use. Winnipeg, MB: Manitoba Centre for Health Policy. 288 p.
7. Martens P, Burchill C, Fransoo R. 2004. Patterns of Regional Mental Illness Disorder Diagnoses and Service Use in Manitoba: A Population-Based Study. Winnipeg, Manitoba: Manitoba Centre for Health Policy. 436 p.
8. Currie, Janet. 2003. Manufacturing Addiction; The Over-Prescription of Benzodiazepines and Sleeping Pills to Women in Canada. Vancouver, BC: British Columbia Centre of Excellence for Women's Health. 13 p.
9. Rosenberg H & Allard D. June 2007. Evidence for Caution: Women and Statin Use. Toronto, Ontario: Women and Health Protection. 35 p.
10. Health Canada. Benefits and Risks of Hormone Replacement Therapy (Estrogen with or without Progestin). It's Your Health. [Internet]. Ottawa, ON: Health Canada. [cited 2008 July 16]. Available from: http://www.hc-sc.gc.ca/iyh-yvs/med/estrogen_e.html
11. CIHI. June 2008. Hormone Replacement Therapy: An Analysis Focusing on Drug Claims by Female Seniors, 2000 to 2007. Ottawa, ON: Canadian Institute for Health Information. 23 p.
12. Currie, Janet. 2005. The Marketization of Depression: The Prescribing of SSRI Antidepressants to Women. Toronto, ON: Women and Health Protection. 27 p.
13. Harding J. 1987. Social Trends in Prescribing Mood-Modifying Drugs to Women. Can Fam Physician 33(11): 2537-2541.
14. World Health Organization. Gender and women's mental health [Internet]. World Health Organization; c2008 [cited 2008 Sept 11]; [about 5 screens]. Available from: http://www.who.int/mental_health/prevention/genderwomen/en/
15. Simoni-Wastila L. 1998. Gender and psychotropic drug use. Medical Care 36(1):88-94.
16. Lippman, Abby. 2006. The Inclusion of Women in Clinical Trials: Are We Asking the Right Questions? Toronto: Women and Health Protection. 38 p.
17. Fuller, Colleen. (Revised) August 2003. Women and Adverse Drug Reactions Reporting in the Canadian Context. Toronto: Women and Health Protection. 22 p.
18. Canadian Institute for Health Information. September 2007. Drug Claims by Seniors: An Analysis Focusing on Potentially Inappropriate Use of Medications, 2000-2006. Ottawa, ON: Canadian Institute for Health Information. 27 p.
19. Canadian Centre for Health Information. 2007. Patient Safety in Canada: An Update. Ottawa, ON: Canadian Centre for Health Information. 23 p.
20. Millar, Wayne. 1998. Multiple Medication Use Among Seniors. Health Reports 9(4):11-17.
21. Tannenbaum Cara, Mayo Nancy, Ducharme Francine. 2005. Older women's health priorities and perceptions of care delivery: results of the WOW health survey CMAJ 173(2): 153-159.
22. Health Council of Canada. Safe and Sound; Optimizing Prescribing Behaviours. A Policy Symposium Held on June 12-13, 2007, Montreal, Quebec Summary of Main Themes and Insights. Toronto, ON: Health Council of Canada. 16 p.
23. Garriguet, D. 2006. Medication Use Among Pregnant Women. Health Reports 17(2): 9-18.
24. Wilkins K, Johansen H, Beudet MP, Neutel CI. 2000. Oral Contraceptive Use. Health Reports 11(4): 25-37.
25. Batt, Sharon. 2003. Full Circle: Drugs, the Environment and Our Health. Toronto, ON: Women and Health Protection. 28 p.
26. Fuller C, Saibil D. Post-Market Surveillance of Therapeutic Drugs in Canada [Internet]. 2005. [cited 2008 Sept 4]. Toronto, ON: Women and Health Protection. Available from: <http://www.whp-apsf.ca/en/documents/adrBackground.html>





27. Menec V, MacWilliam L, Soodeen R, Mitchell L. 2002. *The Health and Health Care Use of Manitoba's Seniors: Have They Changed Over Time?* Winnipeg, Manitoba: Manitoba Centre for Health Policy. 70 p.
28. Lynd LD, Taylor J, Dobson R and Willison DJ. 2005. Prescription to over-the-counter deregulation in Canada: Are we ready for it, or do we need to be? *Can Med Assoc J.* 173(7): 775-777.
29. Canadian Centre on Substance Abuse (CCSA). June 2007. Prescription Drug Abuse FAQs. Ottawa, Ontario: Canadian Centre on Substance Abuse. 10 p. <http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011519-2007.pdf>
30. Fischer B, Rehm J, Patra J and Firestone Cruz M. 2006. Changes in illicit opioid use across Canada. *CMAJ* 175(11):1385-7.
31. The Associated Press. 2007. Prescription drug abuse set to exceed use of illicit narcotics globally. 2008 February 28 [cited 2008 Sept 19]. Available from <http://www.cbc.ca/world/story/2007/02/28/prescription-pills.html>
32. Addictions Foundation of Manitoba. Fast Facts on Drugs [Internet]. c2004 [cited 2008 Sept 19]. Winnipeg, MB: Addictions Foundation of Manitoba. Available from <http://www.afm.mb.ca/pdf/FastFacts-Drugs.pdf>
33. Crowshoe L. April 2003. Prescription Drug Abuse and Suicide in the Aboriginal Community: The Physician's Contribution? Letter to the Editor. *Messenger* [Newsletter of the College of Physicians and Surgeons of Alberta] 101:8-9.





Emergency Medical Services

Introduction

The availability and affordability of ambulance service is considered a core indicator for population health internationally [1]. Manitoba's geography and demography make medical transportation challenging. The province is home to 1.2 million people, spread over 649,950 square kilometres, approximately half of whom live outside the City of Winnipeg [2].

Material in this section was previously produced in *Manitoba Field Testing of Gender-Sensitive Core Set of Leading Health Indicators*, by Donner, Haworth-Brockman and Isfeld (2006). The authors are grateful to the WHO Kobe Centre for technical assistance.

Since not all emergency medical transportation is provided by ambulance, and also the care provided by emergency medical staff goes well beyond the transportation provided, it is more appropriate to consider Emergency Medical Services, consistent with current Canadian usage, in Manitoba.

Provision of Emergency Medical Services in Manitoba

Emergency medical services (EMS) in Manitoba are the responsibility of the Province of Manitoba, Manitoba Health, Emergency Medical Services Branch. Manitoba Health funds the Regional Health Authorities to provide emergency medical transportation, while retaining regulatory oversight of the operation of the program, and providing provincial co-ordination. In 2002, Manitoba's EMS responded to over 103,000 incidents [2, 3].

Unlike physician and hospital services, EMS are not routinely an insured benefit under Manitoba's universal medicare system. Most Manitobans, most of the time, pay for their emergency medical transportation out-of-pocket, or through private insurance, often as an employment benefit. Women are more likely than men to be unemployed or employed in part-time or lower paying jobs which do not provide these additional benefits.

There are programs that provide emergency medical services, at no cost to Manitobans, under certain circumstances. These are:

- **Neonatal Transportation** - available for infants in need of treatment at a tertiary care paediatric hospital.
- **Interfacility Transportation** - when ordered by a physician for a hospital patient or personal care home resident who requires special care or diagnostic services that are not available at the originating facility, and where the patient is returned to the facility of origin within 24 hours [4].





- **Air Ambulance Transportation** - for patients who meet certain acuity requirements under the Manitoba Lifeflight Air Ambulance Program. This covers the air portion only. Individuals are still responsible for all costs associated with the land ambulance to and from the airport. [4]
- **Northern Patient Transportation Program (NPTP)** - subsidizes the cost of transportation for residents of Manitoba located in the north to obtain medical or hospital care at the nearest location available. NPTP covers both health conditions that require elective treatment, and those that require emergency treatment. Subsidy may include costs for an essential escort (as required for an infant or disabled person). Coverage is restricted to Manitoba residents north of the 53rd parallel on the west of Lake Winnipeg, and north of the 51st parallel east of Lake Winnipeg. When ground travel is complicated by freeze up and thaw, there are provisions for some isolated communities outside of these boundaries [5].
- **First Nations Residents Living on Reserves** - qualify for medical air, water or land transportation as a Treaty Entitlement, funded by the federal government [6].
- **Manitobans in Receipt of Income Assistance** - EMS are provided to Manitobans in receipt of Income Assistance.

Because EMS are not provided through the medicare system, detailed data are not available about emergency medical transportation services.

Policy Implications

The lack of available data about the users of EMS makes analysis of inequities in access difficult. Certainly, many Manitobans are disadvantaged when EMS is paid for only through private insurance (as an employee benefit in some jobs) or through social assistance or entitlements, leaving persons without employee benefits to pay the costs themselves. Women are less likely to be employed in jobs that provide extended health benefits, and thus are probably more likely than are men to have to pay for emergency medical transportation out-of-pocket.

References

1. Lin, V. et al. 2003. *Comparative Evaluation of Indicators for Gender Equity and Health*. Kobe, Japan: Women and Health Program. World Health Organization Centre for Health Development.
2. Emergency Services. [Internet]. Winnipeg, MB: Manitoba Health Emergency Services. [cited 2006 Apr 3]. Available from <http://www.gov.mb.ca/health/ems/index.html>
3. Emergency Services: Manitoba EMS Statistics. [Internet]. Winnipeg MB: Manitoba Health. [cited 2006 Apr 3]. Available from <http://www.gov.mb.ca/health/ems/statistics.html>
4. Emergency Services: Interfacility Transfer Guidelines. [Internet]. Winnipeg MB: Manitoba Health. [cited 2006 Apr 3]. Available from <http://www.gov.mb.ca/health/ems/interfacility.html>
5. Emergency Services: Northern Patient Transportation Program. [Internet]. Winnipeg MB: Manitoba Health. [cited 2006 Apr 3]. Available from <http://www.gov.mb.ca/health/ems/nptp.html>
6. First Nations and Inuit Health: Medical Transportation Benefits. [Internet]. Ottawa ON: Health Canada.; c2005 [cited 2006 Apr 3]. Available from http://www.hc-sc.gc.ca/fnih-spni/nihb-ssna/benefit-prestation/medtransport/index_e.html





Cataract Surgery

Introduction

Insured through Canada's universal, public medicare system, cataract surgery is the highest-volume surgical procedure in Canada. Over 200,000 such surgeries are performed annually in Canada, and about 85% of cataract surgeries are performed on people aged 65 years of age and older [3].

Cataract surgeries, and especially waiting times for cataract surgery, are topical issues in Canada. Manitoba research found that almost two-thirds of patients waiting for cataract surgery in Manitoba were women, and that their wait times tended to be longer than those for men (173 versus 147 days). Wait times were also higher among those 65 years of age and older, than for those under age 65 [3].

Cataract Surgery in Manitoba

Women are more likely to have had cataract surgery than men. During the three year period from April 1, 2001 to March 31, 2004, cataract surgeries were performed 8,172 times on males and 13,634 times on females [4]. This difference is in large measure because the risk of cataract surgery is strongly related to age, and there are more elderly women than there are men in the province. It is therefore not surprising that cataract surgery rates were highest among those 80 to 85 years of age [females 62.4/1,000; males 55.6/1,000] [5].

The age-adjusted rates (population 50 years of age and older) were 20.4/1,000 for males and 22.2/1,000 for females. That is, women's increased likelihood of cataract surgery compared to men was reduced from 1.4:1 to 1.09:1 after controlling for age. The difference remains statistically significant [4, 5].

This is noteworthy, given that other researchers have found that women were more likely to have cataract surgery than men [6], which has been attributed to men's acceptance of greater loss of visual acuity than women, before requesting cataract surgery. However, more recent population-based Swedish research found that women did not request cataract surgery earlier than men, once preoperative visual acuities were compared [7].

What are cataracts?

Normally, the lens of the human eye is clear. Cataracts are areas of the lens that have become opaque. Cataracts usually begin small, causing little interference with vision. However, as they grow, cataracts can cause blurred vision, sensitivity to light and glare, increasing nearsightedness, visual distortion and double vision [1].

What is cataract surgery?

In cataract surgery, the cloudy lens is removed from the eye. In most cases, the natural lens is replaced with a permanent intraocular lens implant [2].

What is being counted?

The Manitoba research described here includes all cataract surgeries done in Manitoba hospitals. It is important to note that residents may have had surgery on both eyes during this time, in which case each procedure was counted as a separate event [4].





Manitoba research has also shown a significant relationship between cataract surgery rates and neighbourhood income among urban residents for both males and females. Those from the poorest urban neighbourhoods were most likely to have had cataract surgery; those from the highest income areas were the least likely. This relationship was not found among rural and northern residents [5].

Policy Implications

Women's longer waiting times for cataract surgery is an issue that requires further investigation. Given the findings of Mönestam and Wachtmeister [7] that Swedish women were not more likely to seek cataract surgery at an earlier stage of visual loss, women's longer wait times may reflect societal assumptions about women's presumed increased likelihood to seek medical care.

References

1. Age-Related Cataracts. [Internet]. San Francisco, CA: American Academy of Ophthalmology; c2003 [cited 2006 Mar 30]. Available from http://www.medem.com/MedLB/article_detailb.cfm?article_ID=ZZZJOJW8OPC&sub_cat=119
2. Cataract Surgery. [Internet]. San Francisco, CA: American Academy Of Ophthalmology; c2004 [cited 2006 Mar 30]. Available from http://www.medem.com/MedLB/article_detailb.cfm?article_ID=ZZZY9VMAC8C&sub_cat=0
3. De Coster C. 2005. Non-clinical factors associated with variation in cataract surgery waiting times in Manitoba. *Canadian Journal on Aging / La Revue Canadienne Du Vieillessement* 24 [Suppl. 1]:47-58.
4. MCHP Reports: Data & Support Items: Sex Differences in Health Status, Health Care Use, and Quality of Care: A Population-Based Analysis for Manitoba's Regional Health Authorities. [Internet]. Winnipeg: MB: Fransoo R, Martens P, The Need To Know Team; c2005 [cited 2006 Mar 31]. Available from http://www.umanitoba.ca/centres/mchp/reports/support_items/ntk_sex/Web_Graphs/Chapter6/WEBcataract_Au8_05jb.xls
5. Fransoo R, Martens P, The Need To Know Team. 2005. Sex Differences in Health Status, Health Care Use, and Quality of Care: A Population-Based Analysis for Manitoba's Regional Health Authorities. Winnipeg, MB: Manitoba Centre for Health Policy. 435 p.
6. Bishara SA, Goya V and Rand WJ. 1988. Cataract and ocular parameters: sexual comparison. *Annals of Ophthalmology* 20 [2]: 73-74.
7. Mönestam E, Wachtmeister L. 1998. Cataract Surgery from a gender perspective - a population based study in Sweden. *ACTA Ophthalmologica Scandinavica* 76:711-6.

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